

Tuberculosis surveillance and monitoring in Europe

2018

2016 data

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Contents

Abbreviations
Summary
Executive summary The WHO European Region European Union and European Economic Area countries Monitoring progress towards TB elimination.
Резюме
Европейский регион ВОЗ
1. Main facts about TB
2. Technical note 1 2.1 Data reporting and analysis 12 2.2 Definitions 14
3. Commentary
3.1 The WHO European Region 19 3.2 European Union and European Economic Area countries 2
4. Commentary – Monitoring
4.1 WHO European Region 3: 4.2 European Union and European Economic Area countries 3:
5. Annexes Annex 1: Tuberculosis surveillance system overview, 2016
6. Tables
7. Trend tables
8. Country profiles

Summarv	table Tuberculosis surveillance data by region, European Region, 2016
Table 1	Estimates of the TB disease burden, European Region 2016
Table 2	Estimates for TB/HIV co-infection and MDR TB, European Region, 2016
Table 3	Tuberculosis cases, notification rates per 100 000 population and mean annual change in rates, European Region, 2012–2016
Table 4	New TB cases and relapses, notification rates per 100 000 population and mean annual change in rates, European Region, 2012–2016
Table 5	Tuberculosis cases by history of previous TB treatment, European Region, 2016
Table 6	Tuberculosis cases by site of disease, European Region, 2016
Table 7	New and relapse pulmonary tuberculosis cases by diagnostic method, European Region, 2016
Table 7a	New and relapse tuberculosis cases by diagnostic method, European Region, 2016
Table 8	Tuberculosis cases according to EU case definition, EU/EEA, 2016
Table 9	New TB cases and relapses by age group and male-to-female ratio, European Region, 2016
Table 10	Tuberculosis cases by origin, European Region, 2016
Table 11	Drug resistance surveillance of pulmonary bacteriologically-confirmed tuberculosis cases, European Region, 2016
Table 12	Drug resistance surveillance of bacteriologically-confirmed pulmonary tuberculosis cases by previous TB treatment history, European Region, 2016
Table 13	Drug resistance in all laboratory-confirmed tuberculosis cases, EU/EEA, 2016
Table 14	XDR TB cases among all laboratory-confirmed MDR TB cases, European Region, 2016
	MDR and XDR TB cases enrolled in treatment, European Region, 2016
Table 16	New and relapse tuberculosis cases with HIV infection, European Region, 2016
Table 16a	All tuberculosis cases with HIV infection, EU/EEA, 2016
Table 17	Tuberculosis in prisons, European Region, 2016
Table 18	Treatment outcome for all TB cases notified in 2014, European Region, 2016
Table 19	Treatment outcome of new tuberculosis cases and relapses notified in 2014, European Region, 2016
	Treatment outcome of new and relapse tuberculosis cases in children (o-14 years) notified in 2015, European Region, 2016
	Treatment outcome of HIV positive new and relapse tuberculosis cases notified in 2015, European Region, 2016
	Treatment outcome after 24 months of RR TB/MDR TB cases started on second-line treatment in 2014, European Region, 2016.
Table 23	Treatment outcome after 24 months of laboratory-confirmed MDR TB cases notified in 2014, EU/EEA, 2016
Table 24	Treatment outcome after 24 months of XDR TB cases started on second-line treatment in 2014, European Region, 2016
	Treatment outcome after 36 months of XDR TB notified in 2013, EU/EEA, 2016
Table 26	Monitoring the WHO Europe Roadmap to Implement the Tuberculosis Action Plan for the WHO European Region, 2016 – 202
Trend 1	ables
Table I	Estimated TB mortality per 100 000 population, European Region, 2007–2016
	Estimated TB incidence per 100 000 population, European Region, 2007–2016
Table III	Tuberculosis cases in children under 15 years, European Region, 2012–2016
Table IV	Tuberculosis cases by origin, European Region, 2012–2016
Table V	MDR TB notification among new bacteriologically-confirmed pulmonary TB cases with available DST results, European Region, 2012–2016
Table VI	MDR TB notification among previously treated bacteriologically-confirmed pulmonary TB cases with available DST results, European Region, 2012–2016
	MDR TB notification among all bacteriologically confirmed TB cases with available DST results, European Region, 2012–2016
Table VIII	XDR TB notification among pulmonary MDR TB cases with second-line drug sensitivity test results, European Region, 2012–2016
Table IX	Tuberculosis cases with HIV infection, European Region, 2012–2016
Table X:	Treatment success after 12 months of new TB cases and relapses, European Region, 2011–2015
Table XI	Treatment success after 12 months of all TB cases, European Region, 2011–2015
Table XII	Treatment success after 24 months of RR/MDR TB cases started on treatment, European Region, 2010–2014
	Treatment success after 24 months of XDR TB cases started on treatment, European Region, 2010–2014
T-1-1- VIV	Treatment success after 26 months of VDD TD cases notified in European Degion, 2000, 2012

Abbreviations

ADR Adverse drug reactions

AFB Acid-fast bacilli

AIDS Acquired immunodeficiency syndrome

ART Antiretroviral therapy
CI Confidence interval

CISID Centralized Information System for Infectious Diseases

DRS Drug resistance surveillance
DST Drug susceptibility testing

ECDC European Centre for Disease Prevention and Control

EEA European Economic Area
EPTB Extrapulmonary tuberculosis
EQA External quality assessment

EU European Union

HIV Human immunodeficiency virus

HPC High-priority countries (Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Kazakhstan, Kyrgyzstan,

Latvia, Lithuania, Moldova, Romania, Russia, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan)

LTBI Latent tuberculosis infection

MDR Multidrug resistance

MDR TB Multidrug-resistant tuberculosis
MSM Men who have sex with men
PTB Pulmonary tuberculosis
PLHIV People living with HIV/AIDS
RR TB Rifampicin-resistant tuberculosis

SLD Second-line drugs
TB Tuberculosis

TESSy The European Surveillance System

TME WHO Tuberculosis Monitoring and Evaluation platform

TOM Treatment outcome monitoring

UN United Nations

WHO World Health Organization
WRD WHO-approved rapid diagnostics

XDR Extensive drug resistance

XDR TB Extensively drug-resistant tuberculosis



Executive summary

The WHO European Region

Tuberculosis incidence in the WHO European Region increased sharply from 1990 onwards, reaching a peak in 1999. Since 2000, the number of TB cases emerging in the Region has consistently decreased. The average annual decline in the TB incidence rate was 4.3% during the period 2007-2016, and 4.4% between 2015 and 2016. Over the last 10 years TB incidence in the Region has decreased from 47 to 32 cases per 100 000 population; the equivalent of 410 000 in 2007 and 290 000 in 2016. This represents a decrease of the TB burden in the Region by a third, as well as a decline from 4% to 3% in the Region's proportion of the Global TB burden during the period 2007-2016. Yet, despite this being the fastest decline in the world compared to other regions, it will still need to be accelerated to achieve the milestone of reducing TB incidence as part of the End TB strategy.

In 2016, the TB mortality rate had fallen more than two-fold compared with the rate for 2007, 2.8 and 6.5 TB deaths per 100 000 population respectively, which on average represents a decline of 8.9% per year. Over the last five years, this decline has accelerated to 10.5% per year, which is notably higher than the global rate of decline for TB mortality (3.2% between 2012 and 2016). Yet in 2016, 26 000 TB deaths occurred in the European Region.

Nine out of 30 countries with the highest multidrug-resistant (MDR) TB burden in the world are in the WHO European Region. In 2016, an estimated 71 000 incident cases of rifampicin-resistant and multidrug-resistant tuberculosis (RR/MDR TB) emerged in the WHO European Region. This represents about 20% of the global RR/MDR-TB burden which is 350 000. The proportion of RR/MDR-TB among new and previously treated TB cases in the Region is also significantly above the global average, with 19% in new and 55% in previously treated cases compared to 4.1% and 19% respectively. Since 2011, and with the introduction and scale up of the WHO-recommended rapid diagnostics, the detection rate of MDR-TB has increased significantly, from 33% in 2011 to 73% in 2016.

During the period 2007–2016, the WHO European Region faced an unprecedented increase in HIV prevalence in incident TB cases from 3% to 12%. This is higher than both the global average and the dynamic, which declined from 13% in 2007 to 10% in 2016. The number of TB/HIV co-infections emerging in the WHO European Region has increased from 13000 to 34000, representing a 260% increase during the period from 2007 to 2016. This situation is driven by the spread and dynamic of the HIV epidemic in the Region.

Despite universal treatment coverage for TB and RR/MDR-TB patients, the treatment success rate in the Region is still below the 85% and 75% Regional targets respectively. Nevertheless, when data for 2012 and 2016 are compared,

a slow but sustainable increase can be seen in both cohorts for all new and relapse TB and RR/MDR-TB cases, from to 72% to 75% and from 49% to 55% respectively. Nonetheless, several high countries with high MDR-TB burdens have shown remarkable success in the treatment of MDR-TB patients (Kazakhstan 76.5% and Latvia 73.2%).

To commemorate the tenth anniversary of the Berlin Declaration 'All against Tuberculosis' and the fact that we are now half way through implementation of the Tuberculosis Action Plan for the WHO European Region 2016–2020, this report also provides an overview of the progress made and the challenges faced in addressing TB in the Region.

European Union and European Economic Area countries

Epidemiology

In 2016, 58 994 cases of TB were reported in 30 EU/EEA countries (Liechtenstein did not report). The decreasing notification rates observed in most countries are reassuring, but annual rates of decline are still insufficient to achieve the WHO target of TB elimination by 2050 in European low-incidence countries.

Of all notified TB cases, 70.4% were newly diagnosed and 71.0% were confirmed by culture, smear or nucleic acid amplification test. Thirty-three per cent of all TB cases were of foreign origin, mostly residing in low-incidence countries. Overall, adult age groups were equally affected by TB. Children under 15 years of age accounted for 4.1% of all TB cases, corresponding to a notification rate of 3.0 per 100 000 population. Higher-incidence countries also had the highest age-specific notification rates in children. Males were over-represented in all EU/EEA Member States.

Multidrug-resistant (MDR) TB was reported for 3.7% of 36 o71 cases with drug susceptibility testing (DST) results and continues to be highest (more than 10%) in the three Baltic countries. Extensively drug-resistant (XDR) TB was reported for 20.1% of 984 MDR TB cases tested for second-line drug susceptibility. The drug resistance for the second line anti-TB drugs has slightly increased compared to recent years.

Data on HIV co-infection remained very incomplete, and the number of countries reporting HIV status was similar to 2015. Of all TB cases with known HIV status, 4.5% were co-infected with the virus.

TB in prisons remains poorly reported. For the 18 EU/EEA countries reporting data, the notification rate amounted to 163.8 per 100 000 inmates - i.e. an incidence ratio of 11.1 compared to the general population in the same countries.

Monitoring progress towards TB elimination

In 2016, 19 of 26 WHO targets could be effectively monitored based on the data available from EU/EEA Member States. Almost all EU/EEA Member States met the four targets regarding estimated TB case detection (at least 84%), TB notification (below 24.6 per 100 000), treatment enrolment of RR/MDR TB cases (100%) and estimated TB mortality (below 2.7 per 100 000).

A majority of reporting countries met or were close to the targets on first-line DST coverage among bacteriologically confirmed cases (100%) and the percentage of RR/MDR TB among previously treated TB patients (decrease compared with 2014). However, only a minority of reporting Member States met the targets regarding use of WHO-recommended rapid tests for diagnosis (40% of new cases and relapses), the percentage of RR/MDR TB among new TB patients (decrease compared with 2014) and the percentage of TB/HIV co-infection (decrease compared with 2014).

Finally, a small minority, sometimes only a single Member State, met the targets regarding estimated RR/MDR TB case detection (at least 85%), TB and MDR TB treatment success (at least 85% and 75%, respectively), HIV testing coverage (100%) and the detection of TB/HIV co-infection (100%).

Резюме

Европейский регион ВОЗ

Начиная с 1990 г. в Европейском регионе ВОЗ отмечался резкий рост заболеваемости туберкулезом, которая достигла максимального значения в 1999 г. С 2000 г. число возникающих в Регионе случаев ТБ неуклонно снижается. В период с 2007 по 2016 г. показатель заболеваемости ТБ снижался в среднем на 4,3% в год и на 4,4% в год в период с 2015 по 2016 г. За последние 10 лет абсолютное число случаев ТБ, возникающих в Регионе ежегодно, сократилось с 47 до 32 на 100 000 населения, что эквивалентно снижению с 410 000 случаев в 2007 г. до 290 000 случаев в 2016 г. Это означает, что в период с 2007 по 2016 гг. бремя ТБ в Регионе сократилось на треть, а процентный вклад Региона в глобальное бремя ТБ снизился с 4% до 3%. При этом несмотря на то, что Региону удалось обеспечить самые высокие в мире темпы снижения показателей ТБ, их недостаточно, чтобы достичь целевого показателя снижения заболеваемости ТБ, предусмотренного стратегией «Ликвидировать ТБ».

В 2016 г. показатель смертности от ТБ сократился более чем вдвое по сравнению с 2007 г., до 2,8 с 6,5 случаев на 100 000 населения, что соответствует снижению этого показателя в среднем на 8,9% в год. За последние пять лет темпы снижения ускорились до 10,5% в год, что существенно выше глобальных темпов снижения смертности от ТБ (3,2% в период с 2012 по 2016 г.). Тем не менее, в 2016 г. в Европейском регионе от ТБ умерло 26 000 человек.

Девять из 30 стран мира с самым высоким бременем МЛУ-ТБ находятся в Европейском регионе ВОЗ. В 2016 г. расчетное число новых случаев и рецидивов ТБ с устойчивостью к рифампицину и множественной лекарственной устойчивостью (РУ/МЛУ-ТБ) в Европейском регионе ВОЗ составляло 71000. Это соответствовало приблизительно 20% от 350 000 случаев, составляющих глобальное бремя РУ/МЛУ-ТБ. Доля РУ/МЛУ-ТБ среди впервые выявленных и ранее леченных больных ТБ в Регионе также значительно превышает среднемировой показатель и достигает 19% среди впервые выявленных и 55% среди ранее леченных больных, по сравнению с 4,1% и 19% соответственно. С 2011 г. и с внедрением и расширением масштабов применения рекомендованных ВОЗ методов ускоренной диагностики существенно вырос уровень выявления МЛУ-ТБ, с 33% в 2011 г. до 73% в 2016 г.

В период с 2007 по 2016 г. Европейский регион ВОЗ столкнулся с беспрецедентным ростом распространенности ВИЧ-инфекции у впервые выявленных больных и больных с рецидивом ТБ - с 3% до 12%, что превышало среднемировой показатель и шло в разрез с глобальной тенденцией к снижению с 13% в 2007 г. до 10% в 2016 г. Число случаев сочетанной инфекции ТБ/ВИЧ в Европейском регионе ВОЗ выросло с 13000 до

34 000, что соответствует росту этого показателя к 2016 г. на 260% по сравнению с 2007 г. Сложившаяся ситуация обусловлена распространением и динамикой развития эпидемии ВИЧ-инфекции в Регионе.

Несмотря на всеобщий охват лечением больных ТБ и РУ/МЛУ-ТБ, показатель успешности лечения в Регионе по-прежнему остается ниже целевых показателей 85% и 75% соответственно. Тем не менее, сравнивая данные за 2012 и 2016 гг., отмечается медленный, но устойчивый рост успешности лечения в обеих когортах как среди всех впервые выявленных больных ТБ, так и среди больных РУ/МЛУ-ТБ, с 72% до 75% и с 49% до 55% соответственно. При этом, нескольким странам с высоким бременем МЛУ-ТБ удалось достичь значительных успехов в излечении больных МЛУ-ТБ (Казахстан 76,5% и Латвия 73,2%).

По случаю 10-й годовщины принятия Берлинской декларации «Все против туберкулеза» и в ознаменование половины срока реализации Плана действий по борьбе с туберкулезом для Европейского региона ВОЗ на 2016-2020 гг. в настоящем докладе также представлен обзор достигнутого прогресса и проблем в борьбе с ТБ в Регионе.

Страны Европейского союза и Европейской экономической зоны

Эпидемиология

В 2016 г. в 30 странах ЕС/ЕЭЗ (Лихтенштейн не предоставил отчетных данных) было зарегистрировано 58 994 случая ТБ. Наблюдаемое в большинстве стран снижение показателей регистрации случаев ТБ обнадеживает, но ежегодных темпов снижения по-прежнему недостаточно для достижения целевого ориентира ВОЗ в отношении ликвидации ТБ к 2050 году в европейских странах с низким уровнем заболеваемости.

В структуре всех зарегистрированных случаев ТБ 70,4% составили впервые выявленные случаи, 71,0% случаев был подтвержден культурально, с помощью микроскопии мазка мокроты или метода амплификации нуклеиновых кислот. Тридцать три процента всех случаев ТБ были зарегистрированы у лиц иностранного происхождения, в основном проживавших в странах с низкой заболеваемостью ТБ. В целом, взрослые возрастные группы были в равной степени затронуты ТБ. Дети в возрасте до 15 лет составляли 4,1% всех больных ТБ, что соответствовало показателю регистрации случаев 3,0 на 100 000 населения. В странах с более высоким уровнем заболеваемости также отмечались самые высокие возрастные показатели регистрации случаев ТБ у детей. Во всех государствах членах ЕС/ЕЭЗ в структуре больных преобладают мужчины.

Туберкулез с множественной лекарственной устойчивостью (МЛУ) был зарегистрирован в 3,7% от 36 о71 случая ТБ с результатами тестирования на лекарственную чувствительность (ТЛЧ), и его показатели остаются самыми высокими (свыше 10%) в трех странах Балтии. Туберкулез с широкой лекарственной устойчивостью (ШЛУ) был зарегистрирован в 20,1% от 984 случаев МЛУ-ТБ, протестированных на лекарственную чувствительность к препаратам второго ряда. По сравнению с прошедшими годами отмечался незначительный рост лекарственной устойчивости к противотуберкулезным препаратам второго ряда.

Данные о сочетанной ВИЧ-инфекции оставались весьма неполными, и число стран, предоставивших данные о ВИЧ-статусе, осталось неизменным с 2015 г. Сочетанная ВИЧ-инфекция была зафиксирована у 4,5% всех больных ТБ с известным ВИЧ-статусом.

По-прежнему сохранятся проблема качества отчетности о случаях ТБ в местах лишения свободы. Для 18 стран ЕС/ЕЭЗ, предоставивших данные, показатель регистрации равнялся 163,8 на 100000 заключенных, т. е. коэффициент заболеваемости составил 11,1 по сравнению с населением в целом в тех же странах.

Мониторинг прогресса в направлении ликвидации туберкулеза

В 2016 году на основе данных, полученный от государств-членов ЕС/ЕЭЗ было возможным проведения

мониторинга по 19 из 26 показателям ВОЗ. Почти все государства-члены ЕС/ЕЭП достигли все четыре цели, касающимся выявлению случаев ТБ (не менее 84%), заболеваемости туберкулезом (ниже 24,6 на 100 000), покрытию лечением РУ/МЛУ-ТБ случаев (100%) и смертности от туберкулеза (ниже 2,7 на 100 000).

Большинство стран, подающие отчет о ТБ, достигли или были близки к достижению намеченных целевых уровня показателей в отношении охвата тестами на лекарственную чувствительность к препаратам первого ряда (ТЛЧ ПТП) среди бактериологический подтвержденных случаями (100%) и распространённости РУ/МЛУ ТБ среди ранее леченного больного туберкулеза (снижение по сравнению с 2014 годом). Однако, лишь немногие страны достигли целевых показателей в отношении использования рекомендованных ВОЗ экспресс-тестов для диагностики (40% новых случаев и рецидивов), процентное соотношение РР/МЛУ ТБ среди новых больных туберкулезом (снижение по сравнению с 2014 годом) и доля коинфекции ТБ/ВИЧ (снижение по сравнению с 2014 годом).

Наконец, несколько стран, а иногда и только одно государство-член, достигло целевых показателей по выявлению случаев РУ/МЛУ-ТБ (не менее 85%), успеха лечения ТБ и МЛУ-ТБ (по меньшей мере, 85% и 75% соответственно), охватом тестирование на ВИЧ (100%) и выявлению коинфекции ТБ/ВИЧ (100%).



1. Main facts about TB

Tuberculosis (TB) is an infectious disease caused by a group of *Mycobacterium* species called the *Mycobacterium* tuberculosis complex [1]. Although TB typically affects the lungs (pulmonary TB), it can cause disease in any organ (extrapulmonary TB). TB is transmitted from person to person, for example when people with pulmonary TB expel bacteria by coughing.

Only a small proportion of people (\approx 10%) infected with *Mycobacterium tuberculosis* will develop TB disease during their lifetime, but this probability is much higher among immunocompromised individuals (e.g. people infected with HIV).

Sputum smear microscopy is the most common TB diagnostic method worldwide. However, culture remains the gold standard and the use of rapid molecular testing is increasing.

Standard treatment of non-resistant TB consists of a six-month regimen of four first-line drugs (isoniazid, rifampicin, ethambutol and pyrazinamide), with success rates usually above 85% [2]. Multidrug-resistant (MDR)

and extensively-drug-resistant (XDR) TB require longer treatments with more drugs and are associated with lower success rates.

In 2016, the World Health Organization (WHO) estimated that 10.4 million people fell ill with TB, 62% of them in South-East Asia and the Western Pacific Region. The African Region accounted for 25% of all TB cases. Smaller proportions of cases were estimated for the Eastern Mediterranean Region (7%), and the Region of the Americas (3%). The European Region accounted for 3% of all cases [3].

Overall, in the European Union and European Economic Area (EU/EEA), TB remains a common infection [4]. However, most EU/EEA countries are low-incidence countries (i.e. with a notification rate below 10 per 100 000) where TB predominantly affects vulnerable populations, such as migrants, prison inmates or people co-infected with HIV.

The overall aim of TB surveillance is to help inform public health action. The Annual TB Surveillance and Monitoring report presents the key figures and trends and provides an overview of the TB situation in the EU/EEA and the WHO European Region.



2. Technical note

Between 1996 and 2007, TB surveillance data from the European Region were collected and analysed annually under the 'EuroTB' project.

Since 1 January 2008, ECDC and the WHO Regional Office for Europe have jointly coordinated the collection and analysis of TB surveillance data in Europe, aiming to ensure data standardisation and high quality across the countries of the WHO European Region. The underlying standards and definitions have been agreed by leading European experts. The definitions used in this report are in line with the latest WHO revised definitions [5].

This report covers the 53 countries of the WHO European Region plus Liechtenstein. These are collectively referred to as the 'European Region'.

The data published in this report may differ from figures in national reports due to variation in reporting periods. The deadline for updating the data used in this report was 1 October 2017.

2.1 Data reporting and analysis

Designated experts within the national surveillance institutes submitted their TB surveillance and control programme management data for 2016 electronically to the ECDC-WHO Regional Office for Europe Joint TB Information System via a common portal¹. Designated experts within the national surveillance institutes submitted their TB surveillance and control programme management data for 2016 electronically to the ECDC-WHO Regional Office for Europe Joint TB Information System via a common portal. The TB surveillance data from the EU/EEA countries were redirected to The European Surveillance System (TESSy) platform, hosted by ECDC (Annex 1). The surveillance data from the non-EU/EEA countries, from France for 2016, and the programme management data from the entire European Region were processed through WHO's Tuberculosis Monitoring and Evaluation (TME) platform in aggregated format. A total of 29 EU/EEA Member States reported case-based data². All countries in the European Region were also asked to provide updates for 2013, 2014 and 2015 to allow for the exclusion of duplicate cases, or those later found not to have TB, and for the reporting of treatment outcomes in previously-notified cases.

The TESSy variable list for collection of the 2016 data (Annex 2) has not undergone any changes compared to the previous year.

Reporting completeness (Annex 3 and 4) varied among countries due to differences in legislation, specifics of

national surveillance systems and TB case ascertainment. Although the quality and comparability of reported data have improved in recent years, the reader should be cautious when making comparisons across countries. Data for the year 2016 from France have been noted as provisional and reported only in aggregated format to the WHO Global TB database. For the calculation of notification rates, country total population denominators by age group and gender were obtained from Eurostat³ (22 September 2017) for the EU and EEA countries and from United Nations Population Division statistics⁴ for all others.

Reported data were analysed using the main epidemiological (time, place, gender, age, patient origin) and case management variables (history of previous anti-TB treatment, localisation of disease, laboratory results, HIV serostatus and treatment outcome). Associations between variables were quantified as prevalence ratios and their 95% confidence intervals, and results were considered significant if the confidence interval did not include 1.

TB/HIV co-infection

Case-based HIV serostatus was reported by Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Hungary, Iceland, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia and Spain. The non-EU/EEA countries, Latvia (for years 2004–2014), the Netherlands (2004–2012) and United Kingdom (2011–2013) submitted this information in aggregate format via WHO's TME platform. Finland and Poland reported the number of HIV-infected TB cases for most of the years, but not the denominator of known HIV test results. United Kingdom reported the number of HIV-tested TB cases but not the test results and were therefore excluded from the analysis. The proportion of HIV-TB co-infection was expressed as a percentage of reported TB cases with known HIV status. HIV status had to be available for >50% of all TB cases to be considered complete in the country profiles. Antiretroviral therapy was reported by eight EU/EEA Member States.

Laboratory network performance and drug resistance

Since the reporting year 1998, the results of drug susceptibility testing (DST) from initial isolates of *Mycobacterium tuberculosis* have been collected for isoniazid and rifampicin, and most EU/EEA countries have also reported susceptibility to ethambutol and streptomycin. Data on second-line drug resistance to amikacin, kanamycin, capreomycin, ciprofloxacin and ofloxacin have been reported via TESSy since 2008 and via CISID/TME since 2009. Data on resistance to gatifloxacin, levofloxacin and moxifloxacin

¹ ECDC/WHO Europe Joint Surveillance: http://www.ecdcwhosurveillance.org

² As Liechtenstein has not provided any TB data, except for five cases in 2007, it is not included in the commentary.

³ Available from: http://ec.europa.eu/eurostat/data/database

⁴ Population by UN Population Division, World Population Prospects: The 2015 Revision, medium variant (2016).

were added in 2013 and bedaquiline and delamanid in 2016. In countries where DST results are linked to TB case notifications, case-based information on DST is collected (27 countries in 2016). When individual DST data are not available, data are collected in aggregate format in TME based on previous anti-TB treatment history. Information on the organisation and laboratory practices for anti-TB DST in the country is collected using the TME module of the joint TB surveillance system. Drug resistance surveillance (DRS) methods vary across countries. Initial DST results may be collected routinely for all culture-positive TB cases notified, or only for cases included in specific surveys or diagnosed in/referred to selected laboratories. DRS data were considered complete if:

- they were collected nationwide and linked to TB case notifications in countries routinely using culture (> 50% culture confirmation);
- DST results for isoniazid and rifampicin were available for ≥75% of culture-positive cases;
- at least 95% of external quality assessment (EQA) results were confirmed by a supranational reference laboratory.

DRS data are considered incomplete for Albania, Andorra, Azerbaijan, Greece, Italy, Kazakhstan, Kyrgyzstan, Moldova, Portugal, San Marino, Spain, Turkmenistan and Uzbekistan.

External quality assurance (EQA) systems are essential for ensuring accurate diagnosis of TB and drug-resistant TB. The implementation of EQA by organising regular EQA rounds and identifying training needs is one of the key activities of the European TB reference laboratory network (ERLTB-Net)[6]. The EQA test results for 2016 are published in Annex 5.

Percentages of laboratory-confirmed drug-resistant cases were calculated using cases with known DST results (for at least isoniazid and rifampicin) as the denominator. If the cases had DST results for ethambutol and streptomycin, these were shown under resistance to any TB drugs. The results of DST for second-line drugs were analysed for MDR TB cases only.

Treatment outcome monitoring (TOM)

Since the reporting year 2002, treatment outcome data have been provided by EU/EEA countries through the submission of an updated dataset for cases notified one year prior to the year of reporting. The same applies to MDR TB treatment outcome for cases reported two years earlier and XDR TB treatment outcome for cases reported three years earlier. Thus, as part of the 2017 data call, for 2016 data, outcome data were collected for TB cases reported in 2015, MDR TB cases reported in 2014 and XDR TB cases reported in 2013. Non-EU/EEA countries have reported aggregated treatment outcome data following the same principle since 2013.

For the purpose of TOM analysis, two types of MDR TB cases were considered: cases with a known treatment start and cases with no indication of treatment. For countries reporting case-based data, the most recently updated information was used. This may result in denominators

differing from the number of notified cases reported in the previous year's report. For countries reporting aggregate outcome data, completeness of cohorts is assessed by comparing the total number of cases included in TOM cohorts with those initially notified as pulmonary and culture or smear-positive, depending on the type of cohort.

Geographical areas

The following 31 EU/EEA countries are presented separately in tables and in Chapter 3.2: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

The 23 remaining (non-EU/EEA) countries in the WHO European Region are: Albania, Andorra, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Israel, Kazakhstan, Kyrgyzstan, the former Yugoslav Republic of Macedonia, Moldova, Monaco, Montenegro, Russia, San Marino, Serbia, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan.

Data from Serbia include TB cases reported from Kosovo⁵, and these are also stratified in tables to reflect UN Security Council Resolution No. 1244 (1999).

In order to highlight the 18 high-priority countries (HPC) identified by WHO Regional Office for Europe's Stop TB Strategy in the European Region, their data are presented in italics and as subtotals alongside the subtotals for the EU/EEA and non-EU/EEA Member States. The 18 high-priority countries in the WHO European Region are: Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Romania, Russia, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan.

TB notifications from France include overseas territories. TB notifications from Greenland are not included in the report.

2.2 Definitions

TB case definition for surveillance

Information from EU/EEA countries was collected to enable the classification of cases according to the case definition approved by the EU Member States and published by the European Commission⁶. This classifies cases as 'possible', 'probable' or 'confirmed'. Possible cases meet clinical criteria only. Probable cases are defined by the additional detection of acid-fast bacilli (AFB), *M. tuberculosis* nucleic acid or granulomata. Confirmed cases require a

⁵ This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

⁶ European Union Commission. 2008/426/EC: Commission Decision of 28 April 2008 amending Decision 2002/253/EC laying down case definitions for reporting communicable diseases to the Community network under Decision No 2119/98/EC of the European Parliament and of the Council (notified under document number C(2008) 1589). OJ L 159, 18.06.2008, p. 46

positive culture or detection of both AFB by microscopy and *M. tuberculosis* by nucleic acid amplification testing.

Data from all countries in the European Region also follow the WHO-recommended definitions – 2013 revision⁷. They define a 'case of tuberculosis' as a patient in whom TB has been confirmed by bacteriology or diagnosed by a clinician. A 'bacteriologically confirmed TB case' is one from whom a biological specimen is positive by smear microscopy, culture or WHO-approved rapid diagnostics (WRD) such as Xpert MTB/RIF. A 'clinically diagnosed TB case' is one that does not fulfil the criteria for bacteriological confirmation, but has been diagnosed with active TB by a clinician or other medical practitioner who has decided to give the patient a full course of TB treatment.

Cases discovered post-mortem, whereby gross pathological findings are consistent with active TB that would have indicated anti-TB treatment, had the patient been diagnosed before dying, also fit the clinical criteria and are included.

Previous anti-TB treatment status

New patients have never been treated for TB or have taken anti-TB drugs for less than one month.

Previously-treated patients have received one month or more of anti-TB drugs in the past. They are further classified by the outcome of their most recent course of treatment as follows:

- Relapse: patients have previously been treated for TB, were declared cured or to have completed their treatment at the end of their most recent course of treatment, and are now diagnosed with a recurrent episode of TB (either a true relapse or a new episode of TB caused by reinfection).
- Treatment after failure: patients who have previously been treated for TB and whose treatment failed at the end of their most recent course of treatment.
- Treatment after loss to follow-up: patients have previously been treated for TB and were declared lost to follow-up at the end of their most recent course of treatment. (These were previously classified as 'treatment after default'.)
- Other previous treatment: patients who have previously been treated for TB but whose outcome after their most recent course of treatment is unknown or undocumented.

Patients with unknown previous TB treatment history do not fit any of the categories listed above.

New cases and relapses of TB are incident TB cases.

Site of disease

Pulmonary tuberculosis (PTB) refers to any bacteriologically confirmed or clinically diagnosed case of TB involving the lung parenchyma or the tracheobronchial tree (laryngeal TB is classified as pulmonary). A patient with both

pulmonary and extrapulmonary TB should be classified as a case of PTB.

Extrapulmonary tuberculosis (EPTB) refers to any bacteriologically confirmed or clinically diagnosed case of TB involving organs or anatomical sites other than the lungs (e.g. pleura, lymph nodes, abdomen, genitourinary tract, skin, joints and bones, or meninges).

Notes on the definition

- The above definitions are in accordance with the European Commission's approved definitions for TB surveillance.
- All possible, probable and confirmed cases are reported to the joint European surveillance database. For countries with laboratory-based reporting where no clinical information is available, laboratory-confirmed cases should be reported.
- Cases should be notified only once in a given 12-month period. However, a case should be reported again if the diagnosis of confirmed tuberculosis is made following completion of anti-TB treatment (relapse), even if this occurs within 12 months of reporting the initial episode of disease.
- Cases that have never been treated are commonly referred to as new cases, although this term should not be considered to indicate incidence in the strict epidemiological sense.
- Among re-treated cases, relapses are included in notifications from all countries, whereas cases re-treated after failure or loss to follow-up and chronic cases are not included or further defined by Belgium, Cyprus, Denmark, Ireland, France, Luxembourg, Malta, Norway, Spain and United Kingdom.
- DST data were analysed for laboratory-confirmed cases.

Origin of cases

The geographic origin of a TB case is classified according to place of birth of a person with TB disease (born in the country/born outside of the country) for Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Iceland, Ireland, Israel, Italy, Kyrgyzstan, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta, the Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, the United Kingdom and Uzbekistan. Albania, Andorra, Armenia, Austria, Belarus, Belgium, Bosnia and Herzegovina, Georgia, Greece, Hungary, Kazakhstan, Moldova, Montenegro, Poland, Russia, Serbia, Turkmenistan and Ukraine used citizenship (citizen/noncitizen) for classification. Azerbaijan and Turkmenistan did not report information on origin. In Denmark, the birthplace of the parents is also used to classify origin (similarly, in the Netherlands, the birthplace of parents is notified for case management purposes). The country of origin is included in case-based data. The term 'native' as used in this report refers to cases born in, or having the citizenship (nationality) of the reporting country. 'Foreign origin' refers to cases born in (or citizens of) a country different to the reporting country.

⁷ WHO. Definitions and reporting framework for tuberculosis 2013 revision, updated December 2014. Geneva: WHO; 2015. Available from: http://www.who.int/tb/publications/definitions/en/

Drug resistance

Resistance among cases never treated (new TB cases): indicates primary drug resistance due to infection with resistant bacilli.

Resistance among cases previously treated: usually indicates acquired drug resistance emerging during treatment following selection of drug-resistant mutant bacilli. It can also result from exogenous re-infection with resistant bacilli

Multidrug resistance (MDR): resistance to at least isoniazid and rifampicin.

Extensive drug resistance (XDR): resistance to (i) isoniazid and rifampicin (i.e. MDR), (ii) resistance to a fluoroquinolone, and (iii) resistance to one or more of the following injectable drugs: amikacin, capreomycin, or kanamycin [7].

Rifampicin resistance: resistance to rifampicin detected using phenotypic or genotypic methods, with or without resistance to other anti-TB drugs. This includes any resistance to rifampicin, whether mono-resistance, multidrug resistance, polydrug resistance or extensive drug resistance.

Treatment outcome

Cohorts

All TB cases notified in the calendar year of interest, after exclusion of cases with a final diagnosis other than TB, or cases found to have been reported more than once.

In accordance with the new WHO treatment outcome definitions⁸ two types of cases were considered:

- patients treated for drug-susceptible TB;
- patients treated for drug-resistant TB using second-line treatment (defined as combination chemotherapy for drug-resistant tuberculosis).

The two groups are mutually exclusive. Any patient found to have drug-resistant TB and placed on second-line treatment is removed from the drug-susceptible TB outcome cohort.

Period of observation

Cases are observed until the first outcome up to a maximum of 12 months after the start of treatment. For MDR TB cases in EU/EEA countries, treatment outcome after 24 months should be reported if treatment lasts longer than 12 months and the reported 12-month outcome is coded as 'still on treatment'9. For XDR TB cases in EU/EEA countries, treatment outcome after 36 months should be reported if treatment lasts longer than 24 months and the reported 12-month and 24-month outcomes are coded as 'still on treatment'10. Non-EU/EEA countries evaluate treatment outcomes according to the WHO definition.

Treatment outcome categories

All outcome categories but one apply to the entire region and follow the recommendations in 'Definitions and reporting framework for tuberculosis – 2013 revision'. The additional category: 'still on treatment' only applies to the EU/EEA Member States. The categories are as follows:

Cured: A pulmonary TB patient with bacteriologically confirmed TB at the beginning of treatment who was smearor culture-negative in the last month of treatment and on at least one previous occasion.

Cured of MDR TB: Treatment completed as recommended under national policy without evidence of failure AND three or more consecutive cultures taken at least 30 days apart are negative after the intensive phase.

Treatment completed: Treatment completed, but does not meet the criteria to be classified as cure or treatment failure.

Treatment failed: A TB patient whose sputum smear or culture is positive at month 5 or later during treatment.

Treatment failed for MDR TB case:

Treatment terminated or need for permanent regimen change of at least two anti-TB drugs because of:lack of conversion by the end of the intensive phase, or

- bacteriological reversion in the continuation phase after conversion to negative, or
- evidence of additional acquired resistance to fluoroquinolones or second-line injectable drugs, or
- adverse drug reactions (ADRs).

Died: A TB patient who dies for any reason before starting or during the course of treatment.

Lost to follow-up: A TB patient who did not start treatment or whose treatment was interrupted for two consecutive months or more.

Still on treatment11:

 patient still on treatment at 12 months without any other outcome during treatment;

or

 patient reported as still on treatment at 12 months and still on treatment at 24 months without any other outcome.

Not evaluated: a TB patient for whom no treatment outcome is assigned. This includes cases 'transferred out' to another treatment unit as well as cases for whom the treatment outcome is unknown to the reporting unit.

In this report:

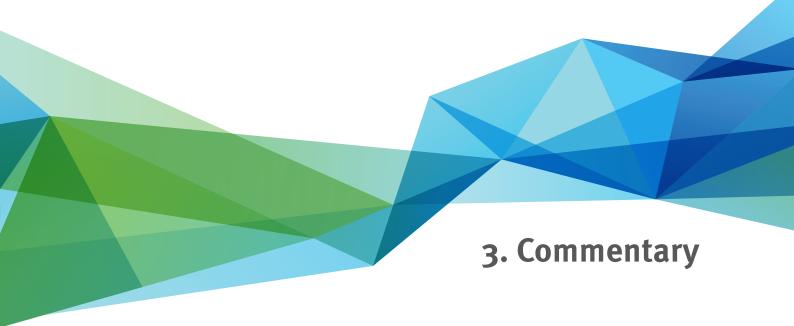
Success: The sum of 'cured' and 'treatment completed'.

⁸ WHO. Definitions and reporting framework for tuberculosis 2013 revision, updated December 2014. Geneva, Switzerland: World Health Organization; 2015. Available from: http://www.who.int/tb/publications/definitions/en

⁹ The degree of adherence to the 12-month limit is unknown, and a number of countries are known to exceed it.

¹⁰ The degree of adherence to the 24-month limit is unknown.

¹¹ Definition applicable to EU/EEA countries only.



3. Commentary

3.1 The WHO European Region

Tuberculosis burden estimates

In 2016, an estimated 290 000 new and relapse TB cases (range 251000-333000) occurred in countries of the WHO European Region, equivalent to an average incidence of 31.6 cases (27.3-36.3) per 100 000 population. This represents about 3% of the total burden of tuberculosis in the world. During 2016, the absolute number of incident TB cases in the WHO European Region fell by 13 000 compared to the previous year. About 83% of the estimated TB cases in the Region occur in the 18 high-priority countries, where estimated TB incidence was 60.4 cases per 100 000 population¹², which is about five times higher than the EU/EEA average. The five countries with the largest absolute number of incident TB cases were Russia (94 000), Ukraine (39 000), Uzbekistan (24 000), Romania (15 000) and Kazakhstan (12000). The number relative to population (incidence rate) was highest in Kyrgyzstan (145 per 100 000 population), followed by Moldova (101 per 100 000 population) Georgia (92 per 100 000 population), Ukraine (87 per 100 000 population) and Tajikistan (85 per 100 000 population) (Table 1).

Since 2000, the estimated number of TB cases in the Region has been consistently decreasing. The average annual decline in the TB incidence rate was 4.3% during the period 2007–2016, with 4.6% between 2015 and 2016, which is notably higher than the global rate of decline for TB incidence (1.9%). Yet, despite this being the fastest decline in the world compared to other regions¹³, it will still need to be accelerated to achieve the milestone of reducing TB incidence as part of the End TB strategy. It should, nevertheless, be pointed out that all the high-priority countries in the Region have experienced a decline in the TB incidence rate. Those countries with the highest annual rate of decline during the period 2007–2016 were Kazakhstan (-9.4%), Estonia (-8.6%) and Tajikistan (-7.4%) (Table I).

In 2016, there were an estimated 26 000 TB deaths among HIV-negative people in the European Region, which is equivalent to 2.8 deaths per 100 000 population (range 2.8–2.9). There was considerable variation across the Region, ranging from less than one TB death per 100 000 population in western European countries to more than nine deaths per 100 000 in high-priority countries. The TB mortality rate was highest in Ukraine (9.5 deaths per 100 000), followed by Russia (8.2 deaths per 100 000), Turkmenistan (7.6 per 100 000) and Kyrgyzstan (7.2 deaths

per 100 000 in each). Together, the 18 high-priority countries account for over 90% of TB deaths in the Region (Table 1).

At Regional level, the TB mortality rate fell by 57%, from 6.5 to 2.8 deaths per 100000 population between 2007 and 2016 (Table I), which on average is a decline of 8.9% per year. Over the last five years, this decline has accelerated to 10.5% annually, which is notably higher than the global rate of decline for TB mortality (3.4% between 2015 and 2016).

In 2016, 12.0% (range 8.6–15.0%) of incident TB cases were estimated to be co-infected with HIV, 5.9% (5.4–6.3) in the EU/EEA group of countries and 13.1% (11.7–13.8) in the non-EU/EEA group of countries (Table 2). The proportion of TB cases co-infected with HIV was highest in Ukraine (21%) and Russia (19%), followed by Portugal and France (14% each). Although Malta and Luxemburg also showed high prevalence of HIV among TB cases (26% and 15% respectively), this represented only a few cases in absolute numbers. The top five countries with the highest number of TB/HIV co-infections were Russia (18 000), Ukraine (8100), Uzbekistan (1200), France (670), Kazakhstan (580) and the UK (560).

Nine out of 30 countries with the highest MDR TB burden in the world are in the WHO European Region¹⁴. In 2016, there were an estimated 122 000 (range, 110 000–134 000) incident cases of rifampicin-resistant and multidrug-resistant tuberculosis (RR/MDR TB) in the WHO European Region, with MDR TB accounting for 95% of the total. An estimated 19% (95% CI: 12–26%) of new cases and 55% (95% CI: 43–67%) of previously treated cases had RR/MDR TB. If all notified pulmonary tuberculosis patients were tested for drug resistance to rifampicin and isoniazid, it is estimated that around 71000 (range 71000–72000) would be detected (Table 2).

TB notification and trends

In 2016, a total of 297132 TB cases were reported from 52 countries¹⁵ in the WHO European Region, 253096 of which were new, relapses or had an unknown previous treatment history (Table 5). This represents 85.2% of all TB cases notified in 2016.

The notification rate of new and relapse cases varies widely among countries, from none (San-Marino) to 118 (Kyrgyzstan) per 100 000 population (Map 1 and Table 4).

In 2016, there were 34 countries with low notification of new and relapse cases (less than 20 cases per 100 000), all located in the western and central part of the Region and the majority of them were high-income countries. Seven

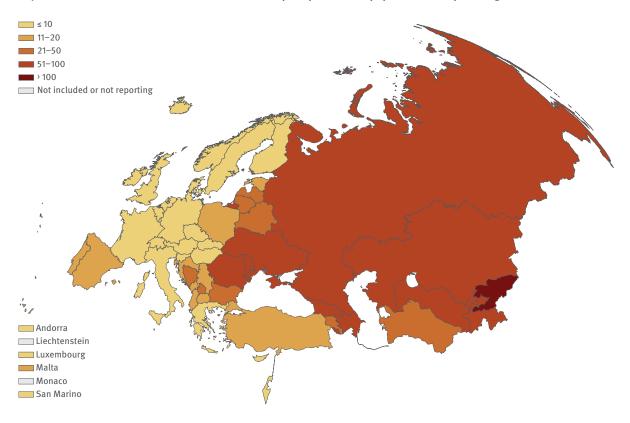
¹² The 18 high-priority countries are: Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Romania, Russia, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan.

¹³ World Health Organization. Global tuberculosis report 2017. Geneva: World Health Organization; 2017. Available from: http://apps.who.int/iris/bitstream/10665/259366/1/9789241565516-eng.pdf

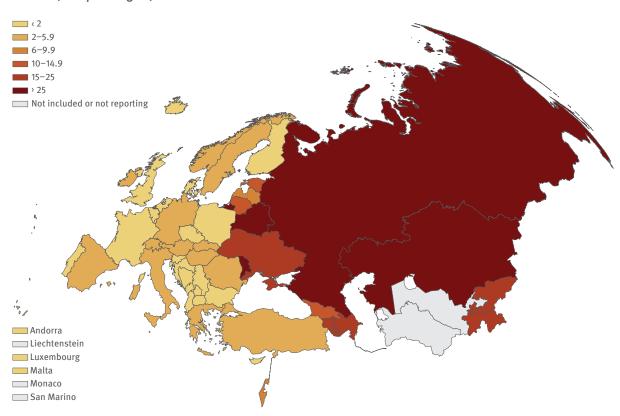
¹⁴ Top 10 countries with the highest global MDR TB burden (in alphabetical order): Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Somalia, Tajikistan, Ukraine, Uzbekistan according to WHO Global tuberculosis report, 2017.

¹⁵ Monaco was the only non-reporting country in 2017.

Map 1: TB notification rates of new TB cases and relapses per 100 000 population, European Region, 2016



Map 2: Percentage of notified TB cases with multidrug resistance among new pulmonary laboratory confirmed TB cases, European Region, 2016



countries reported new or relapse case rates of between 20 and 50 per 100 000 population. Nine reported between 50 and 100 cases per 100 000 population: Moldova (88), Georgia (76), Kazakhstan (69), Tajikistan (68), Romania (65), Ukraine (65), Russia (64), Azerbaijan (53) and Uzbekistan (51). The 18 high -priority countries with new and relapse case notifications account for about 83% of the Regional burden. Around 36% of new and relapse cases come from Russia, even though Russia only accounts for 16% of the Region's population.

During the period 2012–2016, an overall downward trend of 16.6% was observed in the notification of incident TB cases, from 33.5 to 28.0 cases per 100000 population (Table 4). This trend reflects a genuine reduction in the spread of the disease, significantly influenced by the decrease in notification rates throughout the Region's 18 high-priority countries from 64.7 to 53.5 per 100000 population. The notification rate of new and relapse cases in the 18 high-priority countries is almost twice as high as for the Region overall (53.5 cases per 100000 compared to 28.0 for the Region) and about five times higher than the rate in the EU/EEA (10.9 cases per 100000 population).

Previous treatment history

In 2016, previously treated cases represented 10.5% and 30.3% in the EU/EEA and non-EU/EEA respectively. The average in the 18 high-priority countries was 30.0%, impacting the pan-European average of 26.4%. There were 16 countries in which previously treated cases accounted for 15% or more of all TB cases: Azerbaijan (43.4%), Russia (35.5%), Ukraine (31.6%), Moldova (31.2%), Kyrgyzstan (28.7%), Belarus (26.3%), Georgia (26.0%), Kazakhstan (25.9%), Armenia (24.3%), Uzbekistan (21.7%), Romania (21.1%), Lithuania (20.2%), Turkmenistan (17.8%), Montenegro (16.1%), Tajikistan (16.0%) and Latvia (15.2%) (Table 5). Reasons for the high percentage of previouslytreated cases include clinical failure or poor treatment adherence and mismanagement in previous treatment episodes and possible re-infection during the current treatment episode.

Disease localisation

In 2016, pulmonary localisation was notified in about 72% of the overall TB cases in the Region (Table 6). The proportion of patients with pulmonary localisation in the EU/EEA was higher than in non-EU/EEA countries. Extrapulmonary TB was notified on average for 14.2% of all TB cases in the Region. Eight countries reported more than 30% of their tuberculosis cases having extra-pulmonary localisation: Belgium, Ireland, Italy, Netherlands, Norway, Sweden, Turkey and United Kingdom.

Bacteriological confirmation

Bacteriological confirmation of TB diagnosis was reported for 135 472 (64.2%) of all 211 018 new and relapse pulmonary cases in the Region (Table 7). Confirmation of TB diagnosis among pulmonary TB cases by culture, smear and/or nucleic acid amplification tests (such as WHO-recommended rapid diagnostics Xpert MTB/RIF) was much lower in non-EU/EEA countries (60.1%) than in EU/EEA countries

(80.3%). Confirmation also varied considerably among countries - from 45% in Uzbekistan to 93% in Slovenia. In five countries bacteriological confirmation of new and relapse pulmonary cases was below 60%, underlining the need to strengthen diagnostics: Uzbekistan (45.3%), Armenia (52.8%), Hungary (54.4%), Russia (50.8%) and Kyrgyzstan (57.7%). In 34 countries bacteriological confirmation of new and relapse pulmonary cases was 75% and above.

Age and sex

There is a wide variation in the distribution of age- and sex-specific notification rates across countries. Notification rates in eastern European countries are highest in young adults (25–44 years) and subsequently decrease, while in the countries of Central Asia and in Turkey the notification rates either increase with age, or are relatively constant across adult age groups.

In the group of 18 high-priority countries, the rate of TB in children under five years was lower than the notification rate among children aged 5–14 years, indicating that detection of TB remains especially challenging in young children.

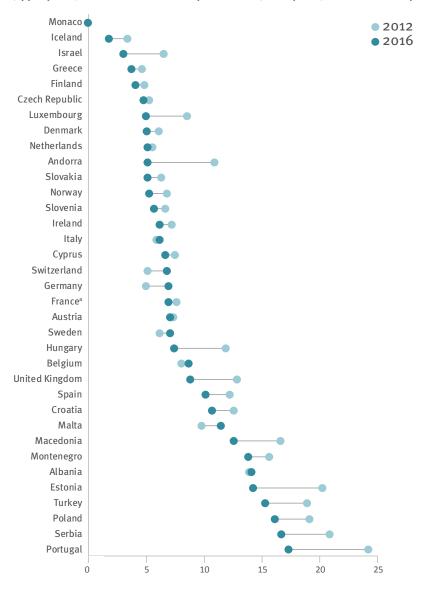
In countries with at least 100 new and relapse TB cases the proportion of TB cases notified in children (0–14 years) varied at country level from below one percent (Turkmenistan, Belarus, Hungary) to 21.4% (Slovakia) of all new cases and relapses. The difference in proportions of childhood TB cases across the countries may reflect differences in case-finding practice (e.g. contact tracing), population age-structure and under-/over-diagnosis or reporting of childhood TB. The average percentage of new and relapse TB patients under 15 years in the Region is around 4.0% (Table 9).

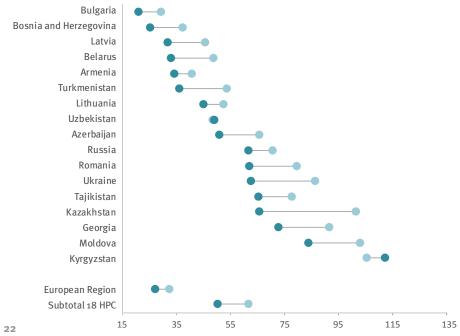
There were twice as many males as females reported among all TB cases (Table 9), however a large variation was observed for male predominance in the sex distribution of TB cases, ranging from almost even distribution to over three times greater in Armenia and Luxemburg. In most countries, gender differences in notification rates appear to be more significant among middle-aged and older adults. TB rates in males and females appear to be more similar in children and younger adults (0–14 and 15–24 years). This gender difference in TB case notification most likely reflects the overrepresentation of males in the various TB risk groups, notably the homeless, prisoners, seasonal migrant workers, people living with HIV (PLHIV), men who have sex with men (MSM) and people who inject drugs (PWID).

Drug resistance

In 2016, 50 countries in the Region reported on first-line anti-TB drug susceptibility test (DST) results. The percentage of confirmed MDR TB cases among 86 797 new pulmonary TB cases tested for first-line DST in the Region was 17.7%, which is slightly lower than the rate observed in 2015 (18.3%) (Fig 3.1.2). One possible reason for the low percentage of MDR TB at Regional level is the unusually low number of MDR TB cases reported from Kazakhstan and Uzbekistan compared to previous years. While 13 countries reported no MDR TB or less than 1%

Figure 3.1.1. Trend in TB notification rate per 100 000 between 2012 and 2016 in countries with under 20 cases per 100 000 (upper panel) and 20 cases and over per 100 000 (lower panel) in the WHO European Region





among new TB cases, eight countries reported a rate over 20% (Table 12). With the exception of the Baltic States, where MDR TB among new cases varied from 7.6% in Latvia to 13.3% in Lithuania, the prevalence was 4.1% or lower in all EU/EEA countries, with an average of 2.4% (Fig 3.1.3). In the non-EU/EEA area, three countries had an MDR TB prevalence ranging from 10–19% among new cases tested for first-line DST: Armenia (15.4%), Azerbaijan (15.4%) and Georgia (10.2%). Six countries had 20–29% MDR TB among new cases: Kazakhstan (25.5%), Kyrgyzstan (21.9%), Moldova (25.6%), Russia (27.3%), Tajikistan (20.8%) and Ukraine (22.0%). Belarus and Uzbekistan reported MDR prevalence above 30% (38.6%).

The percentage of confirmed MDR TB cases among 46 272 previously-treated TB cases whose isolates were tested for first-line DST was 51.9%, which is higher than the 2015 rate (46.3%) (Fig 3.1.2). The reason for such an increase at Regional level is the notable increase in the absolute number of previously treated cases with DST results in the Russian Federation as a result of the introduction of a country-wide electronic surveillance system. In 2016, the Russian Federation reported twice as many MDR TB cases as in previous years. The new surveillance system in Russia facilitated an accurate estimate of the number of previously treated MDR TB patients. This had not been possible before and consequently regional data had been under-estimated.

Eighteen countries had between 15% and 49% MDR TB among previously-treated TB cases tested for first line DST. In six countries this rate was even higher: Albania (50.0%), Kyrgyzstan (56.3%), Moldova (57.4%), Armenia (57.7%), Belarus (71.6%) and Russia (65.2%) (Table 12). However, it should be noted that in Albania this involved only four cases in absolute numbers.

In 2016, the per capita rate of MDR TB notification among new TB cases at Regional level was 1.7 per 100 000. This represents an average annual increase of 0.8% between 2012 and 2016 (Table V).

Trends in the MDR percentage among new TB cases and trends in the per capita notification rate of MDR TB among new cases have differed significantly by country in recent years (Table V). The proportion of MDR among new pulmonary TB cases tested for drug resistance decreased slightly in the EU/EEA sub-region over the last five years, from 2.7 to 2.4%, and the per capita rate of notified MDR TB cases remained stable at around 0.1 per 100 000 population. Meanwhile, in the non-EU/EEA countries the MDR percentages among new cases increased from 18.4% in 2012 to 22.8% in 2016. At the same time, despite an impressive decline in incident TB cases per capita, the notification rate for MDR TB increased from 3.4 to 3.7 per 100 000 population, suggesting that the replacement of susceptible TB strains with resistant strains is becoming more common in the non-EU/EEA subregion. The Regional trend is influenced by an increase in the MDR notification rate experienced mainly by Russia and Ukraine, as well as by Azerbaijan and Tajikistan. In a few settings (Armenia, Belarus, Georgia, Lithuania, Moldova) the MDR rate has levelled off, while Estonia and Latvia serve as clear examples of countries that have reversed the trend in rising epidemics of MDR TB. In central Asian countries the prevalence and rate of MDR TB fluctuates widely from year to year, indicating weaknesses in routine drug-resistance surveillance.

In 2016, a total of 50 countries reported on second-line DST data. Data on second-line DST was available from about 96% of all notified MDR TB cases (compared to 29% in 2015), which is an exceptional achievement for data coverage in the history of drug resistance surveillance for the European Region. Of the 37663 MDR TB cases subjected to second-line DST, 4 917 (13.1%) were XDR TB (Table 14). This is notably lower than the previous year's result (21.9%). Such rapid change at Regional level is related to the fact that Russia, which accounts for around 67% of MDR TB cases in the Region, began reporting second-line drug (SLD) data to the global TB database for the first time. In EU/EEA countries, where 74.4% of MDR TB cases were tested for second-line drugs, the prevalence of XDR among MDR cases was 20.1%, which is comparable to the result for 2015. Among the countries reporting at least 30 MDR cases with second-line DST results, five countries reported over 20% XDR prevalence among MDR TB cases: Belarus (45.9%), Latvia (37.5%), Lithuania (23.8%), Romania (30.0%) and Poland (20.5%).

There is no clear trend in the XDR TB percentage for countries with a long history of SLD DST surveillance. Thus, in Belarus the alarming rate of increase for XDR continued in 2016, reaching a prevalence of 45.6%. An increasing trend in XDR-TB was also observed in Estonia, Latvia and Romania, while in Lithuania, Armenia, Azerbaijan, Georgia and Tajikistan XDR prevalence among MDR TB cases has levelled off (Table VIII).

Of the 51752 RR/MDR TB patients notified, 49 446 (95.5%) were enrolled into MDR TB treatment programmes. Five high-priority countries reported a gap of over 5% between the number of patients enrolled and the number diagnosed: Turkey (82.4%), Azerbaijan (86.3%), Belarus (87.2%), Georgia (87.5%), and Russia (94.0%) (Table 15).

Access to XDR TB treatment at regional level was only 76.6% in 2016, which is notably lower than the 98.6% treatment coverage reported for the previous year. This trend is influenced by Russia where XDR TB treatment coverage is only 52%, whereas in the rest of the high-priority countries, except for Tajikistan, XDR-TB treatment coverage is above 90%.

TB/HIV co-infection

A total of 40 countries provided surveillance data on TB/HIV co-infection (Table 16). In the reporting countries, of the 224 282 new and relapse TB patients notified, 193 128 were screened for HIV (86.1%). Nine high-priority countries achieved a testing level above 90%: Armenia, Azerbaijan, Belarus, Georgia, Estonia, Moldova, Tajikistan and Ukraine and Uzbekistan. A total of 25 844 TB cases were detected with HIV-positive status, 13.4 % of those tested versus 9.0% recorded in 2015. The sudden change in TB/HIV cases is related to improvement of the TB/HIV surveillance system in Russia following the introduction of a

Figure 3.1.2. Percentages of MDR among laboratory-confirmed pulmonary TB cases, European Region, 2012 – 2016

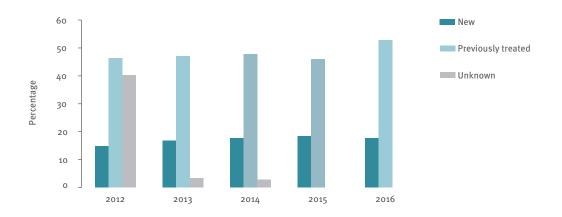


Figure 3.1.3. Percentages of MDR among laboratory-confirmed pulmonary TB cases, EU/EEA, 2012 – 2016

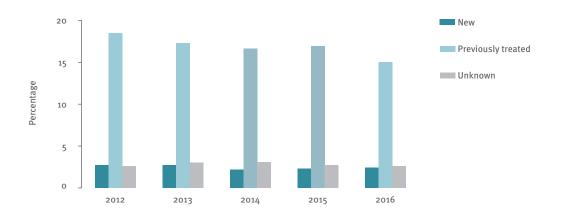
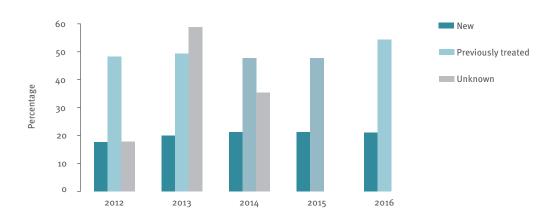


Figure 3.1.4. Percentages of MDR among laboratory-confirmed pulmonary TB cases, 18 high-priority countries, 2012–2016



case-based, country-wide electronic surveillance system. Until 2016 Russia only reported TB/HIV data from among the TB cases newly diagnosed with HIV in the civilian population. Improvement of electronic surveillance has indicated that the burden of TB/HIV infection is much higher than was estimated. This has also resulted in a substantial revision of regional estimates.

Among those countries reporting representative HIV testing (above 50% HIV testing coverage), six have documented a significant overlap of the HIV and TB epidemics by exceeding 10% HIV prevalence among new and relapse TB cases (Table 16): Russia, Ukraine (20.7% each), Malta (17.4%), Portugal (13.9%), Estonia (11.7%) and Latvia (11.0%). Six countries with representative routine surveillance had 5-10% HIV prevalence among TB patients: Belarus, Moldova (8.7% each), Spain (7.3%), Israel (7.2%), Armenia (5.6%) and Kazakhstan (5.4%). In 2016, 32 countries in the Region provided information on anti-retroviral therapy (ART) enrolment among TB cases with HIV-positive status. Of 25844 HIV-positive tuberculosis cases, 16829 (65.1%) had received ART. This is somewhat higher than in 2015 (62.4%), but far below the WHO target of universal ART coverage. Among the high-priority countries there were only eight that achieved coverage of over 75%: Armenia, Belarus, Estonia, Georgia, Kazakhstan, Romania, Tajikistan and Turkey.

Origin of cases

TB cases of foreign origin represent 8.2% of all TB cases notified Region-wide, 32.7% in EU/EEA countries and only 2.0% in non-EU/EEA countries (Table 10). In many countries TB cases of foreign-origin represent a large majority: Malta (96.0%), Sweden (89.8%), Norway (88.6%), Israel (80.8%), Cyprus (93.3%), Switzerland (79.8%), Netherlands (75.3%) and Luxemburg (75.9%).

TB in prisons

During 2016, 36 countries in the Region provided information on TB case detection and treatment in prisons (Table 17). Overall, 12 298 (6.0%) of the new and relapse TB cases in the Region were reported from prisons, 11863 (97%) of which were in the high-priority countries. In EU/EEA countries the proportion of TB cases in prisons represented only 1.7% of the country total; in non-EU countries the proportion was 7.1%. In the non-EU/EEA countries, the notification rate in prisons was 1144 new TB cases per 100 000 detainees, which is about seven times higher than in the EU/EEA sub-region (164 per 100 000). The overall notification rate for new TB cases in prisons in the WHO European Region was 862 per 100 000 detainees. In five countries the TB notification rate exceeded 1000 cases per 100 000 detainees: Azerbaijan, Kyrgyzstan, Moldova, Russia and Ukraine. The highest TB risks in prison relative to the risk in the general population are calculated to be in Slovakia (41), Moldova (25), Azerbaijan, Latvia and Russia (23 each). Six countries (Andorra, Ireland, Luxemburg, Malta, and San-Marino and Slovenia) did not report any cases of TB from their penitentiary systems.

Treatment outcome

The treatment success rate among 218 o28 new TB cases and relapses having started treatment in 2015 was 77.2% (Table 19). This is slightly higher than the 76.2% treatment success rate reported in the previous year (Table X). The average rate for the 18 high-priority countries was 78.5% cured and treatment completed. The treatment success rate was slightly lower in the EU/EEA countries than in non-EU/EEA countries (74.1% versus 78.0%). Only 17 countries achieved an 85% treatment success rate in this treatment cohort. Another eight countries were close to the target, with success rates of 80–85%. Six countries had treatment success rates below 60%, where no treatment follow-up data were inversely correlated (Croatia (10.4%), Cyprus (55.6%), Poland (53.1%), Ireland (57.0%), Finland (36.2%) and Denmark (50.0%).

In the 2015 cohort of all clinically-diagnosed and bacteriologically-confirmed new TB and relapse cases, a total of 17 403 (8.0%) cases were reported to have died, 4.6% to have been lost to follow-up and 4.2% to have had treatment that failed. These unfavourable outcomes were lower in the EU/EEA countries than in the rest of the Region, exemplified by the proportion of patients with failed treatment – 0.7% in the EU/EEA versus 5.1% in non-EU/EEA countries (Table 19). Countries reporting fatal outcomes in excess of 10% were Czech Republic (19.0%), Slovenia (16.3%), Estonia (14.5%), Hungary (11.9%), Moldova (11.3%), Lithuania (11.1%), Russia and Ukraine (10.0% each). Countries reporting the highest failure rates were Ukraine (8.2%) and Russia (7.0%).

For 2015, the treatment success rate among the 7215 child TB cases was 91.9% (Table 20). The treatment success rate in EU/EEA countries was somewhat lower than that for the non-EU/EEA countries (86.7% vs. 93.5%). Among child TB cases in the Region 1.0% died, another 0.8% failed and 1.4% were lost to follow-up.

Of 7177 TB/HIV co-infected patients who started treatment throughout the Region in 2015, only 4461 (62.2%) had a successful treatment outcome (Table 21). This is notably higher than the 41.4% treatment success rate reported in the previous year. The reason for such a sharp change year to year was most probably the weakness of data quality and coverage. Treatment outcome data is available for only 30% of notified TB/HIV cases. Given that within recent years there has been no indication of a sharp increase in ART and CPT coverage, the observed improvement in the TB/HIV co-infection treatment success rate would appear to be the result of selection bias.

In 2016, the treatment outcome was notified for 44703 laboratory-confirmed RR/MDR TB cases reported by 41 countries (Table 22). For the whole Region the treatment success rate was 54.7%, which is somewhat higher than the 51.5% treatment success rate reported for the 2013 RR/MDR TB treatment cohort (Table XII). The treatment success rate for RR/MDR TB patients was higher in the non-EU/EEA countries than in the EU/EEA countries (55.2% versus 39.4%). The countries that performed best were the Hungary (100%), Sweden (88.2%) and Netherlands (85.7%). In the Region

as a whole 15.3% of RR/MDR TB cases died, 12.4% failed and 10.9% were lost to follow-up.

Conclusion

The year 2016 was the first year in which the Roadmap to implement the TB Action Plan for the WHO European Region 2016–2020 was activated. The TB Action Plan incorporates the lessons learned in implementing Regional Committee resolution EUR/RC61/15 on The Consolidated Action Plan to Prevent and Combat Multidrug- and Extensively Drug-Resistant Tuberculosis in the WHO European Region 2011-2015, and is in-line with WHO's new European health policy framework, Health 2020. The new TB Action Plan sets a Regional goal of ending the spread of drug-susceptible and drug-resistant TB by achieving universal access to prevention, diagnosis and treatment in all Member States of the Region. This, in turn, will contribute to ending the TB epidemic, which is the main aim of the End TB Strategy. Under the TB Action Plan, targets to be achieved by 2020 are: a 35% reduction in TB deaths, a 25% reduction in TB incidence rates and a 75% treatment success rate among MDR TB patients.

TB continues to be a major public health challenge in the WHO European Region. According to the latest estimates, about 290 000 incident TB cases and 26 000 deaths were reported in the Region in 2016, mostly from eastern and central European countries. In the last 10 years, new cases of TB have been falling at an average rate of 4.3% per year. The rate of decline has been accelerated in recent years. If this trend continues then the Regional target of a 25% reduction in the incidence rate compared to 2015 will be achieved.

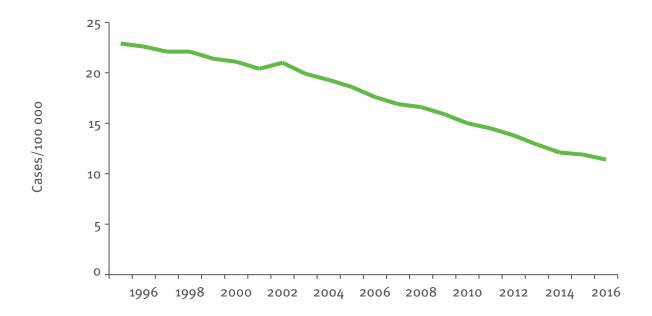
The WHO European Region is the most affected area for MDR TB in the entire world. Of the 30 countries in the world with the highest MDR TB burden, nine are in the Region (Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Ukraine and Uzbekistan). In 2016, estimated percentages of MDR among new and previously treated TB cases in the Region were 19% and 55% respectively, while reported percentages were 17.7% and 51.9%.

Around 122 000 people in the Region are estimated to become infected with RR/MDR TB every year. It is important to note that over the last six years (2011–2016) the capacity of countries' health systems for early detection of RR/MDR TB has increased substantially. In 2016, 73% of RR/MDR TB were detected out of an estimated 71000 of all notified TB cases. Progress in detections could be attributed to the early-detection diagnosis coverage of the WHO-recommended rapid diagnostics and countries' efficient diagnostic algorithms.

TB is a major cause of death among people living with HIV, and this deadly combination is increasing in the Region. Rapid detection and appropriate treatment are therefore vital. In 2016, only 25 844 (76.0%) of an estimated 34 000 HIV patients co-infected with TB were detected and only 65% of them were offered antiretroviral treatment. The percentage of HIV among TB cases increased from 3.4% in 2008 to 13.4% in 2016.

TB cases of foreign origin represent 8.2% of all TB cases notified Region wide, 32.7% in EU/EEA countries and only 2.0% in non-EU/EEA countries.

Figure 3.2.1. TB notification rates per 100 000 population by year of reporting, EU/EEA, 1995–2016^a



Missing data from Liechtenstein (except 2007)
Data source: ECDC Surveillance Atlas of Infectious Diseases. http://www.ecdc.europa.eu/en/data-tools/atlas/Pages/atlas.aspx

A total of 6.0% (12 298 cases) of the new and relapse TB cases in the Region were reported from prisons, 11863 (96.5%) of which were in the 18 high-priority countries. The overall notification rate for new TB cases in prisons in the WHO European Region was 862 per 100 000 detainees. A Regional average of related risks for emerging TB in prisons was 25 times higher than in society as a whole.

In 2016, treatment success rates increased to 77.2% in the new and relapse cohort and 54.7% in the RR/MDR TB cohort respectively. It is reassuring that the trend towards a decline in treatment success rates, seen in the Region since the beginning of the new millennium, has reversed. This is the fourth consecutive year in which the treatment success rate has been improving, both among the new and relapse and the RR/MDR TB cohorts. A possible contributing factor to the improvement of treatment efficiency is the increase in diagnostic capacity in countries (reflected by improved DST coverage, including SLD). This means that countries are able to detect and treat more rapidly with the right regimen, in line with the individual resistance pattern. However, Regional progress is not rapid enough to meet the 2020 target of a 75% treatment success rate for MDR TB cases and additional efforts are required to improve the treatment success rate by introducing and expanding access to short treatment regimens, new TB drugs and patient-centred care.

On 16–17 November 2017, the WHO Global Ministerial Conference 'Ending TB in the Sustainable Development Era: A Multisectoral Response' was held in Moscow, Russia. The Conference aimed to accelerate the implementation of the WHO End TB Strategy – with immediate action to address gaps in access to care and the MDR TB crisis – in order to reach the End TB targets set by the World Health Assembly and the United Nations (UN) Sustainable Development Goals (SDGs) through national and global commitments, deliverables and accountability.

At the Conference a Ministerial Declaration was signed, containing bold commitments by countries to accelerate action to end TB and meet the milestones on the path towards the 2030 SDGs. The Moscow Declaration to End TB is a promise to increase multi-sectoral action as well as track progress, and build accountability. It will also inform the first UN General Assembly High-Level Meeting on TB in 2018, which will seek further commitments from heads of state.

3.2 European Union and European Economic Area countries

Data completeness

For 2016, TB notification data were reported by 30 countries (none from Liechtenstein). As with TB cases notified from 2011 to 2015, the reporting of non-mandatory variables in 2016 was complete or near-complete for age, gender, TB site and variables defining the origin of a case (Annex 3). Previous treatment history was available for 76.8% of cases, which was lower than in previous years (84.3% and

87.7% for 2015 and 2014 data, respectively) and masked substantial differences across countries. For example, previous treatment history was only available for 3.4% from Luxembourg and 5.7% of cases from France.

Reporting completeness for the results of culture (82.2%) in 2016 was similar to 2015 (82.5%), with only five countries remaining below 75% (Croatia, France, Greece, Portugal and the United Kingdom). Reporting completeness for microscopy (72.5%) was lower than in 2015 data (76.9%), continuing the declining trend observed in recent years. In 2016, drug susceptibility reporting completeness for first-line TB drugs was 87.4%, which was less than in 2015 (91.3%), continuing the decrease observed since 2014. Second-line DST reporting completeness decreased from 76.7% of MDR TB cases in 2015 to 74.4% in 2016, after having increased from 64.9% in 2013. Of particular note was the fact that four countries (Croatia, Iceland, Malta, and Slovenia) reported no MDR TB cases, and two countries (Greece and Luxembourg) did not report any results for second-line DST.

HIV status was available for 33.9% of all reported cases in 2016, which was lower than in 2015 (34.4%). As for 2015 data, HIV status is still missing for TB cases from Austria, Croatia, Finland, France, Germany, Italy, Poland, Sweden and the United Kingdom. Greece reported HIV status too late for these data to be included in the report. Denmark reported HIV status for the first time.

In 2016, treatment outcome at 12 months, 24 months and 36 months was available for 70.6% of all reported cases, 78.5% of MDR TB and 80.1% of XDR TB cases, respectively. Compared to the 2012–2015 period, completeness was lower for all cases in 2016. Treatment outcome was not reported by France, Greece, Italy, Luxembourg, Malta or Spain. Treatment outcome for MDR TB cases was missing from Finland.

Time and place

In 2016, 58 994 cases of TB were reported in 30 EU/EEA countries (Table 3). As in previous years, three countries (Poland, Romania and the United Kingdom) accounted for nearly 45% of all reported cases, with Romania alone accounting for 23.1% of all cases.

The EU/EEA notification rate in 2016 was 11.4 per 100 000 population, continuing the downward trend observed since the launch of European enhanced TB surveillance in 1996 (Figure 3.2.1). During the period 2012–2016, the average annual decline in the notification rate was 4.5%.

As in 2015, country-specific notification rates differed considerably in 2016, ranging from 1.8 in Iceland to 68.9 per 100000 in Romania. Rates were below 10 per 100000 in 20 countries and below 20 per 100000 in 26 countries. In the majority of countries, the notification rates have fallen steadily during the period 2012–2016 (Table 3). The downward trend was particularly pronounced in Hungary, Iceland and Luxembourg where the average annual rate of decrease exceeded 10%. Among the five WHO high priority countries which are Member States of

the EU/EEA, Latvia and Estonia saw substantial decreases, with rates declining by more than 8% per year. The decline was more moderate in several low-incidence countries, and increasing rates were observed in four countries (Belgium, Germany, Malta and Sweden) during the period 2012–2016. Between 2015 and 2016, notification rates in Malta and Ireland increased by 54.4% and 10.1%, respectively.

Previous treatment, laboratory confirmation and TB site

In 2016, the distribution of cases by previous treatment history was similar to that in recent years: 41531 (70.4%) of 58994 TB cases reported in 2016 were newly diagnosed; 6207 (10.5%) had been previously treated for TB and 11256 (19.1%) had an unknown previous treatment status (Table 5). The Member States with the lowest proportions of new cases had the highest proportions of cases with unknown previous treatment status. Of 11256 TB cases with unknown previous treatment status, 5249 (46.6%) were reported by Germany, representing 88.7% of all German cases reported in 2016. The proportion of previously treated cases was above 20% in two countries (Lithuania and Romania) and more than 10% in another seven countries (Bulgaria, Denmark, Estonia, Hungary, Latvia, Poland and Slovakia).

Laboratory confirmation was reported for 41868 (71.0%) of 58994 cases overall (Table 8). Country-specific proportions of laboratory-confirmed cases ranged from 39.5% in Slovakia to 92.4% in Slovenia. Of the five high-priority countries, the three Baltic States (Estonia, Latvia, and Lithuania) had proportions of confirmed cases above 80%. Overall, the proportion of laboratory-confirmed cases has almost doubled since 1996 and reached its highest level in 2016¹⁶.

Of all 58 994 TB cases reported in 2016, 38 102 (64.6%) were diagnosed with pulmonary TB, 13 450 (22.8%) with extrapulmonary TB, 6 922 (11.7%) with a combination of both and 520 (0.9%) with no TB site reported (Table 6). The proportion of extrapulmonary TB was highest in the Netherlands (46.0%), the United Kingdom (45.3%), and Norway (37.1%) and lowest in Iceland (0%) and Hungary (3.7%).

Of 42720 new and relapse pulmonary TB cases reported in 2016, 34304 (80.3%) were confirmed by culture, smear and/or nucleic acid amplification test (Table 7). Hungary reported the lowest proportion of new, culture-confirmed pulmonary cases (54.4%).

According to the EU case definition, 41867 (71.0%) of 58994 TB cases reported in 2016 would be classified as confirmed, 3890 (6.6%) as probable and 13237 (22.4%) as possible (Table 8). The percentage of clinically diagnosed cases was highest in Hungary (45.8%) and Bulgaria (44.7%). It is unclear if the low proportion of laboratory-confirmed cases and the reliance on clinical diagnosis reflects a potential risk that TB is being over-diagnosed in these countries,

or if it is related to under-reporting of laboratory results to the national surveillance systems.

Age and sex

Of 55718 new TB cases and relapses with known age, 36 049 (64.7%) were aged between 25 and 64 years (Table 9). The highest notification rate was observed in the age group 25–44 years (13.8 per 100 000). On average, adults over 64 years accounted for less than 20% of all cases, but more than one third of all cases reported by Croatia, Finland and Slovenia were in this age group.

In 2016, children under 15 years accounted for 2424 (4.4%) of 55718 new TB cases and relapses reported with information on age (Table 9). The notification rate for all TB cases in children under 15 years was 3.0 per 100 000 (Table III). Three countries (Bulgaria, Lithuania, and Romania) reported age-specific notification rates per 100 000 in children over 10 years.

In 2016, the male-to-female ratio in new TB cases and relapses was 1.5, similar to 2016 (Table 9). Males were over-represented in all EU/EEA Member States. There was no sex imbalance in children under 15 years.

Origin of cases

Of the 58 994 TB cases notified in 2016, 3909 (64.3%) were born in or citizens of the reporting country (referred to as 'native'), 19312 (32.7%) were of foreign origin and 1773 (3.0%) were of unknown origin (Table 10). Over the past five years, the annual number and proportion of native TB cases declined whereas the annual number and proportion of TB cases of foreign origin decreased only between 2012 and 2014, before increasing again thereafter (Table IV). Of the 19312 cases of foreign origin in 2016, 8494 (44.0%) were reported by Germany and the United Kingdom. Country-specific proportions of foreignorigin TB cases ranged from below 1% in Bulgaria, Croatia, Lithuania and Romania to above 90% in Cyprus and Malta.

Drug resistance

Annex 5 displays participation and performance in an external quality assessment (EQA) scheme for drug susceptibility testing (DST) by Member State.

Of 41273 laboratory-confirmed TB cases notified in 2016, 36 071 (87.4%) underwent isoniazid and rifampicin susceptibility testing (Table 13). Resistance to at least one anti-TB drug was reported for 3216 (9.9%) of the cases tested overall and for 26–32% of cases tested in Estonia, Latvia, and Lithuania. MDR TB was reported for 1322 (3.7%) of 36 071 cases with DST results overall and for 10–20% of the cases tested in Estonia, Latvia and Lithuania. The rate of notified MDR TB cases has remained unchanged over the past four years at 0.3 per 100 000 population (Table VII). Overall, XDR TB was reported for 198 (20.1%) of 984 MDR TB cases that underwent second-line DST (Table 14). The proportion of XDR TB cases among MDR TB cases that underwent second-line DST increased from 13.9% in 2012 to 20.6% in 2016 (Table VIII).

¹⁶ European Centre for Disease Prevention and Control. ECDC Surveillance Atlas of Infectious Diseases. Available at: http://www.ecdc.europa.eu/en/data-tools/atlas/Pages/atlas.aspx

Of 21 915 new confirmed pulmonary TB cases with DST results, 524 (2.4%) were resistant to isoniazid and rifampicin (Table 12). Of 4 022 previously treated confirmed pulmonary TB cases with DST results, 602 (15.0%) were resistant to isoniazid and rifampicin. Compared to new cases, previously treated confirmed pulmonary TB cases were over seven times more likely to be resistant to isoniazid and rifampicin (odds ratio [OR] 7.2, 95% confidence interval [CI] 6.3–8.1).

HIV co-infection

HIV status was reported for 19 988 (69.0%) of 28 971 TB cases from 20 countries (Table 16a). Of these 19 988 cases with known HIV status, 895 (4.5%) were reported as HIV-positive. Among countries with at least 50% reporting completeness for HIV status, the proportion of co-infected cases was highest in Malta, Portugal and Estonia at 17.4%, 13.9%, and 12.0%, respectively. Since 2012, the proportion of HIV-co-infected TB cases has been decreasing (Table IX).

TB in prisons

For 2016, 18 EU/EEA countries reported 671 new and relapse TB cases in prisons, resulting in a notification rate of 163.8 per 100 000 inmates and a relative risk of 11.1 compared to the general population (Table 17). TB cases in prisons accounted for 1.7% of all new and relapse cases notified; however, this proportion was above 4% in Estonia, Latvia. and Slovakia.

Treatment outcome

Of the 46 870 TB cases notified in 2015 with a treatment outcome reported in 2016, 33519 (71.5%) were treated successfully, 3709 (7.9%) died, 583 (1.2%) experienced treatment failure, 2442 (5.2%) were lost to follow-up, 2011 (4.3%) were still on treatment in 2016 and 4606 (9.8%) had not been evaluated (Table 18). France, Greece, Italy, Luxembourg, Malta and Spain did not report treatment outcome. Among 43695 new TB cases and relapses notified in 2015, 32 376 (74.1%) were treated successfully (Table 19). In countries where at least 75% of new confirmed TB cases and relapses had a known outcome, treatment success ranged from 64.9% in Germany to 100.0% in Iceland. The proportion of successfully treated cases among new TB cases and relapses decreased from an average of 77% in cases notified during the period 2011–2013, to an average of 74% in cases notified during 2014 and 2015 (Table X). More than 16% of TB cases notified by the Czech Republic and Slovenia died, a remarkably high proportion for these countries where it is rare for cases not to be evaluated.

Of 1214 MDR TB cases notified in 2014 with a treatment outcome reported in 2016, 455 (37.5%) were treated successfully, 202 (16.6%) died, 168 (13.8%) experienced treatment failure, 154 (12.7%) were lost to follow-up, 167 (13.8%) were still on treatment in 2016 and 68 (5.6%) were not evaluated (Table 23). In addition to the countries that did not report treatment outcome data, Cyprus, Iceland and Slovenia did not report any MDR TB cases for 2014, and Finland and Spain did not report treatment outcome after 24 months. Overall, the 24-month MDR TB treatment success rate remains low, although it has improved over the past five

years: from an average of 34% for cases initially reported in 2010–2012, to an average of 41% for cases reported in 2013–2014 (Table XII).

Of 151 XDR TB cases notified by 14 countries in 2013 with a treatment outcome reported in 2016, 51 (33.8%) were treated successfully, 33 (21.9%) died, 37 (24.5%) experienced treatment failure, 27 (17.9%) were lost to follow-up, and three (2.0%) were not evaluated (Table 25). Overall, the 36-month XDR TB treatment success rate remains low and trends over time are unreliable due to the small number of cases (Table XIV).

Of 664 HIV-positive TB cases notified in 2015 with a treatment outcome reported in 2016, 413 (62.2%) were treated successfully, 95 (14.3%) died, five (0.8%) experienced treatment failure, 66 (9.9%) were lost to follow-up, 64 (9.6%) were still on treatment in 2016 and 21 (3.2%) were not evaluated (Table 21).

Conclusions for the EU/EEA

In 2016, the overall TB notification rate in the EU/EEA continued the decline observed since 2002. As in previous years, a few countries reported large numbers of cases, including Romania, which still accounts for 23% of all reported cases. The decreasing notification rates observed in most countries are reassuring, but annual rates of decline are still insufficient to achieve the WHO target of TB elimination by 2050 in European low-incidence countries [5]. To achieve annual decreases of over 10% in notification rates, further efforts would be required to address the most vulnerable and hard-to-reach groups, such as migrants or prison inmates.

In contrast to native TB cases, the number and proportion of TB cases of foreign origin has increased since 2014. TB incidence rates among foreign-born patients remain several times higher than those among natives and may reflect the incidence in their country of origin, as suggested by a study looking at pre-entry screening [8]. Foreign-born patients may have been exposed to TB prior to their immigration to the EU/EEA or when travelling back to their country of origin. Thus, the most frequently reported foreign countries of origin were in regions known for high TB incidence [8]. Asylum seekers are probably at greater risk of TB infection due to the disruption of screening and control programmes in their countries of origin after years of conflict or due to exposure to infection during their journey or in crowded migrant centres. As with any other vulnerable group, it is essential to ensure good access to healthcare services for migrants and TB cases of foreign origin.

In 2016, overall notification rates of MDR TB remained stable at a relatively low level and showed markedly decreasing trends in two of the three Baltic countries where MDR TB is particularly prevalent.

Data on HIV co-infection remained very incomplete, and the number of countries reporting HIV status was similar to 2015. Since 2012, the proportion of HIV co-infected TB cases has been decreasing slightly. HIV co-infection has been found to be more likely in TB cases originating

from Africa [9]. Since HIV co-infection is associated with low TB treatment success, special attention should be given to these cases, with strict adherence to international guidelines for prevention and treatment of TB in HIV-infected adults [9].

Data on TB in prisons remain scarce for the EU/EEA and only 18 countries provided such data for 2016. This situation has not changed over the past few years, and the information available remains insufficient to accurately monitor TB in prisons at EU/EEA level. TB prevalence is substantially higher in the prison population, with higher proportions of drug-resistant TB than in the general population [10]. To efficiently control TB in prisons, it is important that all countries collect and report these data.

Finally, treatment success rates have decreased slightly over the past 10 years and are now at approximately 75%. The surveillance data also show that treatment success rates for both MDR and XDR TB are far below the targets set. Countries with a persistently high proportion of fatal cases (>10%) should further investigate the reasons for this and increase efforts to reduce case fatality.



4. Commentary - Monitoring

4.1 WHO European Region

To address the challenges to tuberculosis and M/XDR TB prevention and care, the WHO Regional Office for Europe, working in close consultation with representatives from the countries, experts and communities, has developed the Tuberculosis Action Plan for the WHO European Region 2016–2020. The Action Plan is based on lessons learned implementing the seven areas of intervention in the Consolidated Action Plan to Prevent and Combat Multidrug- and Extensively Drug-Resistant Tuberculosis in the WHO European Region 2011–2015, and is in line with the global End TB Strategy and other health policy guidance, such as Health 2020: the European policy for health and wellbeing.

The Tuberculosis Action Plan for the WHO European Region 2016–2020 is supported by a monitoring and evaluation (M&E) framework that to monitor progress towards targets. The framework consists of 26 indicators that enable performance monitoring in the Action Plan's areas of intervention, as well as follow on from the Berlin Declaration on Tuberculosis 2007 'All Against Tuberculosis'. Nine are core indicators for monitoring and reporting to the WHO Regional Committee for Europe. In addition, the selection of indicators was harmonised with the End TB Strategy's recommended top 10 global indicators. The status of the core indicators, which is analysed on an annual basis, appears below.

Indicator 1.B.1 Percentage of newly notified TB patients diagnosed using WHO-recommended rapid tests (G9)

Given the large burden caused by MDR TB in the Region, the early detection and diagnosis of drug-resistant tuberculosis using rapid molecular tests is a priority. The Action Plan acknowledged that the uptake of new rapid diagnostic technologies is slow in many settings. The long duration of the diagnostic process for TB (lasting several days) may discourage many vulnerable patients from returning for results and possible treatment.

In the Action Plan, introduction and roll-out of rapid tests followed by the adoption of a diagnostic algorithm for difficult-to-diagnose paediatric TB and extrapulmonary TB, particularly among hard-to-reach and vulnerable populations, was also seen as an opportunity to rapidly identify and control drug-resistant TB. Faster detection of drug-resistant strains means that patients can be initiated onto appropriate treatment regimens more quickly, thereby minimising the window of transmission.

A total of 44 countries reported data on the proportion of newly-notified patients diagnosed using WHO-recommended rapid tests in 2016. There was no data available as a baseline for this indicator and the Action

Plan target was set at 40%. As shown in Figure 4.1.2, the target was over-achieved at regional level, with 57% of new and relapse cases diagnosed using rapid tests. For the 18 high-priority countries this figure was even higher, reaching 63%. Nine of the high-priority countries met the target, seven did not meet it and two (Ukraine and Turkey) did not provide information. In the EU/EEA region, only 25% of cases were diagnosed using rapid tests.

Indicator 1.B.2. First-line DST coverage (%) among all bacteriologically confirmed TB cases (G1)

The Action Plan aims to ensure provision of DST for all bacteriologically confirmed tuberculosis cases. In 2016, a total of 49 countries reported on DST routine surveillance data. Coverage of DST among all notified TB cases confirmed by culture was 87%, which is lower than the 91% level recorded at the baseline. In all, eight of 16 high-priority countries had DST coverage above 90% (Figure 4.1.2). Turkmenistan did not report complete routine drug-resistance surveillance data.

Indicator 1.B.3. MDR TB case detection rate (%) (G3)

From 2016, WHO began generating RR TB estimates instead of MDR TB as, due to the intensive roll-out of WHO recommended rapid diagnostic testing, a considerable number of drug-resistant TB cases are being diagnosed based on GeneXpert MTB/RIF results only. In addition RR TB is a good proxy for MDR TB. Therefore, the MDR TB detection rate has been slightly modified: This indicator is now calculated by dividing the total number of notified RR/MDR TB cases by the total number of estimated RR/MDR TB cases among notified pulmonary TB patients (Figure 4.1.3).

If all notified TB patients with pulmonary TB in the Region had been tested in 2016 for drug resistance to rifampicin and isoniazid, an estimated 71 000 cases of RR/MDR TB would have been found by national tuberculosis control programmes. In 2016, a total of 51752 RR/MDR TB cases were detected among notified tuberculosis patients in the WHO European Region. This is 73% of all estimated cases, indicating notable progress in RR/MDR case detection compared to the baseline (62%) documented in 2014. Six of 16 high-priority countries achieved targeted 85% RR/MDR case-detection rate (Figure 4.1.3).

Indicator 1.B.4 TB notification rate per 100 000 population (E1)

The Regional Action Plan aims to reduce the TB incidence rate by 25% against 2015 before 2020. To enhance this the countries should have annual reduction of at least 5.5% in notification of new and relapse TB cases.

Figure 4.1.1. Percentage of new and relapse TB patients notified in 2016 that were diagnosed using WHO recommended rapid tests in 18 high-priority countries and WHO European Region, 2016

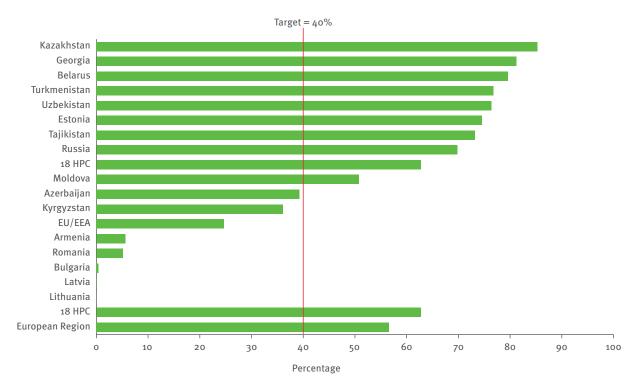
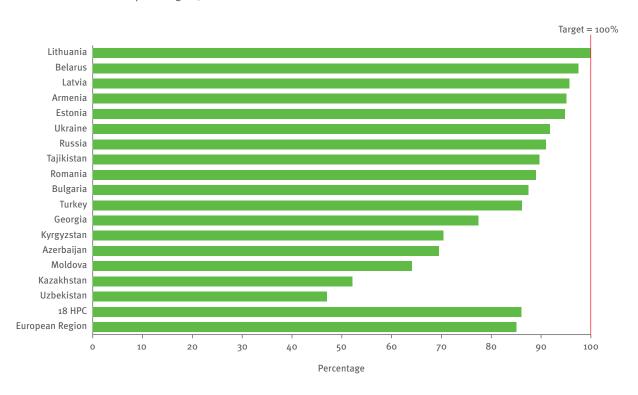


Figure 4.1.2. First-line DST coverage (%) among all bacteriologically confirmed TB cases (G1) by 18 high-priority countries and WHO European Region, 2016



The total average annual decline of TB notification in 2016 compared to 2015 was 5.2%, which is quite close to the targeted annual decline of 5.5%. If this trend continues, the Regional target of a 25% decline in notification by 2020 compared to 2015 will be achieved. Of 51 Member States, 43 have seen a decline in the TB notification rate in the last five years. Kyrgyzstan was the only one of the high-priority countries not on track to reduce TB notification. It should also be noted that notification data reported by Turkmenistan and Kazakhstan vary significantly from year to year, indicating weakness of surveillance data (Figure 4.1.4).

Indicator 1.B.5 TB case detection rate (%)

In 2016, a total of 253 096 incident TB cases were notified in 52 countries across the WHO European Region compared to an estimate of 290 000 cases. This represents a case detection rate of 87.2%, which is slightly higher than the 84.1% baseline measured in 2014. In all, 15 of the 18 high-priority countries have case detection rates above 75% (Figure 4.1.5). Detection of TB cases in the Region is therefore improving and most countries are on track in their efforts to increase TB case detection.

Indicator 1.B.6 Percentage of RR/MDR TB among new TB patients (E2)

Percentage of MDR TB among new TB patients (E2)

The Regional Action Plan aims to reduce MDR prevalence among new TB cases. At Regional level MDR TB prevalence among 85 851 new pulmonary TB cases tested for first-line DST was 17.7%, which is slightly lower than the rate observed in 2015 (18.3%). In seven of the 18 high-priority countries reporting routine DST data, the MDR prevalence among new pulmonary TB cases was higher than or comparable to 2015 data. In contrast, the MDR percentage in Bulgaria, Estonia, Latvia, Romania and Turkey has been declining over the past five years. Meanwhile in Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan significant variation from year to year and missing data indicate that routine drug-resistance surveillance in these countries is challenging and additional efforts are required to produce quality data (Figure 4.1.6).

Indicator 1.B.7 Percentage of RR/MDR TB among previously treated TB patients

A number of studies have demonstrated that acquired drug-resistance can be prevented by appropriate infection control measures, application of home-based care and efficient treatment of drug-sensitive tuberculosis cases. Nevertheless, high prevalence of MDR TB is still a challenge for many countries in the WHO European Region. In 2016, the percentage of confirmed MDR TB cases among previously-treated TB cases tested for first-line DST was 51.9%, which is higher than the 2015 rate (46.3%). The reason for such a rapid change at Regional level is the significant increase in the absolute number of previously treated cases with DST results in the Russian Federation, as a result of the introduction of a country-wide, case-based electronic surveillance system. In 2016, the Russian Federation reported twice as many MDR TB cases as in

previous years. A new surveillance system in Russia facilitated the accurate estimation of previously treated MDR TB patients. In the past, these patients had not been accounted for, which meant that MDR TB cases in the Region were under-estimated. In the rest of the high-priority countries there is no clear trend in MDR: in nine countries the MDR percentage among previously treated cases declined in 2016 against 2015, and in another six countries it increased or remained comparable with the previous year. The very significant variation in data from year to year in Kazakhstan and Uzbekistan and the lack of data from Turkmenistan raise concerns about the capacity of these countries to accurately measure routine data.

(Indicator?) 1.C.1. Percentage of hospitalisation of new TB patients (E₃)

The practice in some countries of hospitalising patients unnecessarily has been shown to contribute to the spread of drug-resistant forms of TB. Ambulatory services and home-based treatment were not fully functional in many countries. In the absence of adequate airborne infection control, hospitalisation can lead to nosocomial transmission and superinfection with M/XDR TB strains among patients and healthcare workers. On the other hand, studies showed no difference in treatment outcomes between patients treated in ambulatory and hospital settings. Therefore, WHO recommends minimising unnecessary hospitalisation and using ambulatory rather than hospital-based models of care for TB treatment.

In 2016, a total of 31 countries provided information on the hospitalization percentage for TB patients enrolled in first and second-line treatment. Hospitalisation rates for first-line TB treatment ranged from 25 (Georgia) to 100% (Belarus), with an average of 74%. The proportion of patients hospitalised for second-line treatment was even higher, ranging from 68 (Tajikistan) to 100%. This data suggests that hospitalisation rates remain very high in most of the countries in the Region and additional efforts are required to change the model of care.

Indicator 1.C.2. Percentage of detected RR/MDR TB patients enrolled in treatment (G₃)

Achieving universal second-line treatment coverage for all detected RR/MDR TB patients is a fundamental requirement for reducing TB transmission in the community and TB mortality.

The number of cases starting MDR TB treatment in 2016 was equivalent to 95.5% of the 51752 RR/MDR TB patients notified in 2016 across the European Region. Access to MDR treatment in the Region increased significantly from 2010 onwards. Over the past five years many of the high-priority countries have consistently reported higher numbers of cases enrolled than cases detected. There are numerous reasons for such discrepancies, including incomplete reporting; backlogs of RR/MDR TB patients; frequent treatment failures and treatment interruptions (leading to re-enrolment of the same patients in the same yearly cohort), and weakness of surveillance. It is noteworthy that in 2016 the gap between the number of RR/MDR TB

Figure 4.1.3. RR TB case detection rate (%) (G3) for 18 high-priority countries and WHO European Region, 2016

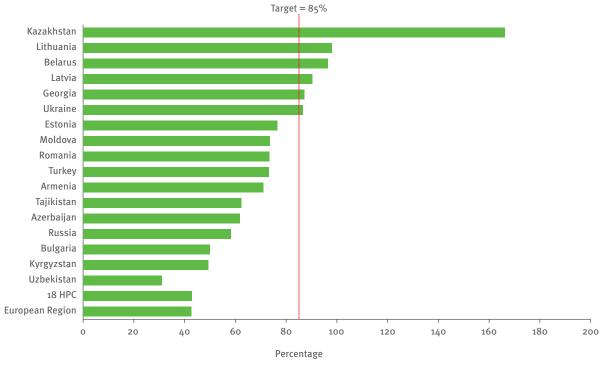
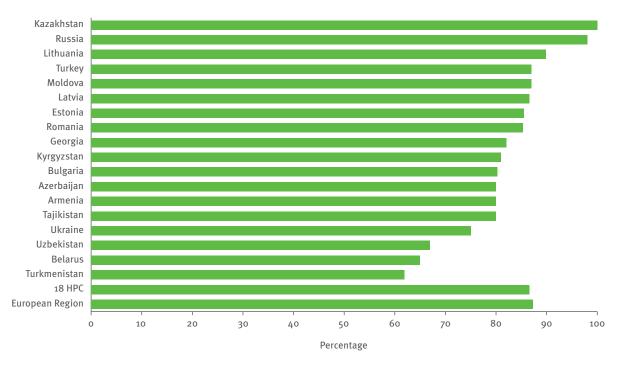


Figure 4.1.5. TB case detection rate (%) (G3) for 18 high-priority countries and WHO European Region, 2016



cases detected and enrolled narrowed considerably in most of the countries, suggesting improvement in the surveil-lance system. In five of the 18 high-priority countries the shortfall between the number of cases detected and the number enrolled into second-line TB treatment was over 5%, indicating an urgent need to improve second-line treatment coverage. Countries with an enrolment rate below 95% were Azerbaijan (86.3%), Belarus (87.2%), Bulgaria (86.4%) Georgia (87.5%), Russia (94.0%) and Turkey (82.4%).

Indicator 1.C.3. Treatment success rate (%) among all new and relapse TB patients (G4)

Effective TB treatment is essential to prevent death and cut transmission. Therefore, the treatment success rate serves as a key indicator for monitoring progress on the Sustainable Development Goals. According to the TB Action Plan, WHO European Region aims to increase the treatment success rate for new and relapse TB cases to at least 85%.

In 2015, the treatment success rate for new and relapse patients enrolled in treatment at Regional level was 78.5% against a baseline of 75.2%. Only seven of the 18 high-priority countries achieved the target level of an 85% treatment success rate. Eight of the 18 high-priority countries showed a trend towards improvement of treatment success, but for most countries the pace of improvement is very slow if the 85% treatment success rate target is to be achieved.

Indicator 1.C.4. Treatment success rate (%) among the MDR TB treatment cohort (G4) (E4)

Treatment success rate is an indicator of high quality TB care. Despite the treatment success rate having continuously improved from 46.1 to 54.8% in recent years, it remains far below the 75% target set by the TB Action Plan. Only two of the 18 high-priority countries (Estonia and Kazakhstan) have achieved the benchmark of at least 75% treatment success rate for RR/MDR TB patients (Figure 4.1.11). Overall, ten of the 18 high-priority countries are on track to increase their RR/MDR TB treatment success rate, however progress is not rapid enough to meet the 2020 target of 75% treatment success rate for MDR TB cases.

Indicator 1.C.5. TB mortality rate (ICD A15-19) (G10) (E6)

The TB Action Plan aims to reduce the number of TB deaths in 2020 by 35% against 2015. As seen in Figure 4.1.12, all high-priority countries except Azerbaijan have shown a rapid decline in TB mortality over the last six years. If the current trend continues, the Regional target will most probably be surpassed. Although decline is comparatively slow in Georgia and Uzbekistan, in three countries (Armenia, Belarus and Kazakhstan) the decline was so fast that the 2020 target of reducing the TB mortality rate by 35% has already been achieved.

Indicator 1.D.1 Percentage of detected out of estimated incident TB/HIV co-infected cases

In 2016, the number of TB/HIV co-infections detected was 83% of the estimated number of TB/HIV incident cases in the Region, which is comparable with the baseline data. It

should be noted that following the epidemiological review in February 2017 and the improvement of reporting completeness for this indicator – after introduction of case-based surveillance system in Russia – the Regional estimate was revised considerably. However, since both estimates and the reported number of TB/HIV cases increased proportionally, the overall Regional detection rate did not change significantly. Only three of the 18 high-priority countries achieved a detection rate of over 90%. In eight high-priority countries the detection rate was below 70%, indicating the need to invest more effort into improving detection.

Indicator 1.D.2 HIV testing coverage (G9) (E7)

The TB Action Plan sets a target of achieving close to 100% HIV testing coverage. In 2016, HIV testing coverage at Regional level was 86.1%, which is a notable improvement on the 67.6% testing coverage at baseline. Nine of the 18 high-priority countries reported over 90% HIV testing coverage.

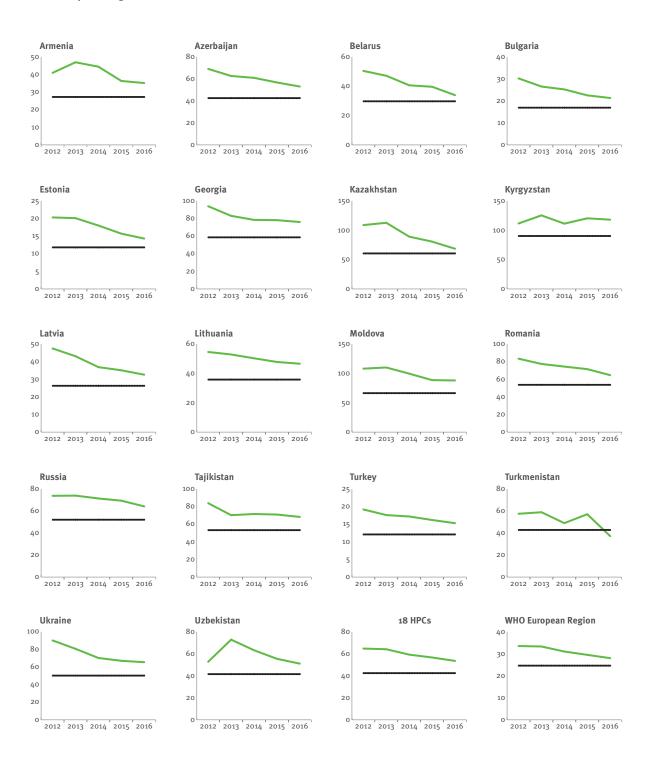
Indicator 1.D.3 Percentage of HIV co-infection among all TB (new and relapse TB cases)

In 2016, 13.4% of new TB patients with known HIV status were HIV positive, compared to 9.0% in 2015. This rapid change is partially due to an improvement in the surveillance system in the Russian Federation, however, TB/HIV co-infections are increasing in the Region, on average by about 20% annually. An increase in TB/HIV co-infection has been recorded in eleven of the 18 high-priority countries. In 2016, Armenia, Georgia and Uzbekistan reported fewer TB/HIV cases than in 2015, however, there is no clear trend of reversion. Only Bulgaria and Latvia have seen a noticeable decline in the TB/HIV co-infection rate over the last five years. This rapid increase is an indication that HIV transmission continues apace in most eastern European and Central Asian countries and that efforts towards the early identification of people living with HIV (PLHIV) and preventive TB treatment are inadequate.

Indicator 1.D.4 Percentage of TB/HIV co-infected patients enrolled in antiretroviral therapy

The TB Action Plan aims to achieve full coverage with antiretroviral therapy (ART) for all patients detected with TB/HIV co-infection, as per WHO recommendations. In 2016, 25 countries in the Region provided information on ART enrolment among TB cases with positive HIV status. All the reporting countries together accounted for 45% of notified TB cases. Among the reporting countries ART coverage was 65.1%. This represents some improvement against the baseline 53.8%. Six of the high-priority countries attained coverage of above 90% and eleven of the 18 high-priority countries demonstrated a trend towards increasing ART coverage over the last five years. However, for most countries the trends have been quite slow and are not stable – consequently more efforts are needed to further strengthen TB/HIV collaborative activities in the Region.

Figure 4.1.4. Trend in new and relapse TB notification rate per 100 000 population for 18 high-priority countries and WHO European Region, 2012–2016.



Indicator 1.D.5 Latent TB infection treatment coverage among people living with HIV/AIDS (G5a)

Detection of latent TB infection (LTBI) offers an opportunity to treat and prevent reactivation of the latent infection that leads to active disease, especially in people with compromised immune systems. WHO recommends that people living with HIV (PLHIV) should be treated, even if they are infected but do not have active TB, due to the very high risk of progression to TB. The proportion of the population with latent TB infections varies from country to country, depending on the TB burden, but it is estimated that about 30% of the adult population in eastern Europe have LTBI. It is therefore probable that about 30% of PLHIV who are newly enrolled in HIV care might have LTBI and should be offered TB preventive treatment. In 2016, a total 12 countries in the Region provided information on LTBI treatment to the UNAIDS reporting system. Overall, of 36 o86 PLHIV newly enrolled in HIV care 70% received LTBI treatment. In Russia and Uzbekistan over 90% of PLHIV received LTBI treatment, which is much higher than expected. Belarus and Moldova reported no access to LTBI treatment, while in Armenia and Georgia the coverage was below the target of 30%. Such large variation from country to country indicates a lack of standardised approach and a gap in adherence to WHO recommendations in countries.

Indicator 1.E.1 Contact investigation coverage (G2) (E7)

Contact tracing is a key component of TB prevention, especially in children. Contact investigation may result in earlier identification of cases, possibly decreasing disease severity and reducing transmission of *Mycobacterium tuberculosis*. WHO recommends that all contacts of bacteriologically confirmed TB patients be followed up and screened for TB.

This indicator is calculated as the number of contacts of people with bacteriologically confirmed TB evaluated for TB, divided by the number eligible. Only 17 countries in the Region reported contact-tracing data to the WHO Global TB Database, and 99.3% of all contacts with TB cases were investigated for TB/LTBI in 2016. The target of 90% was achieved by all seven reporting high-priority countries (Figure 4.1.18).

Indicator 1.E.2 LTBI treatment coverage of childhood TB contacts aged under five years (G5b) (E8)

WHO recommends that children <5 years of age who are household or close contacts of people with TB and who, after an appropriate clinical evaluation, are found not to have active TB should be treated for presumed LTBI as per WHO guidelines . The Regional Action Plan aims to achieve at least 90% presumptive LTBI treatment coverage of childhood TB contacts aged under five years. This indicator is calculated as the number of children aged <5 years who are household contacts of cases started on LTBI treatment, divided by the number of all child contacts <5 years. In 2016, a total of 12 countries provided information on childhood contact investigations for the Global TB database. At Regional level LTBI treatment coverage of childhood TB contacts aged under 5 years was 75.3%. Azerbaijan was

the only country among the 18 high-priority countries that achieved the 90% target (Figure 4.1.19).

Indicator 2.E.1 Treatment success (%) of new and relapse TB cases among prisoners

In 2016, 36 countries in the Region provided data on treatment outcome of prison TB cases. The overall treatment success rate at Regional level was 59.9%, which is much lower than the 78.5% treatment success rate in the general population, or the 63.2% baseline. The Regional indicator is influenced by the outcome for Russia, which accounts for over 75% of prison TB cases notified in the Region. However, it should be noted that seven of the 18 high-priority countries achieved the target 85% treatment success rate (Figure 4.1.20).

4.2 European Union and European Economic Area countries

In 2016, WHO's Regional Office for Europe, working closely with representatives from the countries, experts and communities, developed the 'Roadmap to implement the tuberculosis action plan for the WHO European Region 2016–2020'. This roadmap is based on lessons learnt implementing the Regional Committee Resolution on The Consolidated Action Plan to Prevent and Combat Multidrugand Extensively Drug-Resistant Tuberculosis in the WHO European Region 2011–2015. It is applicable to all Member States in the WHO European Region, including high-priority countries and those with a low incidence of TB.

The Roadmap to implement the TB Action Plan for the WHO European Region 2016–2020 was published in 2016, establishing three areas of intervention with 26 indicators to assess the performance of the countries in tackling TB.

This is the first monitoring report applying these WHO indicators. A summary of findings by EU/EEA Member State and indicator is provided in Table 26, while indicator definitions and targets can be found in Annex 6.

1. Integrated patient-centred care and prevention

1.A. Systematic screening of contacts and high-risk groups

Indicator 1.A.1 Coverage of population at risk with systematic screening for active TB and LTBI

Contact investigation (and potentially source-case investigation) should be promoted to contribute to the detection of active and latent cases of TB. The less generalised the epidemic becomes, the more emphasis needs to be placed on this activity. This indicator is a direct measure of the level of contact investigations in the community. Strategies for contact investigation, including source-case investigation among recently infected cases (young children) and outbreak management, should be developed and/or revised. Of the 30 countries reporting data, five also reported the TB contact investigation coverage for

Figure 4.1.6. Trend of MDR percentage among new pulmonary TB cases for 18 high-priority countries and WHO European Region, 2012–2016.



2016 and four countries (Bulgaria, Lithuania, Norway and Slovakia) reported a screening coverage of over 80% for all TB contacts (Figure 4.2.1).

1.B. Early diagnosis of all forms of tuberculosis and universal access to drug susceptibility testing, including the use of rapid tests

Indicator 1.B.1 Percentage of newly notified TB patients diagnosed using WHO-recommended rapid tests (G9)

Twenty-five EU/EEA Member States reported on the proportion of patients newly notified in 2016 who were diagnosed using WHO-recommended rapid tests. There were no baseline data available and the target was first set to 30% and later updated to 40%. Overall, almost 25% of cases reported in the EU/EEA are diagnosed using WHO-recommended rapid tests. The target (40% of all new cases and relapses) has been met by nine Member States (Figure 4.2.2).

Indicator 1.B.2 First-line DST coverage among bacteriologically confirmed new and relapse pulmonary TB cases (G1)

In 2016, 33383 incident TB cases were laboratory-confirmed in 30 EU/EEA Member States, and for 29426 (88.1%) of them, DST results for rifampicin and isoniazid were provided. The target (100%) was achieved by seven countries (Figure 4.2.3).

Indicator 1.B.3 RR/MDR TB case detection rate (%) (G₃)

In 2016, WHO started replacing MDR TB estimates with RR TB estimates, since the latter is a good proxy of the former and the recommended management is identical for both. The MDR TB detection rate is therefore calculated by dividing the number of notified cases with RR/MDR TB by the estimated number of such cases. In 2016, seven EU/EEA countries achieved an RR detection rate of 85% or more (Figure 4.2.4). Six countries (Croatia, Cyprus, Iceland, Luxembourg, Malta and Slovenia) did not report any RR cases for 2016, and their detection rate could not be calculated.

Indicator 1.B.4 TB notification rate per 100 000 population (E1)

In 2016, country-specific notification rates in EU/EEA Member States differed considerably, ranging from 1.8 per 100 000 in Iceland to 68.9 in Romania. Rates were below the Regional target (24.6 per 100 000) in 27 countries. Only Latvia, Lithuania and Romania reported rates above the Regional target (Figure 4.2.5).

Indicator 1.B.5 TB case detection rate (%)

The case detection rate is calculated by dividing the number of notified new and relapse TB cases by the total number of TB cases estimated by WHO. The target was set to a minimum of 84% which, in 2016, was reached by all EU/EEA countries except Denmark, Greece and Bulgaria (Figure 4.2.6).

Indicator 1.B.6 Percentage of RR/MDR TB among new TB patients (E2)

In 2016, 30 EU/EEA countries reported on first-line anti-TB DST results. The prevalence of rifampicin-resistant (RR) TB among 21915 new pulmonary TB cases with first-line DST results was 2.4%, which was slightly higher than in 2014 (2.2%). Croatia, Cyprus, Iceland Luxembourg, Malta and Slovenia did not report any new RR TB cases in 2016. The target of a decreasing percentage was met by 11 of the remaining 24 Member States. Twelve countries reported an increase in RR cases of up to 4%, and Sweden reported the same proportion of RR cases in 2016 and 2014 (Figure 4.2.7).

Indicator 1.B.7 Percentage of RR/MDR TB among previously treated TB patients

In 2016, the prevalence of RR/MDR TB among 4 022 previously treated pulmonary TB cases tested for first-line DST was 15%, which is slightly less than in 2014 (16.6%). Six EU/EEA Member States did not report any previously treated RR TB cases in 2016 and 2014 and were considered as having achieved the target. Among the remaining 24 countries, the target of a decreasing percentage was met by 14 countries, whereas 10 countries reported an increase of up to 27% compared with 2014. (Figure 4.2.8).

1.C. Equitable access to quality treatment and continuum of care for all people with tuberculosis, including drug-resistant tuberculosis; and patient support to facilitate treatment adherence

Indicator 1.C.1 Percentage of hospitalisation of new TB patients (E₃)

In the EU/EEA, 18 Member States reported on hospitalisation of new TB patients in 2016. There were no baseline data available for 2014, so this target was not defined. In the 18 reporting EU/EEA Member States, 60.7% of new TB cases were hospitalised at the beginning of treatment (Figure 4.2.9).

Indicator 1.C.2 Percentage of detected RR/MDR TB enrolled in treatment (G₃) (E₄)

Eighteen Member States reported on treatment enrolment of MDR TB patients in 2016. For other Member States 100% treatment enrolment for MDR TB cases was used as a proxy. Croatia, Iceland, Malta and Slovenia did not diagnose any MDR TB cases in 2016. The global target of 100% treatment enrolment was met by 22 Member States. Altogether, 99.5% of MDR TB cases reported in the EU/EEA started treatment with second-line anti-TB drugs in accordance with WHO guidelines, and all countries except the Czech Republic reported treatment of more than 95% of their MDR TB cases (Figure 4.2.10).

Indicator 1.C.3 TB treatment success rate (G2)

Of the 43695 new and relapse TB cases notified in 2015 with a treatment outcome reported in 2016, 32376 (74.1%) were treated successfully. France, Greece, Italy, Luxembourg, Malta and Spain did not report treatment outcome. In countries where at least 75% of new confirmed TB cases and relapses had a known outcome, treatment success ranged from 64.9% in Germany to 100% in Iceland. Only

Figure 4.1.7. Trend in MDR percentage among previously treated pulmonary TB cases for 18 high-priority countries and WHO European Region, 2012–2016.



six countries (Iceland, the Netherlands, Norway, Romania, Slovakia and Sweden) met the treatment success target of 85% (Figure 4.2.11).

Indicator 1.C.4 TB treatment success rate among the MDR TB cohort (G4), (E4)

Of the 1367 RR TB cases notified in 2014 with a treatment outcome reported in 2016, 539 (39.4%) were treated successfully. France, Greece, Italy, Luxembourg, Malta and Spain did not report treatment outcome, Cyprus, Iceland and Slovenia did not diagnose any RR TB cases in 2014. Among the remaining 20 Member States, treatment success ranged from 12.5% in Lithuania to 100% in Hungary. Only four countries (Hungary, the Netherlands, Norway and Sweden) met the treatment success target of 75% for RR TB cases (Figure 4.2.12).

Indicator 1.C.5 TB mortality rate (ICD A15-19) (G10) (E6)

For 2016, WHO estimated 4270 TB deaths among HIV-negative people in the European Region. Estimated mortality in the EU/EEA was 0.8 deaths per 100 000 population, ranging from 0.2 in Denmark, Malta, Netherlands and Norway to more than five in Lithuania and Romania. The regional target of below 2.7 cases per 100 000 was met by all EU/EEA Member States except Lithuania and Romania (Figure 4.2.13).

1.D. Collaborative TB/HIV activities, and management of relevant co-morbidities

Indicator 1.D.1 Percentage of detected cases of estimated incident TB/HIV co-infected cases

In 2016, 16 EU/EEA Member States reported TB patients with HIV infection. The detection rate of TB/HIV co-infected cases is based on reporting data (numerator) and WHO estimates (denominator). The HIV detection rate was estimated as 70.9% and the target of 100% was reached only by Slovenia (Figure 4.2.14).

Indicator 1.D.2 HIV testing coverage (G9) (E7)

Twenty EU/EEA countries provided information on the HIV status of their TB cases and 69% of cases had a known HIV status. The target testing coverage of 100% was achieved by Iceland (Figure 4.2.15).

Indicator 1.D.3 Percentage of HIV co-infection among all TB (new and relapse TB cases)

In 2016, twenty EU/EEA Member States reported 826 new and relapse TB cases with HIV infection with an overall percentage of 4.4% TB/HIV co-infection. Country-specific proportions ranged from 0% in Bulgaria, Cyprus, Iceland and Slovakia to above 15% in Luxembourg and Malta. The target – a decrease compared to 2014 – was met by 10 Member States. In Iceland and Slovakia, there were no co-infected cases diagnosed in 2014 or 2016 (Figure 4.2.16).

Indicator 1.D.4 Percentage of TB/HIV co-infected patients enrolled in ART

Eight EU/EEA Member States reported ART enrolment to the WHO Global TB Database. Four countries did not report any HIV-positive TB cases among those tested. In 2016, 94.2% of HIV-coinfected TB cases had started ART. The target for enrolment coverage (close to 100%) was achieved by four Member States (Figure 4.2.17).

Indicator 1.D.5 Latent TB infection (LTBI) treatment coverage among people living with HIV/AIDS (PLHIV)(G5a)

No relevant data were available in the UNAIDS database for any EU/EEA Member State in 2016, therefore this indicator could not be monitored.

1.E. Management of latent tuberculosis infection and preventive treatment of persons at high risk, and vaccination against tuberculosis

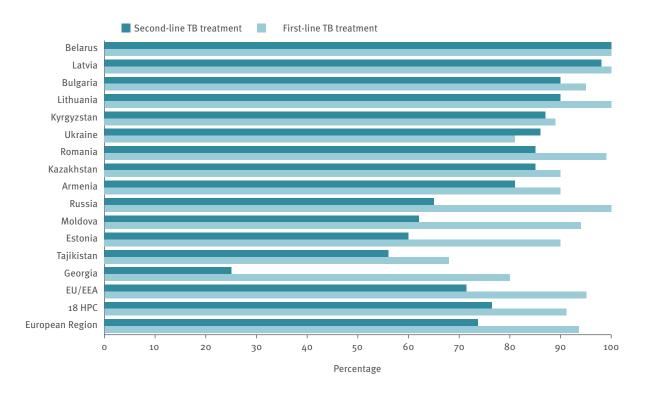
Indicator 1.E.1 Contact investigation coverage (G2)(E7)

Only four EU/EEA Member States reported contact-tracing data to the WHO Global TB Database, with 95.8% of all contacts with TB cases investigated for TB/LTBI in 2016. The target of 90% was achieved by all reporting Member States (Figure 4.2.18).

Indicator 1.E.2 LTBI treatment coverage of childhood TB contacts aged under five years (G₅b) (E8)

Only three EU/EEA Member States reported LTBI treatment data for TB contacts among children under five years to the WHO Global TB Database, with 47.9% of these contacts reported to have started LTBI treatment in 2016. The target of 90% was achieved by Slovakia but not by Slovenia or Norway (Figure 4.2.19).

Figure 4.1.8. Proportion of TB patients hospitalised for first-line and second-line TB treatment (%) (E3) for 18 high-priority countries and WHO European Region, 2016



2. Bold policies and supportive system

2A Political commitment with adequate resources, including universal health coverage policy

Indicator 2.A.1 Number of Member States that have a regular TB control/elimination performance publication every five years (E8)

Target: TB control/elimination performance publication published.

Data are not available for 2016.

2B Health systems strengthening in all functions, including well-aligned financing mechanisms for tuberculosis and human resources

Indicator 2.B.1 Percentage of TB patients and their households that experience catastrophic financial consequences due to TB (G8) (E9)

Target: Close to o

Data are not available for 2016.

2C Regulatory frameworks for case-based surveillance, strengthening vital registration, quality and rational use of medicines, and pharmacovigilance

Indicator 2.C.1 Treatment coverage with new TB drugs (%)

Target: 20%.

Data are not available for 2016.

2D Community systems and civil society engagement

Indicator 2.D.1 Number of Member States with functioning multi-stakeholder coalitions advocating for TB care and resources.

Target: Not defined

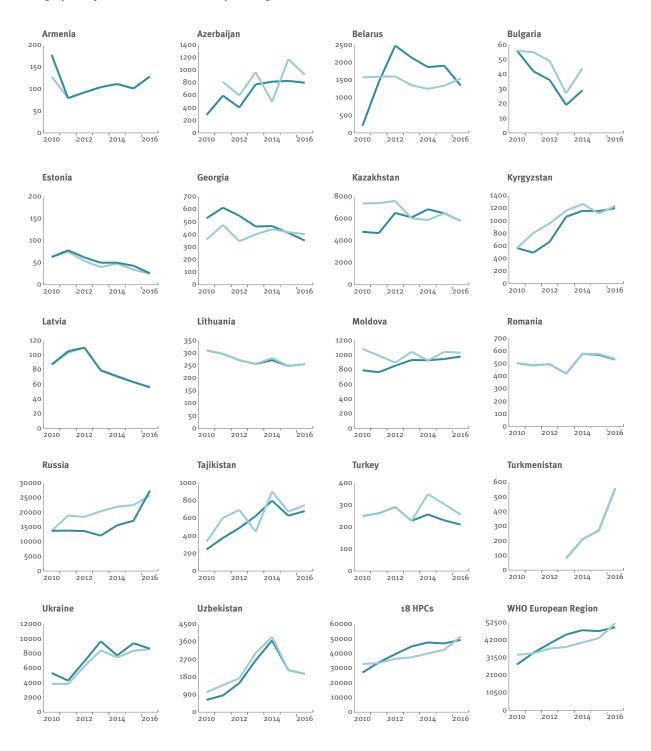
Data are not available for 2016.

2E Social protection, poverty alleviation and actions on other determinants of tuberculosis, such as migration and prisons

Indicator 2.E.1 Treatment success (%) of new and relapse TB cases among prisoners

Of the 544 TB cases notified in prisons across 13 EU/EEA Member States in 2015 for whom treatment outcome data are available, 372 (68.4%) were treated successfully. Ireland, Luxembourg, Malta and Slovenia reported no TB cases among prisoners. France, Greece, Italy, Luxembourg and Spain did not report treatment outcome. Among the 13 Member States reporting, treatment success ranged from 44.4% in Poland to 100% in Slovakia. Four countries (Bulgaria, Estonia, Romania and Slovakia) met the treatment success target of 85% for TB cases diagnosed in prisons (Figure 4.2.20).

Figure 4.1.9. Absolute number of RR/MDR TB cases detected (orange lines) compared with those reported to have been enrolled on second line treatment (blue lines) 2010–2016 in each of the 18 high-priority countries, and as a total for the 18 high-priority countries and WHO European Region, 2010–2016.



3. Intensified research and innovation

3A Discovery, development and rapid uptake of new tools, interventions and strategies

Indicator 3.A.1 European Tuberculosis Research Initiative established by mid-2016

Target: Established

The country-specific indicators are not defined for 2016.

Conclusions and monitoring recommendations

In 2016, only 14 of 26 WHO targets could be effectively monitored based on the data available from EU/EEA Member States. Almost all EU/EEA Member States met the four targets regarding estimated TB case detection (at least 84%), TB notification (below 24.6 per 100 000), treatment enrolment of RR/MDR TB cases (100%) and estimated TB mortality (below 2.7 per 100 000). A majority of reporting countries also met or were close to the targets on first-line DST coverage among bacteriologically confirmed cases (100%) and the percentage of RR/MDR TB among previously treated TB patients (decrease against 2014). However, only a minority of the Member States reporting met the targets regarding use of WHO-recommended rapid tests for diagnosis (40% of new cases and relapses), the percentage of RR/MDR TB among new TB patients (decrease against 2014) and the percentage of HIV co-infection (decrease against 2014). Finally, a small minority, in some instances only a single Member State, met the targets regarding estimated RR/MDR TB case detection (at least 85%), TB and MDR TB treatment success (at least 85% and 75%, respectively), HIV testing coverage (100%) and the estimated detection of TB/HIV co-infection (100%).

Although, TB seems well under control in the vast majority of EU/EEA Member States, certain aspects – especially the trends in detection and prevalence of MDR TB, treatment success of TB and MDR TB, and HIV testing coverage and detection - leave much to be desired. Special efforts should also be made to improve the reporting of LTBI, HIV status and treatment outcome results.

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Table: Monitoring framework for follow up of the TB Action Plan for the WHO European Region, 2016–2020

Area of intervent		Indicator	Baseline for EU/ EEA (2014) ²	Target	EU/EEA status 2016	Number of EU/ EEA Member States reporting the data	Number of EU/ EEA Member States having reached the target	
1. INTEGRATED, PATIENT-CENTRED CARE AND PREVENTION								
1.A. 1.A.	Sys	stematic screening of contacts and high-risk groups Coverage of population at risk with systematic screening for active TB and LTBI ³	N/A	80%	85.6%	5	4	
1.B.	Far	rly diagnosis of all forms of tuberculosis and universal acces1.s to di	ug-suscentihility te	sting, including the	use of rapid tests			
1.B.	1	Percentage of newly notified TB patients diagnosed using WHO-recommended rapid tests (G9)	N/A	40%	24.7%	26	9	
1.B.	2	First line DST coverage among all bacteriologically confirmed TB cases (G7)	90.0%	100%	88.1%	30	7	
1.B.	3	RR/MDR TB case detection rate	85.4%	85%	66.9%	24	9	
1.B.	4	TB notification rate per 100 000 population for new and relapse cases(E1)	12.2	24.6	10.9	30	27	
1.B.	5	TB case detection rate (%)	82.4%	increase	89.0%	30	26	
1.B.	6	Percentage of RR/MDR TB among new TB patients (E2)	2.4%	decrease	2.4%	24	11	
1.B.	7	Percentage of RR/MDR TB among previously treated TB patients	17.7%	decrease	15.0%	22	17	
1.C.		Equitable access to quality treatment and continuum of care for all people with tuberculosis, including drug-resistant tuberculosis; and patient support to facilitate treatment adherence						
ı.C.	1	Percentage of hospitalisation of new TB patients (E3)	N/A	decrease	60.7%	19	-	
ı.C.	2	Percentage of detected RR/MDR TB enrolled in treatment (G ₃) (E ₄)	93.3%	100%	99.5%	26	21	
.C.	3	TB treatment success rate (G2)	73.0%	85%	74.1%	24	6	
.C.	4	RR/MDR TB treatment success rate (G2) (E5)	40.7%	75%	34.2%	20	4	
.C.	5	TB mortality rate (ICD A15-19) (G10) (E6)	4.1	2.7	0.8	30	28	
ı.D.	Col	Collaborative tuberculosis/HIV activities, and management of relevant comorbidities						
.D.	1	Percentage of detected out of incidence TB/HIV estimated	63.1%	90%	59.3%	17	1	
.D.	2	HIV testing coverage (G9) (E7)	64.6%	100%	68.7%	20	1	
.D.	3	Percentage of HIV among all TB	4.9%	decrease	4.4%	16	8	
.D.	4	Percentage of TB/HIV patients enrolled in ART	80.7%	100%	94.2%	8	4	
.D.		LTBI treatment coverage among PLHIV (G5a)	5%	30%	-	-	-	
.E.	Ma	nagement of latent tuberculosis infection and preventive treatment		isk, and vaccination		sis		
.E.	1	Contact investigation coverage (G2) (E7)	N/A	90%	95.8%	4	3	
1.E.	2	LTBI treatment coverage of childhood TB contacts aged under five years (G5b) (E8)	N/A	90%	47.9%	3	1	
		CIES AND SUPPORTIVE SYSTEMS						
2.A.	Pol	litical commitment with adequate resources, including universal hea	lth coverage policy					
2.A.	1	Number of Member States that have a TB control/elimination performance publically available (E8)	N/A	53	-	-	-	
2.B.	Hea	alth systems strengthening in all functions, including well-aligned f	nancing mechanisn	ns for tuberculosis a	ınd human resource	254		
2.B.	1	Percentage of TB-affected households that experience catastrophic costs due to TB (G ₃) (E ₁₀)	N/A	Close to o	-	-	-	
2.C.		gulatory frameworks for case-based surveillance, strengthening vita			of medicines, and p	harmacovigilence4		
.C.	1	Treatment coverage with new TB drugs (G8) (E9)	N/A	30%	-	-	-	
2.D.	Cor	mmunity systems and civil society engagement						
2.D.	1	Number of Member States with functioning multi-stakeholder coalitions advocating for TB care and resources ⁴	N/A	53	-	-	-	
.E.	Social protection, poverty alleviation and actions on other determinants of tuberculosis, such as migration and prisons							
2.E.	1	Treatment success rate (%) of new and relapse TBcases among prisoners	63.2%	85.0%	68.4%	13	4	
. INTENS		D RESEARCH AND INNOVATION						
3.A.	Dis	covery, development and rapid uptake of new tools, interventions a	nd strategies ⁴					
3.A.	1	European Tuberculosis Research Initiative established by mid-2016	N/A	Established	N/A	-	-	

¹ Some of data for 'desk review' assessment are collected through routine reporting at European level and analysed in this report.

² Baseline: as reported for or calculated from 2014 data

³ Currently analysed only for TB contacts.

⁴ Assessed against baseline (2014).

⁵ Data are not available or indicator defined for this report.

Figure 4.1.10. Trend in treatment success rate for new and relapsed TB cases enrolled into treatment 2012-2015 in each of the high-priority countries and totally for 18 high-priority countries and WHO European Region, 2012-2016



Figure 4.1.11. Trend in treatment success rate among MDR TB cohort enrolled in treatment between 2010 and 2014 in each of the 18 high-priority countries, and as a total for the 18 high-priority countries and WHO European Region, 2010–2014



Figure 4.1.12. Trend in TB mortality rate for the 18 high-priority countries and WHO European Region, 2010-2016



Figure 4.1.13. Percentage of cases detected against the estimated number of incident TB/HIV co-infected cases for 18 high-priority countries and WHO European Region, 2016

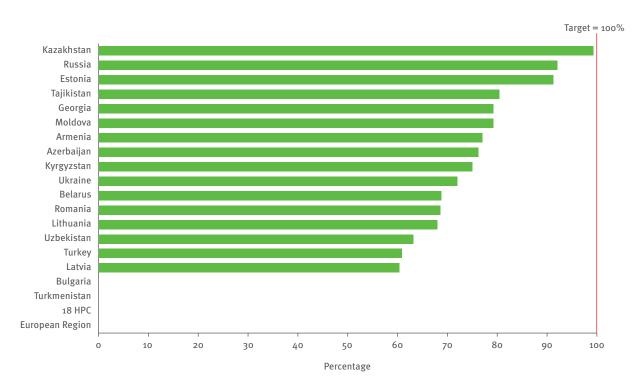


Figure 4.1.14. HIV testing coverage among new and relapse TB patients for the 18 high-priority countries and WHO European Region, 2016

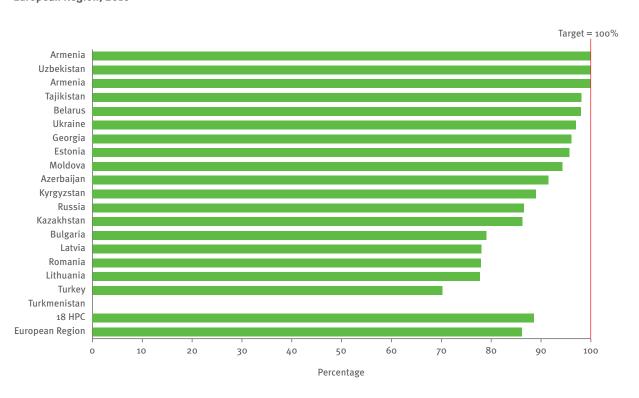


Figure 4.1.15. Percentage of HIV co-infection among new and relapse TB cases for the 18 high-priority countries and WHO European Region, 2012–2016



Figure 4.1.16. Number of HIV cases detected and number enrolled in ART for the 18 high-priority countries, 2011–2016

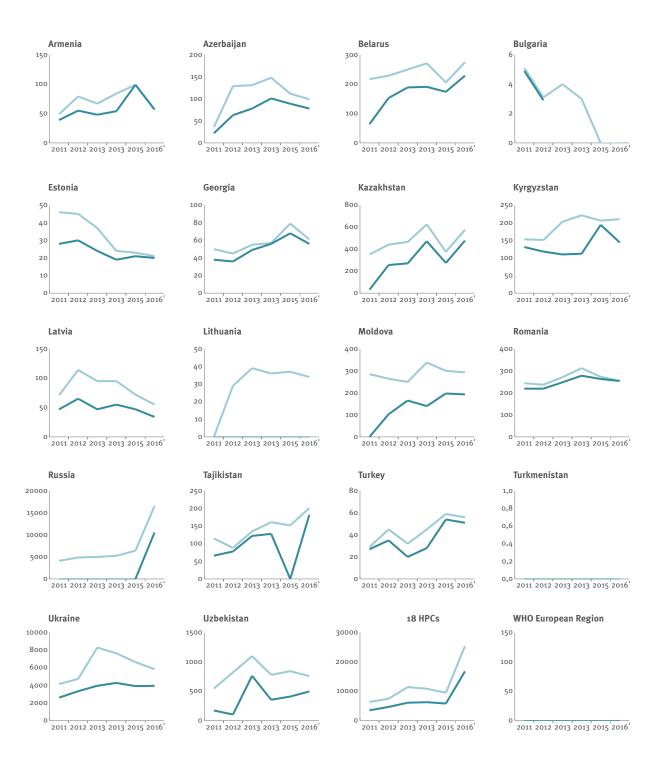


Figure 4.1.17. LTBI treatment coverage for the 18 high-priority countries and WHO European Region, 2016

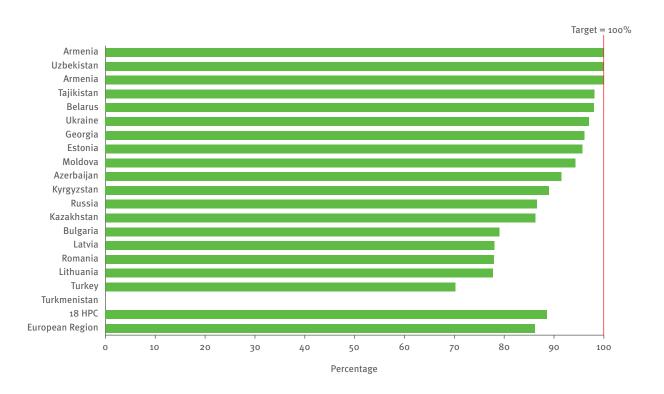


Figure 4.1.18. Contact investigation coverage for the 18 high-priority countries and WHO European Region, 2016

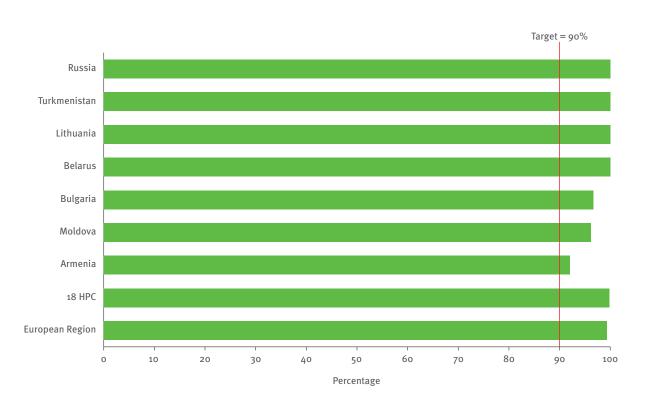


Figure 4.1.19. LTBI treatment coverage of childhood TB contacts aged under five years for the 18 high-priority countries and WHO European Region

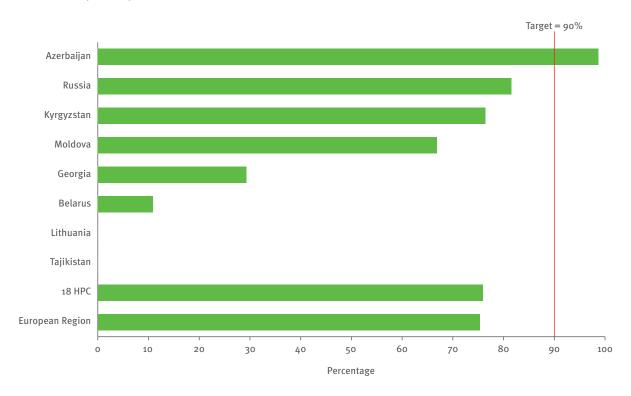


Figure 4.1.20. Treatment success (%) of new and relapse TB cases among prisoners for the 18 high-priority countries and WHO European Region, 2015

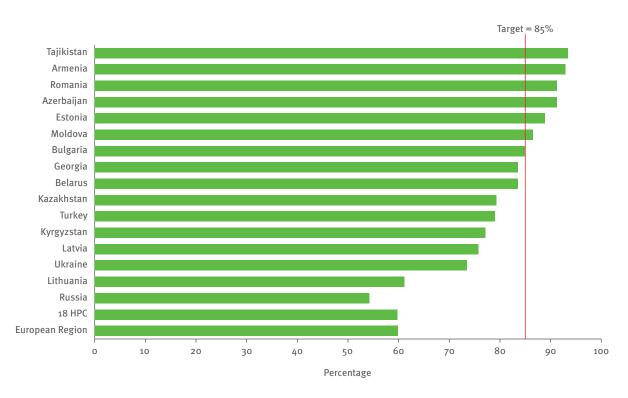


Figure 4.2.1. Indicator 1.A.1: Coverage of population at risk with systematic screening for active TB and LTBI (only TB contacts evaluated), 2016

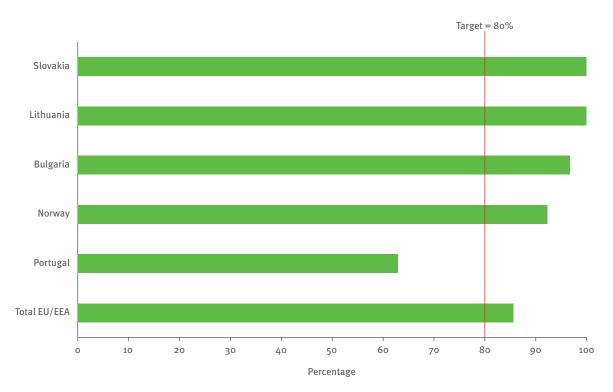


Figure 4.2.2. Indicator 1.B.1: Percentage of TB patients diagnosed using WHO-recommended rapid tests, 2016

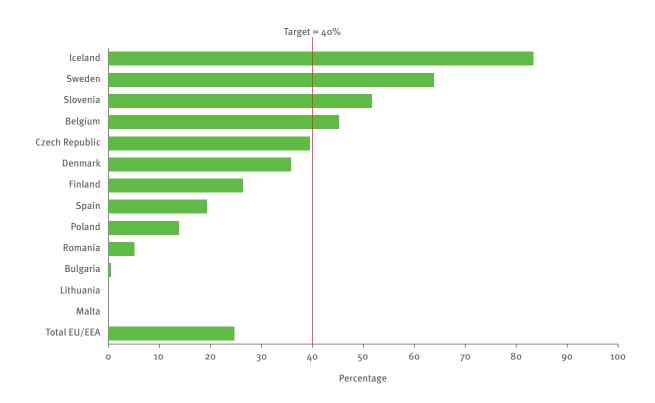


Figure 4.2.3. Indicator 1.B.2: First-line DST coverage among all bacteriologically confirmed TB patients, 2016

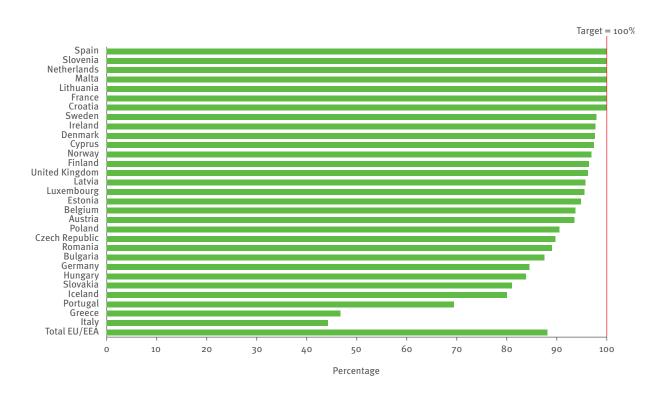


Figure 4.2.4. Indicator 1.B.3. RR/MDR TB case detection rate (%), 2016

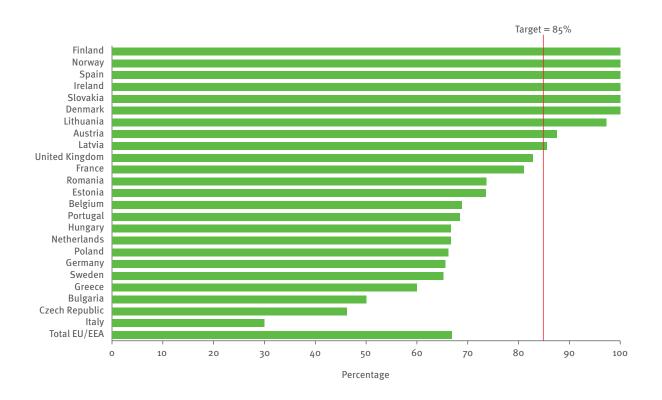


Figure 4.2.5. Indicator 1.B.4. TB notification rate per 100 000 population (E1), 2016

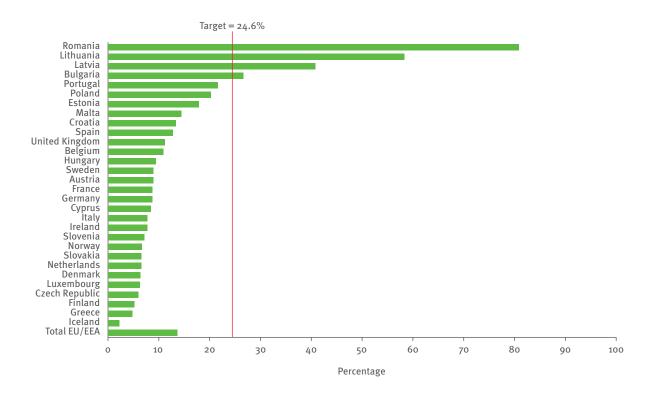


Figure 4.2.6. Indicator 1.B.5. TB case detection rate (%), 2016

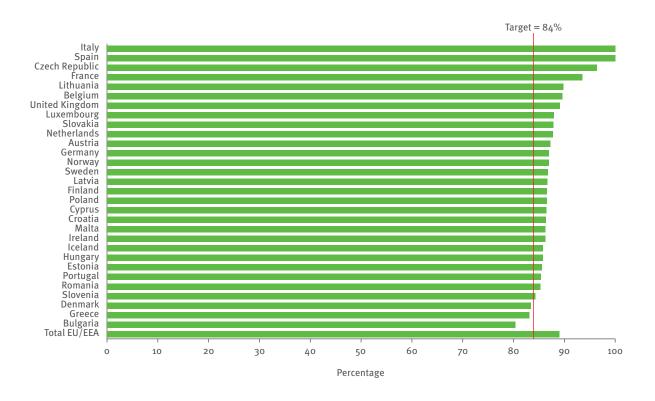


Figure 4.2.7. Indicator 1.B.6 Percentage of RR/MDR TB among new TB patients (E2), 2014 and 2016

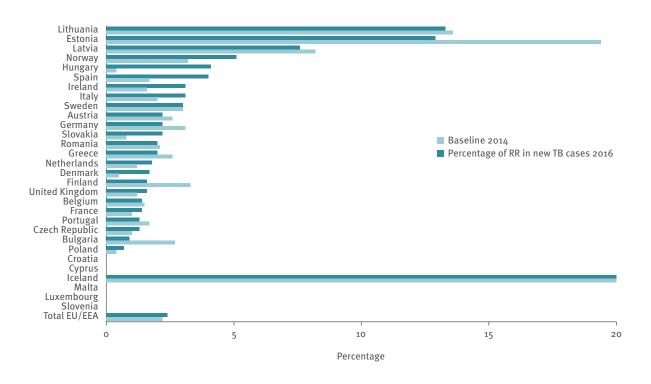
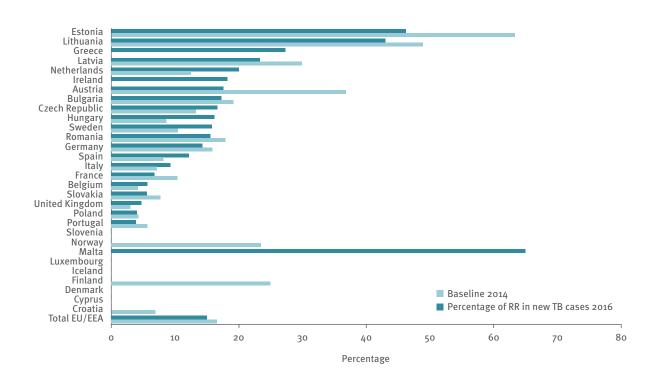


Figure 4.2.8. Indicator 1.B.7 Percentage of RR/MDR TB among previously treated TB patients, 2016



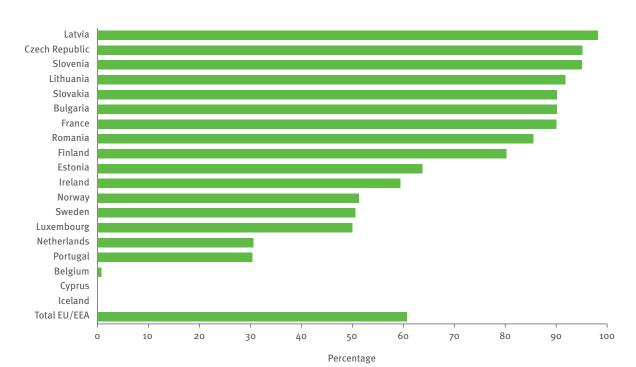


Figure 4.2.9. Indicator 1.C.1 Percentage of hospitalisation for new TB patients, 2016 (E3)

Figure 4.2.10. Indicator 1.C.2 Percentage of detected RR/MDR TB enrolled in treatment, 2016 (G3) (E4)

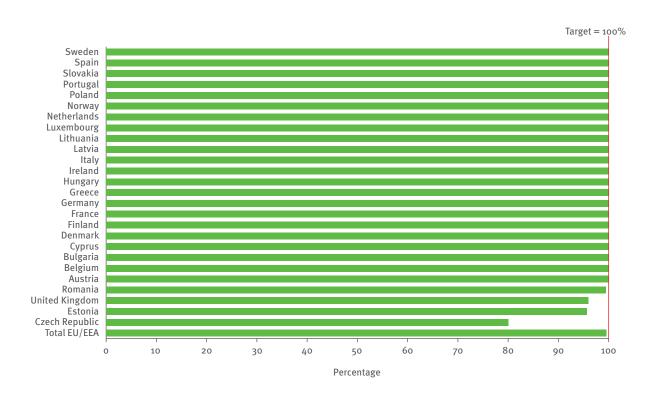


Figure 4.2.11. Indicator 1.C.3 TB treatment success, 2016 (G2)

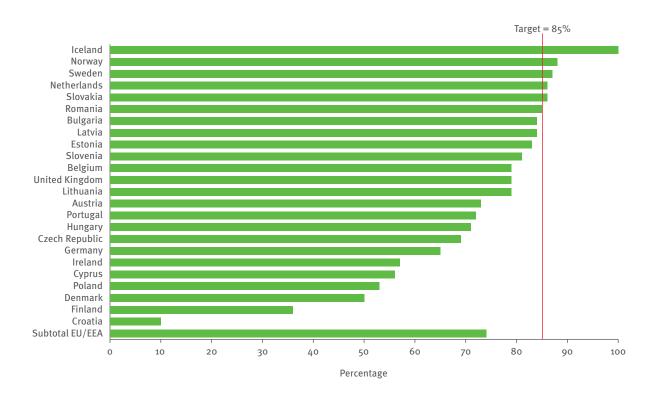


Figure 4.2.12. Indicator 1.C.4 TB treatment success rate among the RR/MDR TB cohort, 2016 (G4), (E4)

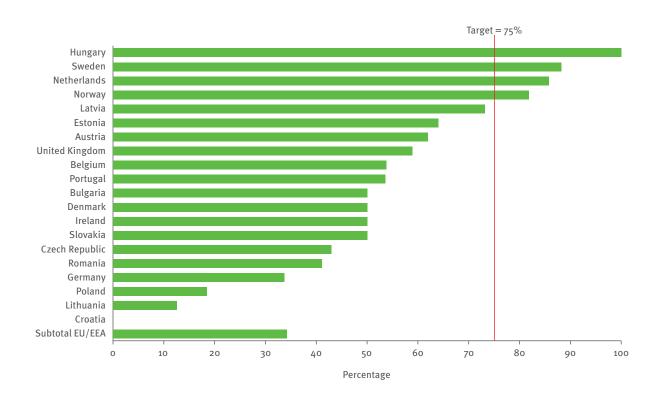


Figure 4.2.13. Indicator 1.C.5 TB mortality rate, 2016 (ICD A15-19)

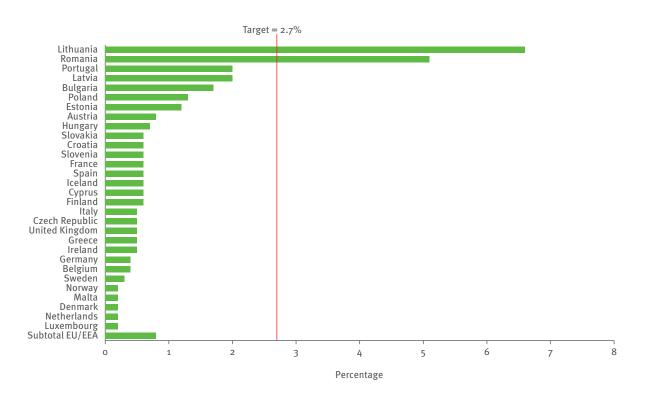


Figure 4.2.14. Indicator 1.D.1 Percentage of detected cases out of estimated incident TB/HIV co-infected cases, 2016

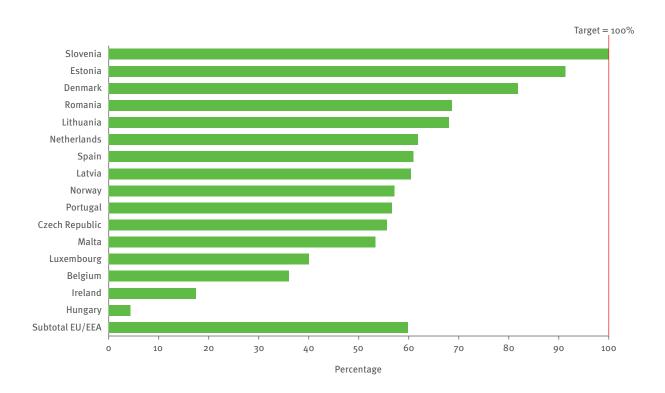


Figure 4.2.15. Indicator 1.D.2 HIV testing coverage, 2016 (G9) (E7)

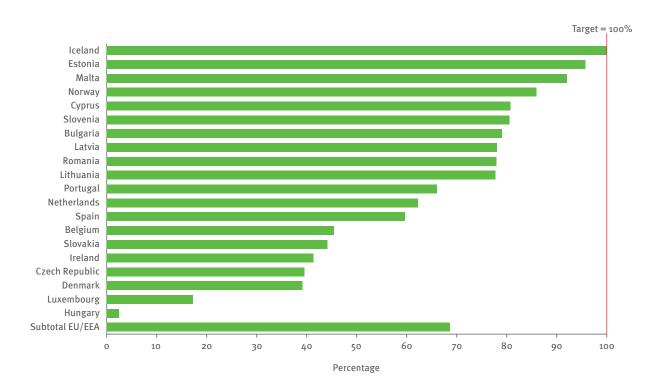


Figure 4.2.16. Indicator 1.D.3 Percentage of HIV among all TB cases, 2016

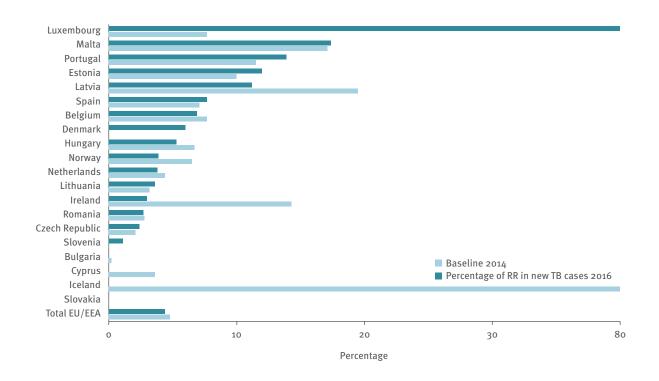


Figure 4.2.17. Indicator 1.D.4 Percentage of TB/HIV patients enrolled in ART, 2016

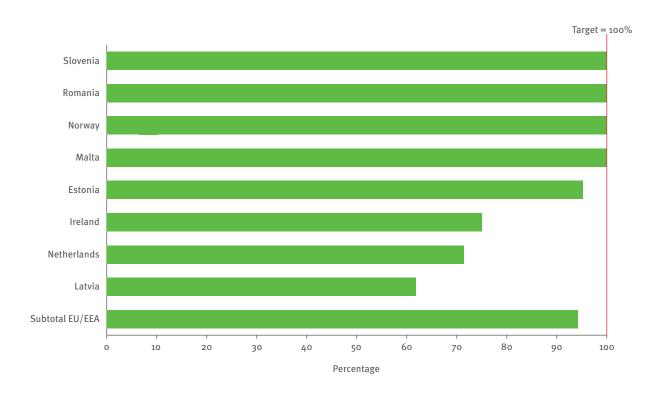


Figure 4.2.18. Indicator 1.E.1 Contact investigation coverage (%) (G2) (E7)

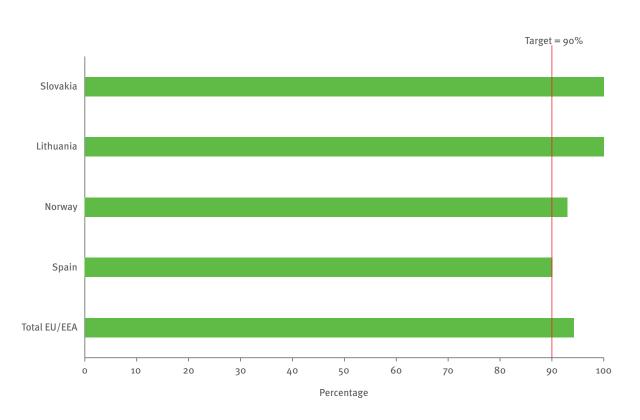


Figure 4.2.19. Indicator 1.E.2 Contact-tracing coverage for children under five years (%) (G2) (E7)

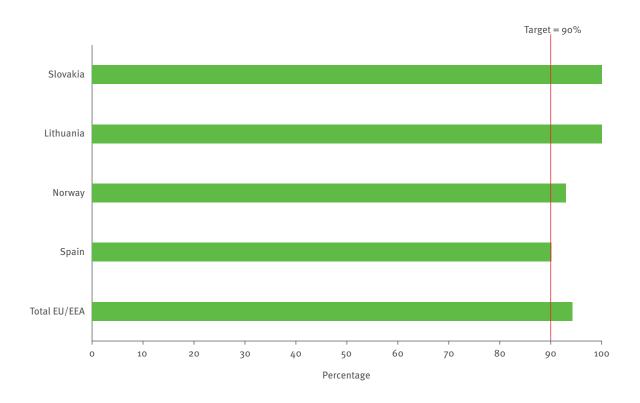
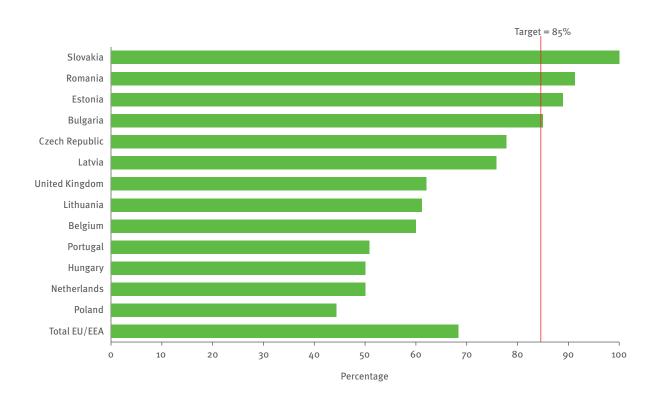
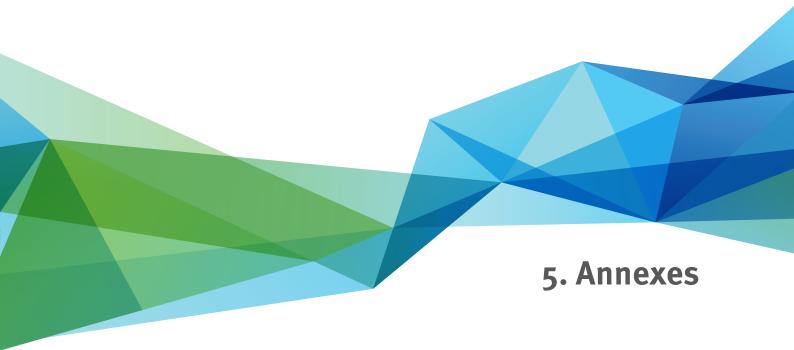


Figure 4.2.20. Treatment success (%) of new and relapse TB cases among prisoners





Annex 1: Tuberculosis surveillance system overview, 2016

			Campra				Data available:	
Country	Data source	Legal character ^a	Compre- hensive- ness ^b	Type ^c	National coverage ^d	EuroTB aggregated data	EuroTB case-based data ^e	TESSy case-based data ^f
Austria	AT-TUBERKULOSEGESETZ	Ср	Со	C	Υ	-	-	1995-2016
Belgium	BE-TUBERCULOSIS	Ср	Со	C	Υ	-	1995-2004	2005-2016
Bulgaria	BG-MOH	Ср	Co	C	-	1995-2006	-	2007-2016
Croatiag	HR-CNIPH	Ср	Со	C	Υ	1995-2007	-	2012-2016
Cyprus	CY-NOTIFIED_DISEASES	Ср	Co	C	Υ	1995-2001	2002-2004	2005-2016
Czech Republic	CZ-TUBERCULOSIS	Ср	Со	С	Υ	-	1995-2004	2005-2016
Denmark	DK-MIS	Ср	Co	С	Υ	-	1995-2004	2005-2016
Estonia	EE-TBC	Ср	Со	С	Υ	-	1995-2004	2005-2016
Finland	FI-NIDR	Ср	Со	C	Υ	-	-	1995-2016
France ^h	FR-MANDATORY_INFECTIOUS_ DISEASES	Ср	Со	С	Υ	2016	1995-1999	2000-2015
Germany	DE-SURVNET@RKI-7.1/6	Ср	Co	C	Υ	1995-2000	2001-2004	2005-2016
Greece	EL-NOTIFIABLE_DISEASES	Ср	Со	С	Υ	1995-2001	2002-2004	2006-2016
Hungary	HU-TUBERCULOSIS	Ср	Co	C	Υ	1995-1998	1999-2004	2005-2016
Iceland	IS-TUBERCULOSIS	Ср	Со	C	Υ	-	1995-2004	2005-2016
Ireland	IE-CIDR	Ср	Co	C	Υ	1995-1997	1998-2004	2005-2016
Italy	IT-NRS	Ср	Со	С	-	-	1995-2004	2005-2016
Latvia	LV-TB	Ср	Со	С	Υ	1995-2000	2001-2004	2005-2016
Liechtenstein	_	Ср	Со	С	-	-	-	2007
Lithuania	LT-TB REGISTER	Ср	Со	С	Υ	1995-2002	2003, 2004	2005-2016
Luxembourg	LU-SYSTEM1	Ср	Со	С	Υ	-	1995-2006	2007-2016
Malta	MT-DISEASE_SURVEILLANCE	Ср	Co	С	Υ	-	1995-2004	2005-2016
Netherlands	NL-NTR	Ср	Со	С	Υ	-	1995-2004	2005-2016
Norway	NO-MSIS A	Ср	Со	С	Υ	-	1995-2005	2006-2016
Poland	PL CR	Ср	Со	С	Υ	1995-1999	2000-2003	2004-2016
Portugal	PT-TUBERCULOSIS	Ср	Со	С	Υ	1995-1999	2000-2004	2005-2016
Romania	RO-NTBSy	Ср	Со	С	Υ	-	1995-2004	2005-2016
Slovakia	SK-NRT	Ср	Со	С	Υ	1995	1996-2004	2005-2016
Slovenia	SI-TUBERCULOSIS	Ср	Со	С	Υ	-	1995-2004	2005-2016
Spain	ES-STATUTORY DISEASES	Ср	Со	С	Υ	1995-2006	_	2007-2016
Sweden	SE-SweTBReg	Ср	Со	С	Υ	-	1995-2006	2007-2016
United Kingdom	UK-TUBERCULOSIS	Ср	Со	C	Υ	1995-1997	_	1998-2016

Legal: compulsory reporting – Cp.

b Comprehensiveness: comprehensive – Co.

Type: case based – C.

d Coverage: national – Y. Not specified in TESSy – '--'.

Data uploaded to TESSy in 2010, not updated later.

WHO TB Monitoring and Evaluation data (TME) for DST analysis of France, Spain and Italy.

Data reported since 2012 to TESSy, historical data extracted from WHO Global TB monitoring and evaluation data (TME).

Data reported to TESSy until 2015, 2016 data extracted from WHO Global TB monitoring and evaluation data (TME).

Annex 2: List of variables for 2017 TB data collection^a

	List	Description
Comn	non set of variables	
1	RecordId	Unique identifier for each record generated by the national surveillance system
2	RecordType	Structure and format of the data
	RecordTypeVersion	Indicates which version the sender uses when generating the data for upload
4	Subject	Disease to report
_	Status	Status of reporting NEW/UPDATE or DELETE (inactivate)
6	DataSource	The data source (surveillance system) that the record originates from
	ReportingCountry	The country reporting the record
-	PlaceOfNotification ^b	Place of the first notification of the case to a regional authority
	PlaceOfResidence ^b	Place of residence of patient at the time of disease onset
	Age	Age of patient in years as reported in the national system
	Gender	Gender of the reported case
	DateOfDiagnosis	First date of clinical or lab diagnosis
	DateOfNotification	Date when the case is first reported to public health authorities
-	DateUsedForStatistics	The reference date used for standard reports. Usually one of the above
	Classification	Case classification according to EU case definition
	LaboratoryResult	Laboratory criteria used to classify a case as confirmed or probable
	ase-specific variables	Laboratory Criteria used to classify a case as commined or probable
	BornReportingCountry	The patient was born in the country of report
	CountryOfBirth	Country of birth of patient
	CountryOfNationality	, ,
-		Country of nationality of patient
	NationalityReportingCountry	Origin of the patient (based on citizenship)
21	MajorSiteOfTB	Major site of the disease
	MinorSiteOfTB	Minor site of the disease
_	PrevDiagnosis	Previous diagnosis of tuberculosis in the past
	PrevDiagnosisYear	Year of previous diagnosis
	PrevTreatment	Previous anti-TB drug treatment (at least one month of drug combination)
	PrevTreatmentCompletion	Completion of the previous anti-tuberculosis drug treatment
	DiagnosedAnteMortem	Vital status of the patient at the time of diagnosis
	EnrolledToTreatment	Patient started appropriate TB treatment according to international recommendations
	Outcome12Months	Patient first outcome at 12 months from the start of the treatment
-	Outcome24Months	The first outcome observed 13 to 24 months from the start of treatment
-	Outcome36Months	The first outcome observed 25 to 36 months from the start of treatment
-	ResultCulture	The result of the culture test for Mycobacterium tuberculosis complex
	ResultMicroscopy	The result of the microscopy test performed
	ResultOtherTest	Additional lab test results
	Pathogen	Species and gene (M. tuberculosis complex) of the pathogen which is the cause of the reported disease
	HIVStatus	Result of the last HIV test
	SIR_AMK	Susceptibility to Amikacin (without Intermediate)
	SIR_BDQ	Susceptibility to Bedaquiline
	SIR_CAP	Susceptibility to Capreomycin (without Intermediate)
	SIR_CIP	Susceptibility to Ciprofloxacin (without Intermediate)
	SIR_DLM	Susceptibility to Delamanid
	SIR_ETH	Susceptibility to Ethambutol
	SIR_GAT	Susceptibility to Gatifloxacin
44	SIR_INH	Susceptibility to Isoniazid
	SIR_KAN	Susceptibility to Kanamycin
46	SIR_LVX	Susceptibility to Levofloxacin
	SIR_MFX	Susceptibility to Moxifloxacin
	SIR_OFX	Susceptibility to Ofloxacin
49	SIR_RIF	Susceptibility to Rifampicin
	SIR_STR	Susceptibility to Streptomycin
	IsolateID	Unique identifier for each isolate within the data source / lab system related to the case
	ECDCIsolateID	Identifier for each isolate record that is guaranteed to be unique across countries/labs/pathogens and not contain additional encoded information
	SpoligoCode	Spoligo pattern code
54	RflpCode	National cluster code based on IS6110 RFLP
	MiruCode	MIRU pattern code
	BeijingGenotype	Beijing genotype identification

Note: Variables 51–56 are optional, complementary for TB molecular surveillance.

Notification of TB cases for 2016, treatment outcome data updated for cohort 2015 and MDR TB treatment outcome data updated for cohort 2014 and XDR TB treatment outcome data for cohort 2013.

Optional for TB reporting.

Annex 3: Reporting completeness of main variables used for the reporta

	(0:		(0)				(0,	0		0	(0)	•	(0)		(0,	(0)	0	•	(0)		(0)		(0)	(0)	(0)	(0)			(0)	(0)	(0)	7
Outcome36Months ⁱ	(100.0)		(100.0)				(100.0)	(100.		9	(0.0)		(100		(100	0)	(100.		(100.		(0.0)		0)	(100)	(100	(100,			(0.0)	(100	(100)	(8)
Outcome24Months ^h	(75.0)	(100.0)	(94.6)	(20.0)		(0.09)	(20.0)	(0.96)	(0.0)	(0.0)	(28.7)	(0.0)	(100.0)		(20.0)	(0.0)	(98.6)		(98.7)	(0.0)	•	(85.7)	(6.06)	(57.1)	(84.0)	(100.0)	(100.0)		(0.0)	(63.3)	(94.6)	(78.5)
Outcome12Months ^g	(88.9)	(6.96)	(66.7)	(20.0)	(8.69)	(0.66)	(58.8)	(100.0)	(41.5)	(0.0)	(82.5)	(0.0)	(6.5)	(100.0)	(61.8)	(0.0)	(100.0)		(100.0)	(0.0)	(0.0)	(67.4)	(100.0)	(74.1)	(100.0)	(66.66)	(64.3)	(100.0)	(0.0)	(62.3)	(1.86)	(20.6)
Enrolled in treatment	(0.0)	(98.5)	(100.0)	(83.7)	(100.0)	(100.0)	(100.0)	(100.0)	(88.8)	(0.0)	(9.66)	(0.0)	(100.0)	(100.0)	(100.0)	(0.0)	(100.0)	•	(100.0)	(100.0)	(100.0)	(100.0)	(66.3)	(0.1)	(100.0)	(100.0)	(100.0)	(100.0)	(0.0)	(100.0)	(68.2)	(63.4)
HIV Status	(0.0)	(45.7)	(9.87)	(0.0)	(80.0)	(39.7)	(45.5)	(92.8)	(0.0)	(0.0)	(0.0)	(0.0)	(5.4)	(100.0)	(41.5)	(0.0)	(2.92)	(0.0)	(78.9)	(17.2)	(92.0)	(62.3)	(86.0)	(0.0)	(0.99)	(78.1)	(9.44)	(80.5)	(0.09)	(0.0)	(0.0)	(33.9)
DST SLD°	(100.0)	(100.0)	(100.0)		(100.0)	(83.3)	(100.0)	(100.0)	(100.0)	(97.2)	(63.4)	(0.0)	(83.3)		(83.3)	(78.6)	(100.0)		(100.0)	(0.0)	•	(100.0)	(100.0)	(84.8)	(41.7)	(45.4)	(100.0)		(67.6)	(100.0)	(89.3)	(74.4)
DST FLD ^d	(2.96)	(0.96)	(87.7)	(100.0)	(9.76)	(93.6)	(67.7)	(97.4)	(98.4)	(100.0)	(60.7)	(20.4)	(84.2)	(80.0)	(1.76)	(100.0)	(62.6)		(100.0)	(96.2)	(100.0)	(100.0)	(1.66)	(61.7)	(20.3)	(88.7)	(9.96)	(100.0)	(5.6)	(66.7)	(0.76)	(87.4)
Result Other test	(83.1)	(26.8)	(5.5)	(0.0)	(13.3)	(58.3)	(69.4)	(7.67)	(39.8)	(0.0)	(75.3)	(39.3)	(0.0)	(100.0)	(47.2)	(0.0)	(6.5)		(1.6)	(0.0)	(34.0)	(16.0)	(84.6)	(14.1)	(29.7)	(11.1)	(26.7)	(93.2)	(26.1)	(9.69)	(14.5)	(22.3)
Result Microscopy	(84.2)	(36.5)	(86.8)	(0.0)	(81.7)	(88.6)	(67.3)	(98.4)	(78.4)	(0.0)	(55.2)	(81.5)	(1.1)	(100.0)	(53.5)	(63.9)	(93.6)		(100.0)	(100.0)	(0.89)	(71.9)	(85.6)	(87.7)	(76.1)	(92.6)	(65.2)	(86.4)	(8 6.1)	(74.8)	(64.7)	(72.5)
Result Culture	(91.8)	(92.4)	(82.9)	(22.0)	(0.06)	(68.3)	(82.8)	(98.4)	(78.8)	(23.1)	(83.1)	(48.5)	(0.76)	(100.0)	(83.6)	(80.9)	(92.8)		(100.0)	(100.0)	(84.0)	(79.3)	(89.3)	(89.1)	(67.1)	(97.6)	(94.6)	(68.3)	(82.9)	(100.0)	(63.1)	(82.2)
Diagnosed ante mortem	(100.0)	(100.0)	(100.0)	(0.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(0.0)	(98.6)	(0.0)	(100.0)	(100.0)	(100.0)	(0.0)	(100.0)		(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(0.0)	(100.0)	(100.0)	(74.8)
Previous treatment history	(76.2)	(78.1)	(100.0)	(0.89)	(100.0)	(100.0)	(100.0)	(100.0)	(6.79)	(2.7)	(11.3)	(02.0)	(100.0)	(100.0)	(75.8)	(79.3)	(100.0)		(100.0)	(3.4)	(100.0)	(66.4)	(97.6)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(61.5)	(62.3)	(6.46)	(200)
Site	(100.0)	(100.0)	(100.0)	(74.1)	(100.0)	(100.0)	(8.86)	(100.0)	(100.0)	(64.3)	(100.0)	(97.1)	(100.0)	(100.0)	(6.96)	(100.0)	(100.0)		(100.0)	(100.0)	(100.0)	(66.7)	(66.7)	(100.0)	(66.5)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(9.66)	(66.5)
CountryOfOrigin	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(1.66)	(100.0)	(62.3)	(0.0)	(64.6)	(9.96)	(100.0)	(100.0)	(96.2)	(84.9)	(100.0)		(100.0)	(100.0)	(0.86)	(66.3)	(100.0)	(66.6)	(100.0)	(100.0)	(100.0)	(100.0)	(78.1)	(66.6)	(93.6)	(87.5)
Origin ^b	(100.0)	(100.0)	(100.0)	(35.7)	(100.0)	(100.0)	(100.0)	(100.0)	(9.96)	(22.6)	(63.6)	(100.0)	(100.0)	(100.0)	(96.2)	(61.5)	(100.0)		(100.0)	(100.0)	(100.0)	(66.3)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(87.7)	(100.0)	(67.7)	(93.3)
Gender	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(64.3)	(866)	(100.0)	(100.0)	(100.0)	(100.0)	(98.6)	(100.0)	•	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(96.4)
Age	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(94.3)	(100.0)	(6.86)	(100.0)	(100.0)	(100.0)	(61.7)	(100.0)	•	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(66.7)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(6.86)
iry	ria	mn	aria	tia	11S	Czech Republic	nark	iia	pu	93	any	ce	ary	pu	pu		a	Liechtenstein	ania	-uxembourg	6	Netherlands	ray	рı	ıgal	ınia	akia	enia		len	United Kingdom	Total EU/EEA countries
Country	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czeci	Denmark	Estonia	Finland	France	German	Greece	Hungary	Iceland	Ireland	Italy	Latvia	Liech	Lithuania	Luxer	Malta	Neth	Norway	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	Unite	Total

Data in green obtained from WHO tuberculosis monitoring and evaluation database (TME). Condetermining the origin two variables emerged. Borneporting Country and Nationality Reporting Country depending on Member State's preference. History of previous treatment defined by previous diagnosis of TB for cases reported by Belgium, Denmark, Ireland, Norway and the United Kingdom. FLD DST – drug susceptibility testing for first line TB drugs, calculated for confirmed TB cases. (Croatia, Iceland, Matta and Slovenia reported zero MDR TB cases for 2016). DST 5LD – drug susceptibility testing for first line TB drugs, calculated for confirmed TB croases (Croatia, Iceland, Matta and Slovenia reported zero MDR TB cases for 2016). Data for 2015 cohort. Data for 2018 cohort (Cyprus, Iceland, Matta and Slovenia reported zero MDR TB cases in 2014). Data for XDR 2019 cohort (Belgium, Croatia, Cyprus, Finland, Greece, Iceland, Luxembourg, Slovakia and Slovenia reported zero XDR TB cases in 2013).

Annex 4: Reporting completeness into Global TB database, 2016

Country	Identification (%) (17 fields)	Notification (%) (53 fields)	Anti-tuberculosis drug resistance surveillance (%) (40 fields)	Treatment outcome of TB cases by risk categories (%) (87 fields)	Implementing Stop TB strategy (%) (83 fields)	Budget and expenditure (%) (87 fields)
EU/EEA			(40 110(03)	(o) netas)		
Austria	(82.4)	(83.0)	(75.0)	(43.7)	(7.2)	(4.6)
Belgium	(100.0)	(84.9)	(90.0)	(93.1)	(48.2)	(8.0)
Bulgaria	(94.1)	(90.6)	(90.0)	(58.6)	(85.5)	(85.1)
Croatia	(64.7)	(84.9)	(57.5)	(50.6)	(47.0)	(5.7)
Cyprus	(0.0)	(60.4)	(90.0)	(35.6)	(0.0)	(2.3)
, ,						
Czech Republic	(70.6)	(92.5)	(90.0)	(93.1)	(61.4)	(12.6)
Denmark	(0.0)	(54.7)	(90.0)	(49.4)	(0.0)	(2.3)
Estonia	(100.0)	(90.6)	(90.0)	(90.8)	(80.7)	(100.0)
Finland	(58.8)	(84.9)	(75.0)	(29.9)	(49.4)	(12.6)
France	(82.4)	(77.4)	(42.5)	(1.1)	(44.6)	(11.5)
Germany	(88.2)	(62.3)	(75.0)	(43.7)	(37.3)	(5.7)
Greece	(41.2)	(60.4)	(57.5)	(0.0)	(0.0)	(2.3)
Hungary	(100.0)	(79.2)	(90.0)	(59.8)	(59.0)	(10.3)
Iceland	(0.0)	(60.4)	(72.5)	(35.6)	(0.0)	(2.3)
Ireland	(88.2)	(86.8)	(90.0)	(72.4)	(66.3)	(9.2)
Italy	(29.4)	(15.1)	(90.0)	(0.0)	(38.6)	(4.6)
,						
Latvia	(100.0)	(92.5)	(90.0)	(100.0)	(78.3)	(49.4)
Liechtenstein	-	-	-	-	-	-
Lithuania	(58.8)	(94.3)	(90.0)	(100.0)	(80.7)	(29.9)
Luxembourg	(88.2)	(84.9)	(72.5)	(23.0)	(51.8)	(6.9)
Malta	(64.7)	(96.2)	(72.5)	(23.0)	(42.2)	(6.9)
Netherlands	(88.2)	(92.5)	(90.0)	(78.2)	(54.2)	(11.5)
Norway	(58.8)	(75.5)	(90.0)	(50.6)	(59.0)	(12.6)
Poland	(94.1)	(81.1)	(75.0)	(58.6)	(45.8)	(4.6)
Portugal	(76.5)	(88.7)	(90.0)	(100.0)	(69.9)	(27.6)
Romania	(100.0)	(90.6)	(90.0)	(100.0)	(90.4)	(100.0)
Slovakia	(70.6)	(92.5)	(90.0)	(93.1)	(77.1)	(14.9)
Slovenia	(88.2)	(92.5)	(72.5)	(79.3)	(79.5)	(12.6)
Spain	(0.0)	(60.4)	(80.0)	(0.0)	(0.0)	(2.3)
Sweden	(58.8)	(86.8)	(75.0)	(49.4)	(39.8)	(11.5)
United Kingdom	(94.1)	(81.1)	(75.0)	(63.2)	(54.2)	(5.7)
Subtotal EU/EEA	(65.8)	(76.7)	(78.0)	(52.0)	(46.7)	(18.6)
Non-EU/EEA						
Albania	(88.2)	(94.3)	(72.5)	(86.2)	(92.8)	(27.6)
Andorra	(70.6)	(92.5)	(100.0)	(100.0)	(54.2)	(12.6)
Armenia	(100.0)	(98.1)	(100.0)	(79.3)	(73.5)	(92.0)
Azerbaijan	(88.2)	(94.3)	(82.5)	(79.3)	(71.1)	(21.8)
Belarus	(88.2)	(98.1)	(100.0)	(100.0)	(90.4)	(80.5)
Bosnia and Herzegovina	(100.0)	(92.5)	(100.0)	(72.4)	(74.7)	(94.3)
former Yugoslav Republic	(100.0)	(92.3)		(72.4)	(/4./)	(74.3)
of Macedonia, the	(88.2)	(94.3)	(100.0)	(100.0)	(100.0)	(34.5)
Georgia Georgia	(100.0)	(98.1)	(85.0)	(93.1)	(91.6)	(98.9)
Israel						
	(88.2)	(86.8)	(90.0)	(79.3)	(38.6)	(5.7)
Kazakhstan	(100.0)	(94.3)	(27.5)	(65.5)	(71.1)	(98.9)
Kyrgyzstan	(100.0)	(96.2)	(70.0)	(65.5)	(81.9)	(98.9)
Moldova	(100.0)	(100.0)	(100.0)	(79.3)	(89.2)	(98.9)
Monaco	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(2.3)
Montenegro	(88.2)	(94.3)	(70.0)	(100.0)	(73.5)	(73.6)
Russia	(70.6)	(90.6)	(22.5)	(67.8)	(68.7)	(100.0)
San Marino	(88.2)	(90.6)	(100.0)	(100.0)	(65.1)	(14.9)
Serbia			(87.5)	(65.5)	(90.4)	(100.0)
	(100 0)			(03.3)	(2017)	(100.0)
Serbia excluding UN Administered Province	(100.0)	(90.6) (90.6)		(76.0)	(90.4)	(100.0)
Administered Province of Kosovo ^a UN Administered	(100.0)	(90.6)	(87.5)	, ,	(90.4)	
Administered Province of Kosovo ^a UN Administered Province of Kosovo ^a	(100.0)	(90.6) (81.1)	(87.5) (80.0)	(78.2)	65.1	(48.3)
Administered Province of Kosovo ^a UN Administered	(100.0)	(90.6)	(87.5)	, ,		(48.3)
Administered Province of Kosovo ^a UN Administered Province of Kosovo ^a	(100.0)	(90.6) (81.1)	(87.5) (80.0)	(78.2)	65.1	(48.3) (14.9)
Administered Province of Kosovo ^a UN Administered Province of Kosovo ^a Switzerland	(100.0) (88.2) (82.4)	(90.6) (81.1) (73.6)	(87.5) (80.0) (80.0)	(78.2) (14.9)	65.1 (44.6)	(48.3) (14.9) (98.9)
Administered Province of Kosovo ^a UN Administered Province of Kosovo ^a Switzerland Tajikistan	(100.0) (88.2) (82.4) (100.0) (100.0)	(90.6) (81.1) (73.6) (100.0)	(80.0) (80.0) (80.0) (100.0) (100.0)	(78.2) (14.9) (86.2) (82.8)	65.1 (44.6) (100.0) (78.3)	(48.3) (14.9) (98.9) (31.0)
Administered Province of Kosovo ^a UN Administered Province of Kosovo ^a Switzerland Tajikistan Turkey Turkmenistan	(100.0) (88.2) (82.4) (100.0) (100.0) (82.4)	(90.6) (81.1) (73.6) (100.0) (88.7) (62.3)	(87.5) (80.0) (80.0) (100.0) (100.0) (15.0)	(78.2) (14.9) (86.2) (82.8) (23.0)	65.1 (44.6) (100.0) (78.3) (49.4)	(48.3) (14.9) (98.9) (31.0) (33.3)
Administered Province of Kosovo ^a UN Administered Province of Kosovo ^a Switzerland Tajikistan Turkey Turkmenistan Ukraine	(88.2) (82.4) (100.0) (100.0) (82.4) (100.0)	(90.6) (81.1) (73.6) (100.0) (88.7) (62.3) (96.2)	(87.5) (80.0) (80.0) (100.0) (100.0) (15.0) (55.0)	(78.2) (14.9) (86.2) (82.8) (23.0) (100.0)	65.1 (44.6) (100.0) (78.3) (49.4) (91.6)	(48.3) (14.9) (98.9) (31.0) (33.3) (97.7)
Administered Province of Kosovo ^a UN Administered Province of Kosovo ^a Switzerland Tajikistan Turkey Turkmenistan Ukraine Uzbekistan	(88.2) (82.4) (100.0) (100.0) (82.4) (100.0) (76.5)	(90.6) (81.1) (73.6) (100.0) (88.7) (62.3) (96.2) (96.2)	(87.5) (80.0) (80.0) (100.0) (100.0) (15.0) (55.0) (27.5)	(78.2) (14.9) (86.2) (82.8) (23.0) (100.0) (21.8)	65.1 (44.6) (100.0) (78.3) (49.4) (91.6) (34.9)	(48.3) (14.9) (98.9) (31.0) (33.3) (97.7) (21.8)
Administered Province of Kosovo ^a UN Administered Province of Kosovo ^a Switzerland Tajikistan Turkey Turkmenistan Ukraine	(88.2) (82.4) (100.0) (100.0) (82.4) (100.0)	(90.6) (81.1) (73.6) (100.0) (88.7) (62.3) (96.2)	(87.5) (80.0) (80.0) (100.0) (100.0) (15.0) (55.0)	(78.2) (14.9) (86.2) (82.8) (23.0) (100.0)	65.1 (44.6) (100.0) (78.3) (49.4) (91.6)	(48.3) (14.9) (98.9) (31.0)

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics.

In accordance with the UN Security Council Resolution No. 1244 (1999).

Annex 5: Laboratory network capacity, European Region, 2016^a

					Country	laborato	ry network				
							,	Internatio	nal profic al referenc		
Country	Micros	сору	Culture	DST for Is and Rifa		Line Probe	Xpert MTB/	-	Percer agreem result	ntage nent of	
	No of laboratories performing	EQA passed ^b	No of laboratories performing	No of laboratories performing	EQA passed ^b	Assay	Rif (N)	Year	Isoniazid	Rifampicin	Acceptable performance ^c
EU/EEA											
Austria	-	-	-	-	-	-	-	-	-	-	-
Belgium	103	0	114	14	14	-	20	2016	100	100	Υ
Bulgaria	33	33	30	33	33	1	4	2015	100	100	Y
Croatia	15	1	5	5	5	0	1	2016	_	-	_
Cyprus	-	-	-	-	-	-	-	-	-	-	-
Czech Republic	39	39	39	18	18	8	5	2016	100	100	Υ
Denmark	-	-	-	-	-	-	-	-	-	-	-
Estonia	6	6	2	0	0	0	4	2016	100	100	Υ
Finland	9	9	9	0	0	2	5	2016	100	100	Υ
France	150	150	150	58	0	0	60	2016	100	100	Υ
Germany	255	255	191	0	0	0	71	2016	100	100	Υ
Greece	-	-	-	-	-	-	-	-	-	-	-
Hungary	11	10	11	7	4	2	3	2016	100	100	Υ
Iceland	-	-	-	-	-	-	-	-	-	-	-
Ireland	10	9	10	2	2	0	6	2016	100	100	Υ
Italy	42	0	42	42	35	12	32	2016	99	99	Υ
Latvia	12	12	5	1	1	1	2	2016	100	100	Y
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-
Lithuania	11	9	6	6	5	1	5	2016	-	-	-
Luxembourg	1	1	1	1	1	-	0	2016	100	100	Y
Malta	1	1	1	0	0	0	1	0	-	-	-
Netherlands	-	-	30	7	-	-	-	2016	100	100	Υ
Norway	15	15	9	3	3	0	4	2016	100	100	Y
Poland	54	1	54	30	1	1	10	2016	100	100	Y
Portugal	-	-	-	-	-	-	-	-	-	-	-
Romania	96	73	87	40	2	0	19	2016	100	100	Y
Slovakia	4	4	4	2	2	1	1	2016	100	100	Υ
Slovenia	2	2	2	1	1	1	2	2016	100	100	Υ
Spain	-	-	-	-	-	-	-	-	-	-	-
Sweden	5	5	5	0	-	-	-	2016	100	100	Υ
United Kingdom	77	77	68	1	1	-	-	2016	100	100	Y
Subtotal EU/EEA	951	712	875	271	128	30	255	2015-2016	100	100	20
Non-EU/EEA	12	1	1	1	1	0	0	2016	100	100	V
Albania	12	1	1	1	1	0	0	2016	100	100	Y
Andorra	8	0	8	8	0	0	0	2016	100	100	N
Armenia	26 67	26 23	7	0	0	1 2	2 10	2016 2016	100	100	Y
Azerbaijan											Y
Belarus Bosnia and Herzegovina	151	94	28 13	7	0	0	28	2016 2016	100	100 100	Y
	9	9	13	/	3	2	0	2010	100	100	Ť
former Yugoslav Republic of Macedonia, the	7	7	3	1	0	0	1	2015	100	100	Υ
Georgia	11	11	2	1	1	2	13	2015	100	100	γ
Israel	19	0	19	2	2	1	0	2016	100	100	Υ
Kazakhstan	332	332	50	22	16	9	22	2015	100	100	γ
Kyrgyzstan	131	129	5	0	0	2	13	2016	100	100	γ
Moldova	58	58	4	0	0	0	58	2016	95	95	N
Monaco	-	-	-	-	-	-	-	-	-	_	_
Montenegro	1	1	1	1	1	0	1	2016	100	100	Υ
Russia	6 0 7 6	635	397	303	96	12	189	-	-	-	N
San Marino	1	1	1	0	0	0	1	-	-	-	N
Serbia	40	10	32	6	6	1	4	2016	100	100	Υ
Serbia excluding UN Administered Province of Kosovo ^d	31	1	29	4	4	1	2	2016	100	100	Υ
UN Administered Province of Kosovo ^d	9	9	3	2	2	0	2	0	100	100	Υ
Switzerland	34	34	21	11	11	5	33	2016	-	-	N
Tajikistan	84	81	6	1	1	3	15	2016	100	100	Y
Turkey	307	119	126	66	0	5	25	2016	100	100	Y
Turkmenistan	61	61	5	4	1	1	6	-	-	-	N
Ukraine	883	666	94	35	25	3	53	-	-	-	N
Uzbekistan	294	2	6	2	2	6	20	-	-	-	N
Subtotal non-EU/EEA	8 612	2300	830	474	169	55	494	2016	99.7	99.7	14
Total European Region	9563	3 012	1705	745	297	85	749	2015-2016	97.1	97.1	34
Subtotal 18 HPC	8578	2309	856	513	185	48	478	2015-2016	91.9	91.9	13

*European Region' comprises the 53 high-priority countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics.

DST – drug susceptibility testing.

*Data obtained from WHO Tuberculosis Monitoring and Evaluation database (TME).

*EQA – External quality assessment.

*Acceptable performance defined as reference laboratory achieving 95% performance (smear and DST).

74n accordance with the UN Security Council Resolution No. 1244 (1999).

Annex 6: Monitoring framework for follow up of the TB Action Plan for the WHO European Region, 2016–2020

Input-impact level			the same period. Output									
		Numerator: total number of people screened for TB and/or LTBI in a defined period. Denominator: total number of people at risk according to the national guidelines in the same period.		Numerator: total number of newly notified TB patients diagnosed with WHO-recommended rapid tests Denominator: total number of newly notified TB patients WHO-HQ indicator 4. WHO-HQ indicator 4. Percentage of newly notified TB patients diagnosed using WHO-recommended rapid tests: number of newly notified TB patients diagnosed with WHO-recommended rapid tests, divided by the total number of newly notified TB patients.	Numerator: total number of newly notified TB patients diagnosed with WHO-recommended rapid tests Denominator: total number of newly notified TB patients Denominator: total number of newly notified TB patients Percentage of newly notified TB patients diagnosed using WHO-recommended rapid tests: number of newly notified TB patients diagnosed with WHO-recommended rapid tests, divided by the total number of newly notified TB patients. Numerator: total number of TB patients with FLD DST results (includes results from molecular (e.g. Xpert MTB/RIF) as well as conventional phenotypic DST results) Denominator: total number of Pacteriologically confirmed TB patients notified. DST coverage for TB patients: number of TB patients with DST results divided by the number of notified cases in the same year, expressed as a percentage. DST coverage includes results from molecular (e.g. Xpert MTB/RIF) as well as conventional phenotypic DST results.	diagnosed with WHO-recommended rapis: signosed with WHO-recommended rapid tests: num mended rapid tests, divided by the total sults (includes results from molecular c DST results) ed TB patients notified. th DST results divided by the number of rt MTB/RIF) as well as conventional pher	diagnosed with WHO-recommended rapis: ng WHO-recommended rapid tests: num mended rapid tests, divided by the total sults (includes results from molecular c DSTresults) red TB patients notified. th DST results divided by the number of r tt MTB/RIF) as well as conventional pher otified	diagnosed with WHO-recommended rapiis: signed rapid tests, divided by the total mended rapid tests, divided by the total results (includes results from molecular CDS Tresults) the TB patients notified. th DST results divided by the number of rt MTB/RIF) as well as conventional pher officed.	diagnosed with WHO-recommended rapiis: ng WHO-recommended rapid tests: num mended rapid tests, divided by the total sults (includes results from molecular c DST results for TB patients notified. th DST results divided by the number of rt MTB/RIF) as well as conventional pher rt MTB/RIF) as well as conventional pher rt MTB/RIF as sell as sone sulting the soults divided by the number of sulting the	diagnosed with WHO-recommended rapis: ng WHO-recommended rapid tests: nummended rapid tests, divided by the total sults (includes results from molecular c DST results) ed TB patients notified. th DST results divided by the number of rt MTB/RIF) as well as conventional pher rt MTB/RIF) as well as conventional pher sously treated MDR TB cases is sults.	diagnosed with WHO-recommended rapii is nummended rapid tests: nummended rapid tests; nummended rapid tests; nummended rapid tests; divided by the total round (CDS Tresults) from molecular CDS Tresults) notified. In NST results divided by the number of reforming the results divided by the number of reform the NST results are soon with DST results conventional pheres is souts. In NST Re cases sees with DST results are and adherence in a specified period in the same period	Numerator: total number of newly notified TB patients diagnosed with WHO-recommended rapid tests Denominator: total number of newly notified TB patients Denominator: total number of newly notified TB patients Denominator: total number of newly notified TB patients diagnosed using WHO-recommended rapid tests; number of newly notified TB patients diagnosed with WHO-recommended rapid tests; divided by the total number of newly notified TB patients with RLD DST results (includes results from molecular (e.g. Xpert MTB/RIF) as well as conventional phenotypic DST results) Denominator: total number of Datteriologically confirmed TB patients notified Cases in the same year, expressed as a percentage. DST coverage for TB patients: number of TB patients with DST results divided by the number of notified TB cases DST coverage includes results from molecular (e.g. Xpert MTB/RIF) as well as conventional phenotypic DST results. Numerator: total number of estimated TB cases Denominator: total number of new and relapse TB cases Denominator: total number of new and relapse TB cases Denominator: total number of new WB cases with DST results Denominator: total number of new WB cases with DST results Denominator: total number of new WB cases with DST results Denominator: total number of laboratory confirmed new MDR TB cases Denominator: total number of new TB cases support to facilitate treatment adherence Denominator: total number of new TB cases support to facilitate treatment adherence Denominator: total number of laboratory confirmed RR/MDR TB cases notified Denominator: total number of laboratory confirmed RR/MDR TB cases notified Denominator: total number of laboratory confirmed RR/MDR TB cases notified and treated, divided by the extendations Denominator: total number of new TB cases support to recommendations Denominator: total number of new TB cases support to recommendations Denominator: total number of new TB cases support to recommendations Denominator: total number of new TB cases support to recommendations Denominato
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Winwardtor: total number of TB patients with FLD DST results (includes results from m (e.g. X.Pert MTB/RE)) as well as conventional phenotypic DST results) Denominator: total number of bacteriologically confirmed TB patients notified. Denominator: total number of bacteriologically confirmed TB patients notified. DST coverage for TB patients: number of TB patients with DST results divided by the cases in the same year, expressed as a percentage. DST coverage includes results from molecular (e.g. Xpert MTB/RIF) as well as conven DST results. DST results. 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Numerator: total number of people screened for TB and/c Denominator: total number of people at risk according to rapid tests Numerator: total number of newly notified TB patients dis Denominator: total number of newly notified TB patients	ruber of people screened for T number of people at risk accor arms are a room and a room and a room and a room and a room	Imber of newly notified TB pati number of newly notified TB p	y nounted to pattents diagnos attents diagnosed with WHO-r 3 patient.	umber of TB patients with FLD I) as well as conventional phen number of bacteriologically co	WHO-HQ indicatory. DST coverage for TB patients: number of TB patients cases in the same year, expressed as a percentage. DST coverage includes results from molecular (e.g., DST results.	WHO-HQ indicator, DST coverage for TB patients: number of TB patien cases in the same year, expressed as a percentage DST coverage includes results from molecular (e.g. DST results. Numerator: total number of notified TB cases	WHO -HQ indicator 7. DST coverage for TB patients. number of TB patients with DST cases in the same year, expressed as a percentage. DST coverage includes results from molecular (e.g. Xpert MTB/DST results. Numerator: total number of notified TB cases Denominator: total number of estimated TB cases Numerator: total number of new and relapse TB cases notified Denominator: population number/1400000	WHO-HQ indicator 7. DST coverage for TB patients: number of TB patient cases in the same year, expressed as a percentage to TB patient cases in the same year, expressed as a percentage DST coverage includes results from molecular (e.g. DST results. Numerator: total number of notified TB cases Denominator: total number of notified TB cases TB ca Denominator: population number/1000000 Numerator: total number of notified TB cases Denominator: total number of settimated TB cases	WHO-HQ indicator 7. DST coverage for TB patients: number of TB patients with DST acases in the same year, expressed as a percentage. DST coverage includes results from molecular (e.g., Xpert MTE DST results. DST results. Numerator: total number of notified TB cases Denominator: total number of new and relapse TB cases notifier Denominator: total number of new and relapse TB cases Denominator: total number of notified TB cases Denominator: total number of ostimated TB cases Denominator: total number of notified TB cases Denominator: total number of laboratory confirmed new MDR TE Denominator: total number of laboratory confirmed new MDR TE Denominator: total number of laboratory confirmed new MDR TE Denominator: total number of new TB cases with DST results	's', earl, expressed as a percentage des results from molecular (e.g. des results from molecular (e.g. mber of notified TB cases number of laboratory confirmed number of new TB cases with turber of laboratory confirmed number	the state of TB patients and the state of TB patients are expressed as a percentage of the state of TB patients are souths from molecular (e.g. muber of notified TB cases number of notified TB cases number of the stimated TB cases number of faboratory confirmed number of faboratory confirmed number of faboratory confirmed number of faboratory confirmed number of faboratory treated a patient support to facilitate number of new TB cases hospita number of new TB cases regis	's, ear, expressed as a percentage as a percentage as a percentage as results from molecular (e.g. and the seal of
Numerator: total numb Denominator: total num rapid tests Numerator: total numb Denominator: total num WHO-40j ndicator 4,	Numerator: total numb Denominator: total num rapid tests Numerator: total numb Denominator: total num WHO-Ug indicator 4.	Numerator: total numb Denominator: total num WHO-HQ indicator 4.	newly notified TB patients di of newly notified TB patients.	Numerator: total numb (e.g. Xpert MTB/RIF) as Denominator: total num WHO-HQ indicator 7. DST coverage for TB pa cases in the same year,	DST coverage includes DST results.	DST coverage includes DST results. Numerator: total numb Denominator: total nur	DST coverage includes DST results. Numerator: total numb Denominator: total num Denominator: total numb Denominator: populati	DST results. Numerator: total numb Denominator: total numb Denominator: total numb Denominator: total numb Numerator: total numb Denominator: total numb Numerator: total numb	DST coverage includes DST results. Numerator: total numb Denominator: total numb	DST coverage includes DST results. Numerator: total numb Denominator: total numb Numerator: total numb Numerator: total numb Denominator: total numb	DST results. Numerator: total numb Denominator: total numb Numerator: total numb Denominator: total numb Denominator: total numb Denominator: total numb Denominator: total numb	DST coverage includes result and manage includes results. Numerator: total number of nonmerator: total number of nonminator: total number of nonminator: total number of nonminator: total number of total nu
<u>_</u>	Deskreview/ N routine D reporting Ing the use of r		Deskreview/ V routine P reporting n	Routine V reporting	,	Routine reporting/ N WHO D				Routine reporting / WHO estimate Routine N reporting / WHO Estimate Routine Routine Reporting C Routine N	Routine reporting WHO Sestimate Routine Routin	Routine reporting / WHO estimate Routine Number of Strain Routine reporting Courtine Routine Number of Strain Routine Number of Strain Routine Number of Strain Routine Number of Strain Routine Routi
National TB Programme	National TB Programme	TASTITUTE VILLE	National TB Programme	WHO Global TB database		WHO Global TB database	WHO Global TB database WHO Global TB database	WHO Global TB database WHO Global TB database WHO Global TB database	WHO Global TB database WHO Global TB database WHO Global TB database WHO Global	WHO Global TB database WHO Global TB database WHO Global TB database WHO Global TB database WHO Global	WHO Global TB database Osis, including	WHO Global TB database
Annually	Annually	Suscentibility	Annually	Annually		Annually						
%08	%08	reace to driig-c	%04	100%		85%	85%	85% 24.6 Increase	85% 24.6 Increase Decrease	85% 24.6 Increase Decrease	85% 24.6 Increase Decrease Decrease Decrease	85% 24.6 Increase Decrease e for all people Decrease
ion d high-risk groups N/A ulosis and universal ac	N/A ulosis and universal a	STATE SHIP CICOR	N/A	95%		9%.24	47%	47% 32.8 84%	47% 32.8 84% 17%	47% 32.8 84% 17% 48%	47% 32.8 84% 17% 48% N/A	47% 32.8 84% 17% 48% N/A N/A
1. INTEGRATED, PATIENT-CENTRED CARE AND PREVENTION	Systematic screening of contacts and high-risk groups	Coverage of population at risk with systematic screening for active TB N/A 80% and and latent TB infection (LTBI). Party disonacie de all forms of tribornal and influences and and access to druo-	Percentage of newly notified IB patients diagnosed using WHO-recommended rapid tests (Gg) ⁴	First line DST coverage among all bacteriologically confirmed TB cases (G7)		RR/MDR TB case detection rate ⁵	RR/MDR TB case detection rate ⁵ B notification rate per 100 000 population (E1)	RR/MDR TB case detection rate ⁵ IB notification rate per 100 000 oppulation (E1) IB case detection rate (%)	RR/MDR TB case detection rate ⁵ TB notification rate per 100 000 population (E1) TB case detection rate (%) Percentage of RR/MDR TB among new TB patients (E2)	RR/MDR TB case detection rate ⁵ IB notification rate per 100 000 population (E1) IB case detection rate (%) Percentage of RR/MDR TB among new TB patients (E2) Percentage of RR/MDR TB among perviously treated TB patients	RR/MDR TB case detection rate* 47% 85% B notification rate per 100 000 32.8 24.6 population (E.) 84% Increase Percentage of RR/MDR TB among 17% Decrease previously treated TB patients Epreviously treated TB patients Equitable access to quality treatment and continuum of care for all people new TB patients (E3) N/A Decrease	RR/MDR TB case detection rate ⁵ TB notification rate per 100 000 population (E1) TB case detection rate (%) TB case detection rate (%) Percentage of RR/MDR TB among new TB patients (E2) Percentage of RR/MDR TB among previously treated TB patients Equitable access to quality treatment Percentage of hospitalisation of new TB patients (E3) Percentage of detected RR/MDR TB enrolled in treatment (G3) (E4)
CANATER DAT	EGKAIED, PAI			Firr bac cas		S RR					1.C.	j.
	INTE	1.A.	1.8.	1.B.		1.B.	1.B. 1.B.	1.B. 1.B.	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1. B.	1. B. 1. B. 1. B. 1. C. 1. C. 1. B.	1.8 1.8 1.8 1.1 1.1 1.1 1.1 1.1 1.1 1.1

Some of data for 'desk review' assessment are collected through routine reporting at European level and analysed in this report.

Two Indicators of MDR TB' in the 'Roadmap to implement the tuberculosis action plan for the WHO European Region 2016-2020' were updated to 'RR/MDR TB' in the follow-up process. In this report analysed only for TB condacts (Check the Indicator 1.E.1.).

End TB Stategy global indicators marked with (G) and WHO European Region indicators with (E).

Updated to RR/MDR TB compared to the original document (MDR TB): Roadmap to implement the tuberculosis action plan for the WHO European Region 2016–2020.

Annex 6: Monitoring framework for follow up of the TB Action Plan for the WHO European Region, 2016-2020, cont.

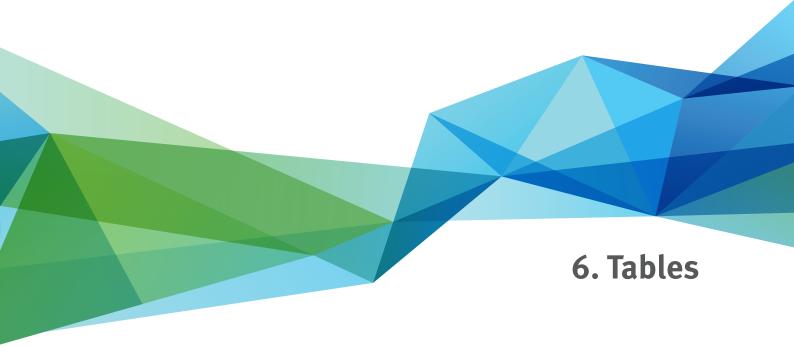
Input-impact level	Outcome	Impact	Outcome	Process	Impact	Output	Output	Output	Output
Indicator definition	Numerator: number of confirmed RR/MDR TB cases during the specified period that were successfully treated Denominator: number of confirmed RR/MDR TB cases that started on a prescribed MDR TB treatment regimen during the specified period. WHO-HQ indicator ab TB treatment success rate: percentage of notified TB patients who were successfully treated. The target is for drug-succeptible and drug-resistant TB combined, although outcomes should also be reported separately.	Numerator: estimated number of TB deaths (from VRS) Denominator: total population/100 000 WHO-HQ indicator10. Case fatality ratio (CFR): number of TB deaths (from a national VR system) divided by estimated number of incident cases in the same year, expressed as a percentage	Numerator: total number of registered HIV co-infected TB patients in a specified period Denominator: total number of estimated TB/HIV co-infected patients	Numerator: total number of registered TB patients in a specified period with reported HIV status Denominator: total number of registered TB patients in the same period WHO-HQ indicator 9. Documentation of HIV status among TB patients: number of new and relapse TB patients with documented HIV status divided by the number of new and relapse TB patients notified in the same year, expressed as percentage	Numerator: total number of registered TB patients in a specified period who are HIV positive Denominator: total number of registered TB patients in the same period with documented HIV test results	Numerator: total number of registered TB/HIV patients in a specified period who are enrolled in antiretroviral therapy (ART) Denominator: total number of registered TB patients in the same period who are HIV positive	Numerator: total number of new HIV cases enrolled in LTBI treatment in a specified period Denominator: total number of new HIV cases eligible for LTBI treatment in the same period WHO-HQ indicators of (composed) LTBI treatment coverage: number of people living with HIV newly enrolled in HIV care started on LTBI treatment. Aivided by the number eligible for treatment, expressed as percentage	st tuberculosis Numerator: number of contacts of people with bacteriologically-confirmed TB who were investigated for TB/LTBI in a defined period For TB/LTBI in a defined period Benominator: the number of contacts eligible for contact investigation in the same period WHO-HQ indicator 6 Contact investigation coverage: number of contacts of people with bacteriologically-confirmed TB who	Where the suggested of the throughout suggests, expressed as a percentage. Numerator: total number of child TB contacts age (syears enrolled in LTBI treatment in a defined period Denominator: number of child TB contact cases eligible for LTBI treatment in the same period WHO-HQ indicator 5b (composed). LTBI treatment coverage: number of children who are contacts of cases started on LTBI treatment. divided by the number eligible for treatment, expressed as percentage
Monitoring mechanism¹	Routine reporting	Routine reporting	Routine reporting/ WHO estimation	Routine reporting	Routine reporting	Routine reporting	Routine reporting	ination again Deskreview/ routine reporting	Deskreview/ routine reporting
Data source	WHO Global TB database	WHO Global TB database	WHO Global TB database	WHO Global TB database	WHO Global TB database	WHO Global TB database	WHO Global TB database	bersons at high risk and vaccination against tuberculosis Numerator: nu Numerator: nu Numerator: nu Numerator: nu Numerator: numerator: numerator: nu Programme reporting Contact investi	_
Frequency of assessment	Annually	Annually	morbidities Annually	Annually	Annually	Annually			2016 and 2020
Target	75%	2.7	of relevant co	100%	Decrease	100%	30%	treatment of	%06
Baseline for WHO European Region (2014)	%64	4.1	ities, and management	%89	%8	24%	%5	nfection and preventive N/A	N/A
Indicator	RR/MDR TB treatment success rate (G2) (E5)		Collaborative tuberculosis/HIV activities, and management of relevant com Percentage of detected out of estimated incident TB/HIV 85% 90% co-infected cases	HIV testing coverage (G9) (E7)	Percentage of HIV among all TB	Percentage of TB/HIV patients enrolled in ART		Management of latent tuberculosis infection and preventive treatment of (cantact investigation coverage (ca) (E7)	LTBI treatment coverage of childhood TB contacts aged under 5 years (G5b) (E8)
Area of intervention	4	5	1:0	7	9	4	10	t.	7
Ainte	1.C.	1.C.	1.D.	1.D.	1.D.	1.D.	1.D.	н Н	1.E.

. Some of data for 'desk review' assessment are collected through routine reporting at European level and analysed in this report.

Annex 6: Monitoring framework for follow up of the TB Action Plan for the WHO European Region, 2016–2020, cont.

Ar	Area of intervention	Indicator	Baseline for WHO European Region (2014)	Target	Frequency of assessment	Data source	Monitoring mechanism¹	Indicator definition	Input-impact level
2. BOL	D POLICI	2. BOLD POLICIES AND SUPPORTIVE SYSTEMS		:					
	2.A.	Political commitment with adequate resources, including universal health coverage policy	resources, including ur	iiversal health	coverage poli	cy			
2.A.	Ħ	Number of Members States that have TB control/elimination performance publicly available (E8)	N/A	53	cumulative 2016–2020	National TB Programme	Desk review	Desk review Not assessed for this publication	Output
		Health systems strengthening in all functions, including well-aligned financing mechanisms for tuberculosis and human resources	functions, including we	Il-aligned fina	incing mechan	isms for tuber	culosis and hu	man resources ⁶	
2.B.	п	Percentage of TB-affected households that experience catastrophic costs due to TB (G3) (E10)	N/A	Close to o	annually	National TB Programme	Desk review	WHO-HQ indicator 3 Percentage of TB-affected households that experience catastrophic costs due to TB: number of people treated for TB (and their houseblods) who incur catastrophic costs (direct and indirect combined), divided by the total number of people treated for TB.	Impact
	2.C.	Regulatory frameworks for case-based surveillance, strengthening vital registration, quality and rational use of medicines, and pharmacovigilence	ed surveillance, streng	thening vital r	egistration, q	uality and rati	onal use of me	licines, and pharmacovigilence	
2.C.	Ħ	Treatment coverage with new TB drugs (G8) (E9) ⁶	N/A	30%	cumulative 2016–2020	National TB Programme	Desk review	Numerator: number of TB patients treated with regimens including new drugs Denominator: number of notified patients eligible for treatment with new TB drugs WHO-HQ indicator B Treatment coverage, new TB drugs Number of TB patients treated with regimens that include new TB drugs, divided by the number of notified patients eligible for treatment with new TB drugs, expressed as a percentage	Process
	2.D.	2.D. Regulatory frameworks for case-based surveillance, strengthening vital registration, quality and rational use of medicines, and pharmacovigilence	ed surveillance, streng	thening vital r	egistration, q	uality and rati	onal use of me	licines, and pharmacovigilence	
2.D.	н	Number of Member States with functioning multi-stakeholder coalitions advocating for TB care and resources	N/A	53	cumulative 2016–2020	National TB Programme	Desk review	Desk review Not defined yet	Output
	2.E	Social protection, poverty alleviation and actions on other determinants of tuberculosis, such as migration and prisons	n and actions on other d	leterminants o	f tuberculosis	, such as migr	ation and priso	SU	
2.E.	₽	Treatment success rate (%) of new and relapsed TB cases among prisoners	63.2%	85.0%	annually	National TB Programme	Routine reporting	Numerator: new and relapse TB cases registered in a specified period that were successfully treated in prisons Oenominator: total number of new and relapse TB cases registered in the same period in prisons	Impact
3. INTE	NSIFIED	3. INTENSIFIED RESEARCH AND INNOVATION							
	3.A.	3.A. Social protection, poverty alleviation and actions on other determinants of tuberculosis, such as migration and prisons	n and actions on other d	leterminants o	f tuberculosis	, such as migr	ation and priso	SU	
3.A.	11	European Tuberculosis Research Initiative established by mid 2016	N/A	Established	cumulative 2016–2020	National TB Programme	Desk review	Desk review Not defined yet	Output

Some of data for 'desk review' assessment are collected through routine reporting at European level and analysed in this report.
 Data are not available for this report.



Summary table: Tuberculosis surveillance data by region, European Region, 2016

	>				Reg	ion			
	count	EU/	EEA	Non-E	U/EEA		tal		-Priority es (HPC)
	Table showing data by country	Number of reporting countries		Number of reporting countries		Number of reporting countries		Number of reporting countries	
Total population (millions)	-	30	515.8	23	402.5	53	916.3	18	400.9
Estimates of TB disease burden 2016 ^b Estimated TB mortality rate (excluding HIV-related deaths) per	1	30	0.8	23	5.5	53	2.8	18	5.7
100 000 population		_		-					
Estimated TB incidence rate per 100 000 population	1	30	12.3	23	56.6	53	32.0	18	60.4
TB mortality rate per 100 000 population	1	30	0.8	23	5.5	53	2.8	18 18	5.7
Estimated RR TB among all notified pulmonary TB cases Estimated proportion of HIV-infection among incident TB cases	1	30	1800	23	70000	53	71000		70000
(new and replapses)	2	30	5.9	23	13.1	53	12.0	18	12.5
Notifications of TB cases, 2016									
Total number of TB cases	3	30	58994	22	238138	52	297132	17	251625
All TB cases per 100 000 population	3	30	11.4	22	59.2	52	32.8	17	64.2
Mean annual % change of notification rate (2012-2016)	3	30	-4.5%	20	-6.1%	50	-5.3%	17	-5.6%
Number of new TB cases and relapses	4	30	56 0 62	21	197 034	51	253096	17	209554
New TB cases and relapses per 100 000 population	4	30	10.9	21	48.9	51	28.0	17	53.5
Mean annual % change of notification rate of new TB cases and relapses (2012–2016)	4	30	-4.3%	20	-5.1%	50	-4.4%	17	-4.7%
Percentage of new cases among all TB cases	5	30	70.4%	21	69.7%	50	69.8%	17	70.0%
Percentage of retreatment cases among all TB cases	5	30	10.5%	21	30.3%	51	26.4%	17	30.0%
Percentage of pulmonary TB among all TB cases	6	30	76.3%	21	70.7%	51	71.8%	17	71.5%
Percentage of bacteriologically-confirmed TB cases among all TB cases	8	29	71.0 %	-	-	-	-	-	-
Male-to-female ratio of new TB cases and relapse	9	29	1.5	21	2.0	50	2.0	17	2.0
Percentage of foreign TB cases among all TB cases	10	30	32.7%	20	2.0%	50	8.2%	17	1.6%
TB case confirmation, multidrug resistance (MDR) and extensive	e drug res	istance (X	DR), 2016						
Percentage of laboratory-confirmed cases among new pulmonary TB cases ^c	12	30	79.0%	21	58.3%	51	62.0%	17	59.6%
Percentage of DST results reported among new bacteriologically confirmed pulmonary TB cases	12	30	92.7%	21	80.9%	51	83.6%	17	81.7%
Percentage of MDR TB among new pulmonary TB cases	12	30	2.4%	21	22.8%	51	17.7%	17	21.2 %
Percentage of MDR TB among previously treated pulmonary TB cases	12	30	15.0%	21	55.4%	51	51.9 %	17	53.5%
Percentage of DST results reported among all confirmed TB cases	13	30	87.4%	-	-	-	-	-	-
Percentage of MDR TB among all TB cases	13	30	3.7%	-	-	-	-	-	-
Percentage of XDR-TB among all MDR TB cases with DST for SLD ^d	14	30	20.1%	19	12.9 %	49	13.1%	14	13.1%
TB-HIV coinfection, 2016									
Percentage of new TB cases and relapses with known HIV status	16	20	68.8%	20	88.5%	40	86.1%	17	88.6%
Percentage of HIV-positive cases among new TB cases and relapses with known HIV status	16	20	4.4%	20	14.4%	40	13.4%	17	13.6%
Percentage of HIV-positive started at ART	16	12	94.2%	18	65.9%	30	65.1%	14	66.1%
Percentage of all TB cases with known HIV status	16a	20	69.0%	-	-	-	-	-	-
Percentage of HIV-positive cases among all TB cases with known HIV status	16a	20	4.5%	-	-	-	-	-	-
Treatment outcome									
Treatment success of all TB cases reported in 2015	18	24	71.5%	21	76.3%	45	75.3%	18	76.4%
Treatment success of new TB cases and relapses notified in 2015	19	24	74.1%	21	78.0%	45	77.2%	18	78.5%
Treatment success of childhood TB cases notified in 2015	20	21	86.7%	17	93.5%	38	91.9%	15	93.6%
Treatment success of TB/HIV cases notified in 2015 Treatment success of RR/MDR TB cases enrolled in SLD	21	15	62.2%	20	62.2%	35	62.2%	16	62.4%
treatment in 2014	22	20	39.4%	21	55.2%	41	54.7%	18	54.8%
Treatment success of all MDR TB cases notified in 2014	23	19	37.5%	-	- 0/	-	- 0/	-	- 0/
Treatment success of all XDR TB cases notified in 2014	24	21	16.7%	19	29.9%	40	29.4%	16	29.4%

European Region' comprises the 53 countries of the WHO European Region and Liechtenstein.

HPC: 18 'high priority' countries to STOP TB in the WHO European Region: Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Romania, Russia, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan.

Number of countries with available data included in the statistics.

WHO estimates, as published in report: Global tuberculosis control 2016.

Laboratory-confirmed means confirmation according to EU case definition for EU/EEA countries and smear and/or culture confirmation for non-EU/EEA countries.

SLD: anti-TB treatment with second-line drugs.

Table 1: Estimates of the TB disease burden, European Region 2016

				d number of forms, excl		m TB		Es	timated nu	mber of inc	dent cases	(all forms)	
Country	Population ^a		Number			r100000			Number		De	r100000	
		Best	Low	High	Best	Low	High	Best	Low	High	Best	Low	High
EU/EEA													
Austria	8712137	71	71	72	0.8	0.8	0.8	710	610	820	8.2	7.0	9.5
Belgium	11358379	42	41	43	0.4	0.4	0.4	1100	970	1300	10.0	8.5	12.0
Bulgaria	7131494	120	120	130	1.7	1.7	1.8	1900	1500	2400	27.0	20.0	34.0
Croatia	4 213 265	27	26	27	0.6	0.6	0.6	520	440	600	12.0	10.0	14.0
Cyprus	1170125	5	5	5	0.4	0.4	0.4	66	56	76	5.6	4.8	6.5
Czech Republic	10 610 947	57	56	57	0.5	0.5	0.5	530	450	610	5.0	4.3	5.8
Denmark	5711870	13	13	14	0.2	0.2	0.2	350	300	410	6.1	5.3	7.1
Estonia	1312442	16	16	16	1.2	1.2	1.2	220	180	250	16.0	14.0	19.0
Finland	5503132	31	30	31	0.6	0.5	0.6	260	220	300	4.7	4.0	5.4
France	64720690	410	390	430	0.6	0.6	0.7	5000	4400	5600	7.7	6.7	8.6
Germany	81914672	320	320	330	0.4	0.4	0.4	6600	5600	7600	8.1	6.9	9.3
Greece	11183716	55	53	57	0.5	0.5	0.5	490	420	570	4.4	3.7	5.1
Hungary	9753281	72	71	73	0.7	0.7	0.7	860	730	990	8.8	7.5	10.0
								7					
Iceland	332 474	2	2	2	0.6	0.6	0.6		200	300	2.1	1.8	2.4
Ireland	4726078	23	23	23	0.5	0.5	0.5	340	290	390	7.1	6.1	8.2
Italy	59 429 938	330	330	340	0.6	0.6	0.6	3700	3100	4200	6.1	5.3	7.1
Latvia	1970 530	39	38	39	2.0	1.9	2.0	740	630	850	37.0	32.0	43.0
Liechtenstein				-		-					-		
Lithuania	2908249	190	190	190	6.5	6.5	6.5	1500	1300	1800	53.0	46.0	62.0
Luxembourg	575 747	1	1	1	0.2	0.2	0.2	33	29	39	5.8	5.0	6.7
Malta	429362	1	1	1	0.2	0.2	0.2	58	49	66	13.0	11.0	15.0
Netherlands	16 98 7 3 3 0	38	37	38	0.2	0.2	0.2	1000	860	1200	5.9	5.1	6.9
Norway	5 2 5 4 6 9 4	13	13	13	0.2	0.2	0.2	320	270	370	6.1	5.2	7.0
Poland	38 224 410	480	460	510	1.3	1.2	1.3	7100	6000	8200	18.0	16.0	21.0
Portugal	10 371 627	210	210	220	2.0	2.0	2.1	2100	1800	2400	20.0	17.0	23.0
Romania	19778083	1000	1000	1000	5.1	5.1	5.1	15 0 0 0	13 000	17000	74.0	64.0	86.0
Slovakia	5 4 4 4 2 1 8	35	34	35	0.6	0.6	0.6	320	280	370	5.9	5.1	6.9
Slovenia	2077862	13	13	13	0.6	0.6	0.6	140	120	160	6.5	5.6	7.5
Spain	46347576	280	280	290	0.6	0.6	0.6	4700	4000	5500	10.0	8.7	12.0
Sweden	9837533	25	25	25	0.3	0.3	0.3	810	690	930	8.2	7.0	9.5
United Kingdom	65788574	350	350	360	0.5	0.5	0.5	6500	5900	7200	9.9	8.9	11.0
Subtotal EU/EEA	513 78 0 43 5	4270	4220	4300	0.8	0.8	0.8	63000	60000	66000	12.3	11.7	12.8
Non-EU/EEA													
Albania	2926348	8	4	15	0.3	0.1	0.5	480	410	550	16	14	19
Andorra	77281	0	0	0	0.0	0.0	0.0	5	4	5	6	5.1	6.9
Armenia	2 9 2 4 8 1 6	62	37	94	2.1	1.3	3.2	1300	980	1600	44.0	34.0	56.0
Azerbaijan	9725376	620	610	630	6.4	6.3	6.5	6400	4900	8200	66.0	51.0	84.0
Belarus	9480042	230	200	260	2.4	2.1	2.8	4900	3500	6500	52.0	37.0	69.0
Bosnia and Herzegovina	3516816	140	120	150	3.9	3.4	4.4	1100	870	1400	32	25	41
former Yugoslav Republic of Macedonia, the	2081206	20	20	21	1.0	1.0	1.0	330	250	420	16	12	20
Georgia	3 9 2 5 4 0 5	190	130	260	4.8	3.4	6.5	3600	3000	4300	92.0	77.0	109.0
Israel	8191828	15	15	16	0.2	0.2	0.2	290	250	330	4	3	4.1
Kazakhstan	17987736	440	400	480	2.4	2.2	2.7	12000	7700	17000	67.0	43.0	95.0
Kyrgyzstan	5955734	430	420	440	7.2	7.0	7.3	8700	7700	9600	145.0	130.0	162.0
Moldova	4059608	260	240	270	6.3	5.9	6.7	4100	3500	4700	101.0	87.0	117.0
Monaco	38499	0	0	0	0.0	0.0	0.0	4100	0	0	0	0	0
		1	1	1	0.0						16		18
Montenegro	628 615					0.2	0.2	100	61000	120		14	
Russia	143 964 513	12 000	11 000	12 000	8.2	7.8	8.6	94000	61000	135 0 0 0	66.0	42.0	94.0
San Marino	33203	0	0	0	0.0	0.0	0.0	0	0	0	0	0	0
Serbia	8820083	84	73	96	1.0	0.8	1.1	1700	1400	2000	19	16	22
Switzerland	8 401739	20	20	21	0.2	0.2	0.3	660	560	760	8	6.7	9.1
Tajikistan	8734951	520	400	660	6.0	4.6	7.6	7500	5700	9400	85.0	65.0	108.0
Turkey	79 512 426	480	350	630	0.6	0.4	0.8	14000	12 000	16000	18.0	15.0	20.0
Turkmenistan	5662544	430	380	480	7.6	6.7	8.5	3400	2600	4300	60.0	46.0	76.0
Ukraine	44438625	4200	4200	4300	9.5	9.4	9.6	39000	25000	55000	87.0	56.0	124.0
Uzbekistan	31446795	1900	1800	1900	5.9	5.9	5.9	24000	17000	32000	76.0	53.0	103.0
Subtotal non-EU/EEA	402534189	22000	21000	23000	5.5	5.2	5.7	228000	188 000	268000	56.6	46.7	66.6
	046 246 626	26000	25 000	27000	2.0	2.8	2.0	200,000	251000	222000	32.0	27.2	36.3
Total European Region	916 314 624	20000	25000	2/000	2.8	2.0	2.9	290000	251000	333000	32.0	27.3	30.3

'European Region' comprises the 53 countries of the WHO European Region. WHO European Region 18 TB high-priority countries presented in italics.

 $^{^{\}rm a}\,$ Population estimate 2016 by UN Statistical Database for all countries.

	Estimate	d incidence	of child TB	cases			Estimated	incidence o	f TB among	females		
	Number			r100000		1	Number			er 100 000		Country
Best	Low	High	Best	Low	High	Best	Low	High	Best	Low	High	FILIFEA
62	52	71	5.0	4.3	5.8	2/10	200	280	5.4	4.5	6.2	EU/EEA Austria
100	53 89	71 120	5.2	4.6	6.2	240 380	200 320	440	6.6	5.5		Belgium
190	140	240	18.9	13.9	23.9	630	470	790	17.2	12.8		Bulgaria
49	41	56	7.9	6.6	9.0	180	150	210	8.2	6.9		Croatia
5	5	6	2.5	2.5	3.0	21	18	25	3.6	3.1		Cyprus
43	37	50	2.7	2.3	3.1	180	150	200	3.3	2.8		Czech Republic
30	26	35	3.2	2.7	3.7	120	99	130	4.2	3.4		Denmark
21	18	24	9.9	8.5	11.3	78	66	90	11.2	9.5		Estonia
23	20	27	2.6	2.2	3.0	87	74	100	3.1	2.6		Finland
460	400	520	3.9	3.4	4.4	2000	1700	2200	6.1	5.2		France
510	440	590	4.8	4.1	5.5	2200	1800	2500	5.3	4.3	6.0	Germany
37	31	42	2.3	1.9	2.6	160	140	190	2.8	2.5	3.3	Greece
93	79	110	6.6	5.6	7.9	300	260	350	5.9	5.1	6.8	Hungary
1	1	1	1.5	1.5	1.5	2	2	3	1.2	1.2	1.8	Iceland
35	30	41	3.4	2.9	4.0	110	96	130	4.6	4.0	5.5	Ireland
300	250	340	3.7	3.1	4.2	1300	1100	1500	4.3	3.6	4.9	Italy
79	67	91	26.3	22.3	30.3	270	230	310	25.3	21.6	29.1	Latvia
-	-	-	-	-	-	-	-	-	-	-		Liechtenstein
170	140	190	39.8	32.8	44.5	480	400	550	30.6	25.5	35.1	Lithuania
2	2	3	2.1	2.1	3.2	11	9	12	3.8	3.1	4.2	Luxembourg
5	5	6	8.1	8.1	9.7	19	16	22	8.9	7.5	10.3	Malta
83	71	96	2.9	2.5	3.4	330	280	380	3.9	3.3	4.5	Netherlands
28	24	33	3.0	2.6	3.5	100	88	120	3.8	3.4	4.6	Norway
690	590	800	12.2	10.4	14.1	2300	2000	2700	11.6	10.1	13.7	
190	160	220	13.2	11.1	15.3	730	620	840	13.4	11.4	15.4	Portugal
1600	1400	1900	52.8	46.2	62.7	4800	4100	5500	47.1	40.2		Romania
31	27	36	3.7	3.2	4.3	110	94	130	3.9	3.4	4.6	Slovakia
12	10	14	3.9	3.2	4.5	45	38	52	4.3	3.6	5.0	Slovenia
420	350	480	6.1	5.1	7.0	1800	1600	2100	7.6	6.8	8.9	Spain
78	66	90	4.6	3.9	5.3	270	230	310	5.5	4.7		Sweden
630	570	700	5.4	4.9	6.0	2700	2400	3000	8.1	7.2		United Kingdom
5980	5 6 7 0	6 290	7.5	7.1	7.9	22000	21000	23 000	8.4	8.0	8.8	Subtotal EU/EEA Non-EU/EEA
46	39	53	8.9	7.5	10.2	160	130	180	0.0	9.0	12 /	Albania
0	0	1	0.0	0.0	19.0	2	1	2	5.7	2.8		Andorra
140	100	170	24.0	17.2	29.2	330	250	410	21.3	16.1		Armenia
760	570	940	33.7	25.3	41.7	2200	1600	2700	45.1	32.8		Azerbaijan
570	400	740	36.5	25.6	47.4	1500	1000	2000	29.6	19.7		Belarus
89	67	110	17.8	13.4	22.0	380	280	470	21.2	15.6		Bosnia and Herzegovina
												former Yugoslav Republic
33	25	41	9.4	7.2	11.7	110	82	140	10.6	7.9	13.5	of Macedonia, the
450	370	520	60.5	49.7	69.9	1200	1000	1500	58.5	48.7	73.1	Georgia
22	18	25	1.0	0.8	1.1	96	81	110	2.3	2.0	2.7	Israel
1200	740	1700	24.3	15.0	34.5	4600	2800	6400	49.6	30.2	69.0	Kazakhstan
1000	920	1100	53.3	49.0	58.6	3700	3300	4100	123.2	109.9		Kyrgyzstan
400	340	460	62.7	53.3	72.1	1200	1000	1400	56.9	47.4	66.3	Moldova
0	0	0	0.0	0.0	0.0	0	0	0	0.0	0.0	0.0	Monaco
11	9	12	9.6	7.8	10.5	34	29	39	10.7	9.1	12.2	Montenegro
10 0 0 0	6100	14000	40.2	24.5	56.2	30000	18 0 0 0	42 000	38.9	23.4		Russia
0	0	0	0.0	0.0	0.0	0	0	0	0.0	0.0		San Marino
150	130	180	10.3	8.9	12.3	740	630	850	16.4	14.0		Serbia
59	50	68	4.7	4.0	5.5	220	190	250	5.2	4.5		Switzerland
830	620	1000	27.0	20.2	32.6	3400	2500	4200	78.2	57.5		Tajikistan
1500	1300	1700	7.5	6.5	8.5	6000	5100	6900	14.9	12.6		Turkey
390	290	490	22.3	16.6	28.1	1200	880	1500	41.7	30.6		Turkmenistan
4400	2700	6100	65.0	39.9	90.1	11 000	6900	16000	46.0	28.9		Ukraine
2600	1800	3500	29.6	20.5	39.8	10 0 0 0	6800	14 000	63.4	43.1		Uzbekistan
25000	21000	29000	29.6	24.9	34.3	78 0 0 0	65000	91000	37.2	31.0		Subtotal non-EU/EEA
31000	22 000	41000	18.9	13.4	25.0	102 0 0 0	73 000	132 000	21.6	15.5		Total European Region
26000	22 000	30 000	31.3	26.5	36.2	84000	71 000	97000	40.1	33.9	46.3	Subtotal 18 HPC

Table 2: Estimates for TB/HIV co-infection and MDR TB, European Region, 2016

		Estimated H	IIV-infection new and re)		ncidence		Estimated p cases amor		
Country		Number	(iicw and ic	парэсэ	%			Number	aticits
	Best	Low	High	Best	Low	High	Best	Low	High
EU/EEA									
Austria	38	21	59	5.3	3.1	8.0	2.3	0.8	4.9
Belgium	89	73	110	7.8	7.0	8.7	1.6	0.7	3.3
Bulgaria	2	1	3	0.1	0.1	0.1	1.2	0.5	2.5
Croatia	3	2	5	0.7	0.4	1.0	0.0	0.0	1.4
Cyprus	2	1	4	3.6	2.0	5.5	0.0	0.0	10.0
Czech Republic	9	5	15	1.8	1.0	2.7	2.2	0.9	4.6
Denmark	11	8	13	3.0	2.4	3.6	1.9	0.5	4.9
Estonia	23	15	33	11.0	10.0	11.0	14.0	8.3	21.0
Finland France	10	6 400	14 1000	3.7	2.1	5.7	1.6	0.2	5.7
Germany	670 350	200	540	14.0 5.3	8.3 3.1	20.0	2.2	0.7	1.5 4.8
Greece	39	200	60	7.9	4.7	12.0	1.5	0.0	8.0
Hungary	23	13	37	2.7	1.5	4.2	2.9	1.6	4.8
Iceland	0	0	0	0.1	0.1	0.1	0.0	0.0	60.0
Ireland	23	13	36	7.0	4.1	11.0	1.1	0.0	5.8
Italy	410	240	630	11.0	6.7	17.0	2.8	1.8	4.3
Latvia	91	77	110	12.0	12.0	13.0	7.6	5.2	11.0
Liechtenstein	-	-	-	-	-	-	-	-	-
Lithuania	50	42	59	3.2	3.0	3.5	12.0	10.0	15.0
Luxembourg	5	3	7	15.0	9.0	21.0	0.0	0.0	0.0
Malta	15	13	17	26.0	26.0	27.0	0.0	0.0	11.0
Netherlands	34	28	40	3.4	3.1	3.7	2.0	0.8	4.2
Norway	14	9	21	4.5	2.6	6.9	2.6	0.7	6.4
Poland	180	99	280	2.5	1.4	3.9	0.8	0.6	1.2
Portugal	290	240	340	14.0	13.0	15.0	1.0	0.5	1.7
Romania	370	310	430	2.5	2.3	2.7	2.8	2.4	3.3
Slovakia	0	0	0	0.1	0.1	0.1	0.0	0.0	2.6
Slovenia	1	1	2	0.8	0.7	0.9	0.0	0.0	3.9
Spain	340	290	410	7.3	6.7	8.0	4.2	2.9	5.8
Sweden	48	27	74	5.9	3.5	9.0	4.0	2.3	6.3
United Kingdom	560	330	850	8.5	5.1	13.0	1.4	1.0	2.0
Subtotal EU/EEA	3700	3220	4180	5.9	5.4	6.3	2.5	1.7	3.7
Non-EU/EEA		4	0	1.2	0.7	1.0	2.2	0.6	г о
Albania Andorra	6	0	9	1.2	0.7	1.8	2.3	0.6	5.8
Armenia		48	110	5.7	5.5	6.0	0.0	0.0 8.0	84.0 14.0
Azerbaijan Azerbaijan	74 130	83	180	2.0	1.8	2.2	13.0	10.0	16.0
Belarus	400	260	570	8.1	7.3	8.8	38.0	36.0	40.0
Bosnia and Herzegovina	2	1	3	0.2	0.1	0.3	0.0	0.0	0.7
former Yugoslav Republic of									
Macedonia, the	0	0	0	0.1	0.1	0.1	1.3	0.2	4.8
Georgia	77	64	91	2.1	2.0	2.3	11.0	9.3	12.0
Israel	21	13	30	7.2	7.0	7.4	7.4	3.5	14.0
Kazakhstan	580	370	820	4.7	4.5	4.8	26.0	25.0	28.0
Kyrgyzstan	280	250	320	3.3	3.1	3.5	27.0	25.0	29.0
Moldova	370	310	430	9.1	8.6	9.6	26.0	24.0	28.0
Monaco	0	0	0	-	-	-	2.4	1.6	3.2
Montenegro	0	0	0	0.2	0.1	0.2	0.0	0.0	7.1
Russia	18 0 0 0	12000	26000	19.0	18.0	21.0	27.0	27.0	28.0
San Marino	0	0	0	-	-	-	2.4	1.6	3.2
Serbia	10	6	14	0.6	0.3	1.0	1.1	0.5	2.2
Switzerland	68	40	100	10.0	6.2	15.0	3.2	1.3	6.4
	250	160	350	3.3	3.1	3.5	22.0	21.0	24.0
Tajikistan		77	110	0.7	0.6	0.7	2.9	2.5	3.4
Tajikistan Turkey	92				2.6	8.8	14.0	11.0	17.0
Tajikistan Turkey Turkmenistan	180	84	310	5.3				24.0	
Tajikistan Turkey Turkmenistan Ukraine	180 8100	5200	12 000	21.0	19.0	22.0	27.0	26.0	27.0
Tajikistan Turkey Turkmenistan Ukraine Uzbekistan	180 8100 1200	5200 800	12 000 1700	21.0 5.0	19.0 4.3	22.0 5.7	27.0 24.0	18.0	27.0 30.0
Tajikistan Turkey Turkmenistan Ukraine	180 8100	5200	12 000	21.0	19.0	22.0	27.0		27.0

'European Region' comprises the 53 countries of the WHO European Region. WHO European Region 18 TB high-priority countries presented in italics.

	Estimated percentage of RR TB cases among retreated TB patien Number			RR TB case Ilmonary TE		
	Number			Number		Country
Best	Low	High	Best	Low	High	
						EU/EEA
18.0	3.8	43.0	16	6	26	Austria
8.8	1.9	24.0	16	6	26	Belgium
19.0	11.0	29.0	44	27	61	Bulgaria
0.0	0.0	37.0	0	0	0	Croatia
0.0	0.0	0.0	0	0	0	Cyprus
12.0	2.4	30.0	13	3	22	Czech Republic
4.5	0.1	23.0	1	0 23	4	Denmark Estonia
54.0 0.0	25.0 0.0	81.0 46.0	34	0	45 6	Finland
10.0	7.1	15.0	63	47	79	France
23.0	16.0	30.0	160	85	240	Germany
9.1	0.2	41.0	10	0	23	Greece
8.1	3.3	16.0	30	17	43	Hungary
0.0	0.0	0.0	0	0	4	Iceland
0.0	0.0	31.0	2	0	6	Ireland
13.0	7.7	21.0	110	76	150	Italy
23.0	15.0	33.0	62	47	78	Latvia
-	-	-	_	_	_	Liechtenstein
47.0	41.0	53.0	260	240	290	Lithuania
0.0	0.0	0.0	0	0	0	Luxembourg
0.0	0.0	0.0	0	0	4	Malta
30.0	6.7	65.0	15	6	24	Netherlands
5.9	0.2	29.0	6	1	10	Norway
4.4	2.7	6.8	77	56	98	Poland
6.9	2.8	14.0	19	10	27	Portugal
17.0	16.0	19.0	730	670	790	Romania
3.7	0.1	19.0	1	0	4	Slovakia
0.0	0.0	71.0	0	0	0	Slovenia
18.0	9.4	30.0	25	10	40	Spain
16.0	3.4	40.0	23	13	32	Sweden
3.4	1.1	7.9	58	39	78	United Kingdom
14.0	9.8	21.3	1800	1680	1900	Subtotal EU/EEA
						Non-EU/EEA
6.7	0.2	32.0	7	1	14	Albania
0.0	0.0	0.0	0	0	3	Andorra
47.0	40.0	55.0	180	160	210	Armenia
39.0	37.0	42.0	1500	1400	1600	Azerbaijan
72.0	68.0	75.0	1600	1500	1600	Belarus
0.0	0.0	6.8	0	0	0	Bosnia and Herzegovina
0.0	0.0	23.0	3	0	6	former Yugoslav Republic of Macedonia, the
31.0	27.0	35.0	460	420	500	Georgia
0.0	0.0	84.0	13	5		Israel
44.0	42.0	46.0	3500	3400		Kazakhstan
60.0	57.0	63.0	2500	2400		Kyrgyzstan
56.0	51.0	60.0	1400	1300		Moldova
11.0	9.1	14.0	0	0	0	Monaco
0.0	0.0	41.0	0	0		Montenegro
65.0	65.0	66.0	47000	46000	47000	
11.0	9.1	14.0	0	0	0	San Marino
4.7	1.3	11.0	19	8	29	Serbia
26.0	9.1	51.0	22	11	34	
45.0	40.0	50.0	1200	1200	1300	Tajikistan
16.0	13.0	19.0	350	300	390	,
38.0	28.0	49.0	450	390	520	Turkmenistan
47.0	46.0	48.0	10 000	10000	11000	Ukraine
63.0	50.0	75.0	5800	4900	6600	
55.0	43.0	67.0	70 000	69000	71000	Subtotal non-EU/EEA
55.0	43.0	67.0	71000	71000	72 000	Total European Region
55.0	43.0	67.0	71000	69 000	71000	Subtotal 18 HPC

Table 3: Tuberculosis cases, notification rates per 100 000 population and mean annual change in rates, European Region, 2012-2016

	2012	2	2013	3	2014		2015		2016	i	Mean annual %
Country	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	change in rate, 2012–2016
EU/EEA											
Austria	646	7.7	653	7.7	586	6.9	583	6.8	634	7.3	-1.3 %
Belgium	976	8.8	963	8.6	949	8.5	977	8.7	1047	9.3	1.2 %
Bulgaria	2280	31.1	1932	26.5	1872	25.8	1660	23.0	1603	22.4	-7.9 %
Croatia ^a	575	13.4	517	12.1	499	11.7	486	11.5	460	11.0	-4.9 %
Cyprus	69	8.0	41	4.7	41	4.8	63	7.4	60	7.1	-3.0 %
Czech Republic	597	5.7	497	4.7	511	4.9	517	4.9	516	4.9	-3.7 %
Denmark	389	7.0	356	6.4	320	5.7	357	6.3	330	5.8	-4.6 %
Estonia	289	21.8	290	22.0	248	18.8	217	16.5	192	14.6	-9.6%
Finland	274	5.1	273	5.0	263	4.8	272	5.0	236	4.3	-4.0 %
France ^b	5 0 0 3	7.7	4947	7.5	4888	7.4	4741	7.1	4958	7.4	-0.8%
Germany	4213	5.2	4340	5.4	4526	5.6	5 8 5 2	7.2	5 9 15	7.2	8.2%
Greece	558	5.0	540	4.9	519	4.7	482	4.4	443	4.1	-5.0 %
Hungary	1223	12.3	1045	10.5	851	8.6	906	9.2	786	8.0	-10.2%
Iceland	11	3.4	11	3.4	9	2.8	7	2.1	6	1.8	-14.9 %
Ireland	359	7.8	374	8.1	311	6.8	294	6.4	318	6.7	-3.7%
ltaly Latvia	4 252 993	7.2 48.6	3973 904	6.7 44.7	3 9 1 6 7 6 1	6.4 38.0	3769 721	6.2 36.3	4 0 3 2 6 6 0	6.6 33.5	-1.8 % -8.9 %
Liechtenstein	793	40.0	904	44.7	701	<i>56.0</i>	/21	J0.J	-)).j	-0.9 %
Liecntenstein	1781	59.3	1705	57.4	1607	54.6	1507	51.6	1442	49.9	-4.2 %
Luxembourg	45	8.6	38	7.1	24	4.4	30	5.3	29	5.0	-4.2 % -12.5 %
Malta	43	10.1	50	11.9	46	10.8	32	7.5	50	11.5	3.4%
Netherlands	956	5.7	845	5.0	814	4.8	862	5.1	889	5.2	-2.2%
Norway	374	7.5	392	7.8	324	6.3	313	6.1	299	5.7	-6.5%
Poland	7542	19.8	7250	19.0	6698	17.6	6430	16.9	6444	17.0	-3.8%
Portugal	2606	24.7	2410	23.0	2278	21.8	2178	21.0	1836	17.8	-7.9 %
Romania	18190	90.5	16 689	83.4	15879	79.6	15183	76.4	13 617	68.9	-6.6%
Slovakia	345	6.4	401	7.4	336	6.2	317	5.8	296	5.5	-3.9 %
Slovenia	138	6.7	140	6.8	144	7.0	130	6.3	118	5.7	-3.9 %
Spain	6070	13.0	5632	12.1	4914	10.6	4997	10.8	4877	10.5	-5.1%
Sweden	623	6.6	639	6.7	659	6.8	815	8.4	726	7.4	2.9 %
United Kingdom	8711	13.7	7868	12.3	7049	11.0	6234	9.6	6 175	9.4	-8.9%
Total EU/EEA countries	70130	13.8	65715	12.9	61842	12.1	60932	11.9	58 994	11.4	-4.5 %
Non-EU/EEA											
Albania	420	14.6	474	16.5	408	14.2	415	14.4	415	14.2	-0.6 %
Andorra	9	10.9	5	6.3	6	7.9	4	5.5	4	5.2	-17.0 %
Armenia	1518	51.1	1417	47.6	1342	44.9	1104	36.7	1080	36.9	-7.8 %
Azerbaijan	8140	88.2	8597	91.8	7539	79.4	7501	77.9	6707	69.0	-6.0 %
Belarus	5246	55.3	4859	51.2	4274	45.0	4177	44.0	3 598	38.0	-9.0 %
Bosnia and Herzegovina	1420	37.1	1261	32.9	1196	31.3	1095	28.7	907	25.8	-8.7%
former Yugoslav Republic of	355	17.2	323	15.6	285	13.8	284	13.7	267	12.8	-7.0 %
Macedonia, the											-8.0%
Georgia Israel	<i>4974</i> 509	118.5	4 <i>319</i> 308	104.4 4.0	3850	94.3	3 <i>6</i> 11 280	89.5	3330 250	84.8 3.1	-8.0 % -17.9 %
Kazakhstan					361		14 631	3.5 84.2	12 658	70.4	-14.2 %
Kyrgyzstan	21 523 6 9 1 6	130.0 124.5	19 <i>8</i> 57 7209	118.0 127.6	15718 7423	91.9 129.2	7833	134.0	7995	134.2	1.9%
Moldova	5341	131.0	5051	124.0	4636	113.8	4211	103.4	4134	101.8	-6.1%
Monaco	0	-	0	124.0	0 0 0	-	0	0.0	0	0.0	0.1 /0
Montenegro	107	17.2	120	19.2	113	18.1	80	12.8	87	13.8	-5.3%
Russia	149 921	104.7	142 533	99.5	136168	95.0	130904	91.3	121 046	84.1	-5.3%
San Marino	0	-	0	-	0	-	0	71.5	0	-	J.J /0
Serbia	1917	21.2	2127	23.7	1832	20.5	1658	18.6	1488	16.9	-5.6%
Serbia excluding UN Administered Province of Kosovo ^c	1215	16.9	1205	16.6	998	14.0	888	12.7	767	11.0	-10.1%
UN Administered Province of Kosovo ^c	702	38.7	922	50.2	834	44.8	770	41.8	721	38.8	0.1%
Switzerland	463	5.8	526	6.6	473	5.8	564	6.9	609	7.2	5.5 %
Tajikistan	6929	89.4	6495	81.9	6260	77.2	6232	75.1	6241	71.4	-5.4%
Turkey	14 691	20.0	13 4 0 9	17.9	13 378	17.6	12772	16.5	12 417	15.6	-6.0 %
Turkmenistan	3 4 2 2	67.0	3 675	71.0	2887	55.1	3309	62.3	2376	-	-
Ukraine	45569	100.2	48134	106.2	40302	89.2	35304	78.4	34088	76.7	-6.5%
Uzbekistan	16810	59.7	25168	88.0	22804	78.5	19 055	64.7	18441	58.6	-0.4 %
Subtotal non-EU/EEA	296 200	76.1	295867	75.5	271255	69.2	255 024	64.2	238138	59.2	-6.1%
Total European Region	366330	40.8	361582	40.4	333 097	37.2	315 956	34.8	297132	32.8	-5.3 %
Subtotal 18 HPC	314533	80.8	312243	79.8	286948	72.9	269 932	68.2	251625	64.2	

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein.
WHO European Region 18 TB High Priority Countries are presented in italics.
Note 1: For TB cases and notification rates by country and year for the period 1995-2016, see http://ecdc.europa.eu/en/data-tools/atlas/Pages/atlas.aspx.
Note 2: The data published in this report might differ from figures in national reports due to different times of reporting. The deadline for correcting and updating the data used in this report in the joint database was 1 October 2017.

These data are subject to change as the national TB registry was under review when this report was being produced.
 Provisional data for 2016 including overseas territories reported to WHO Global TB database.
 In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 4: New TB cases and relapses, notification rates per 100 000 population and mean annual change in rates, European Region, 2012-2016

	201:	2	20	13	201	4	201	5	2010	5	Mean annual
Country	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	% change in rate, 2012–2016
EU/EEA											1410,2012 2010
Austria	623	7.4	628	7.4	567	6.7	564	6.6	619	7.1	-1.0%
Belgium	898	8.1	890	8.0	878	7.9	919	8.2	986	8.7	1.8%
Bulgaria	2212	30.2	1930	26.5	1825	25.2	1619	22.5	1525	21.3	-8.3%
Croatia ^a	539	12.6	511	12.0	498	11.7	484	11.5	449	10.7	-4.0%
Cyprus	65	7.5	41	4.7	39	4.5	63	7.4	57	6.7	-2.8%
Czech Republic	557	5.3	468	4.5	472	4.5	507	4.8	511	4.8	-2.2%
Denmark	342	6.1	330	5.9	293	5.2	320	5.7	292	5.1	-4.4%
Estonia	269	20.3	265	20.1	237	18.0	206	15.7	188	14.3	-8.4%
Finland	264	4.9	267	4.9	257	4.7	269	4.9	225	4.1	-4.3%
France ^b	5003	7.7	4947	7.5	4888	7.4	4 4 4 7	6.7	4 6 7 5	7.0	-2.2%
Germany	4038	5.0	4094	5.1	4352	5.4	5646	7.0	5737	7.0	8.6%
Greece	520	4.7	494	4.5	484	4.4	438	4.0	407	3.8	-5.3%
Hungary	1182	11.9	1040	10.5	799	8.1	858	8.7	737	7.5	-10.9%
Iceland	11	3.4	11	3.4	9	2.8	7	2.1	6	1.8	-14.9%
Ireland	333	7.3	350	7.6	290	6.3	266	5.7	293	6.2	-3.9%
Italy	3512	5.9	3 435	5.8	3663	6.0	3 476	5.7	3778	6.2	1.3%
Latvia	971	47.5	872	43.1	738	36.9	697	35.1	641	32.6	-9.0%
Liechtenstein	-	-	-	-	-	-	-	-	-	-	_
Lithuania	1640	54.6	1573	52.9	1481	50.3	1395	47.8	1347	46.6	-3.9%
Luxembourg	45	8.6	38	7.1	24	4.4	30	5.3	29	5.0	-12.5%
Malta	41	9.8	50	11.9	45	10.6	32	7.5	50	11.5	4.1%
Netherlands	934	5.6	828	4.9	805	4.8	846	5.0	877	5.2	-1.9%
Norway	340	6.8	354	7.0	300	5.9	281	5.4	278	5.3	-6.0%
Poland	7285	19.1	7043	18.5	6539	17.2	6237	16.4	6143	16.2	-4.1%
Portugal	2558	24.3	2356	22.5	2223	21.3	2137	20.6	1794	17.3	-8.0%
Romania	16764	83.4	15505	77.4	14834	74.4	14 215	71.5	12790	64.7	-6.1%
Slovakia	344	6.4	398	7.4	320	5.9	308	5.7	281	5.2	-5.0%
Slovenia	138	6.7	139	6.8	142	6.9	129	6.3	118	5.7	-3.9%
Spain	5738	12.3	5328	11.4	4686	10.1	4791	10.3	4734	10.2	-4.5%
Sweden	591	6.2	603	6.3	625	6.5	776	8.0	702	7.1	3.4%
United Kingdom	8171	12.9	7339	11.5	6587	10.2	5849	9.0	5793	8.9	-8.9%
Total EU/EEA countries	65928	12.9	62 127	12.2	58900	11.5	57812	11.2	56062	10.9	-4.3%
Non-EU/EEA	03720	12.7	02 127	12,2	30 700	11.5	37 012	11,2	30002	10.7	7.370
Albania	408	14.1	474	16.5	408	14.2	415	14.4	415	14.2	0.1%
Andorra	9	10.9	5	6.3	6	7.9	4	5.5	4	5.2	-17.0%
Armenia	1213	40.9	1397	46.9	1329	44.4	1090	36.3	1027	35.1	-3.7%
Azerbaijan	6363	69.0	5860	62.6	5788	60.9	5456	56.7	5159	53.0	-6.3%
Belarus	4783	50.4	4470	47.1	3858	40.6	3765	39.6	3211	33.9	-9.5%
Bosnia and Herzegovina	1409	36.8	1261	32.9	1196	31.3	1092	28.6	907	25.8	-8.5%
former Yugoslav Republic of											
Macedonia, the	346	16.7	318	15.4	284	13.7	282	13.6	263	12.6	-6.8%
Georgia	3940	93.9	3434	83.0	3200	78.4	3152	78.1	2983	76.0	-5.1%
Israel	506	6.7	308	4.0	361	4.6	280	3.5	250	3.1	-17.8%
Kazakhstan	18006	108.8	18958	112.7	15 244	89.1	14006	80.6	12322	68.5	-10.9%
Kyrgyzstan	6195	111.5	7075	125.3	6390	111.2	7027	120.3	7026	118.0	1.4%
Moldova	4409	108.1	4485	110.1	4058	99.6	3608	88.6	3 571	88.0	-5.0%
Monaco	0	-	0	_	0	-	0	0.0	-	-	_
Montenegro	98	15.7	119	19.1	113	18.1	80	12.8	87	13.8	-3.2%
Russia	105753	73.8	106 053	74.0	102340	71.4	99590	69.4	92407	64.2	-3.4%
San Marino	0	-	0	-	0	-	0	-	0	-	-
Serbia	1872	20.7	2106	23.4	1818	20.3	1649	18.5	1472	16.7	-5.3%
Serbia excluding UN Administered Province of Kosovo ^c	1168	16.2	1161	16.2	984	13.8	879	12.5	755	10.8	-9.5%
UN Administered Province of Kosovo ^c	702	38.7	992	54.0	834	44.8	770	41.8	717	38.6	-0.1%
Switzerland	416	5.2	466	5.8	423	5.2	531	6.5	573	6.8	6.8%
Tajikistan	6508	83.9	5576	70.3	5807	71.6	5894	71.0	5965	68.3	-5.0%
Turkey	14139	19.2	13170	17.6	13108	17.2	12 550	16.2	12186	15.3	-5.5%
Turkmenistan	2937	57.5	3046	58.9	2570	49.0	3028	57.1	2104	37.2	-10.3%
Ukraine	40990	90.1	36510	80.6	31701	70.2	30151	67.0	29052	65.4	-7.7%
Uzbekistan	14832	52.7	20812	72.8	18345	63.2	16315	55.4	16 050	51.0	-0.8%
Subtotal non-EU/EEA	235132	60.4	235 903	60.2	218347	55.7	209 965	52.9	197034	48.9	-5.1%
Total European Region	301060	33.5	298 030	33.3	277247	31.0	267777	29.5	253096	28.0	-4.4%

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein.
WHO European Region 18 TB high-priority countries presented in italics.
Note: The data published in this report might differ from figures in national reports due to different times of reporting. The deadline for correcting and updating the data used in this report in the joint database was 1 October 2016.

These data are subject to change as the national TB registry was under review when this report was being produced.
 Provisional data for 2016 including overseas territories.
 In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 5: Tuberculosis cases by history of previous TB treatment, European Region, 2016

			Unkno	own					Previously	/ treated					ALL ED
Country	Ne	W	previou histo	ıs TB	Previously tota		Prev treati comp	nent	Previ treatmen		Previ treatn defau	nent	Otl retrea		All TB cases
	N	(%)ª	N	(%)ª	N	(%)²	N	(%)⁵	N	(%)⁵	N	(%)⁵	N	(%)⁵	
EU/EEA															
Austria	449	(70.8)	151	(23.8)	34	(5.4)	19	(55.9)	0	(0.0)	0	(0.0)	15	(44.1)	634
Belgium ^c	757	(72.3)	229	(21.9)	61	(5.8)	-	-	-	-	-	-	61	(100.0)	104
Bulgaria	1416	(88.3)	0	(0.0)	187	(11.7)	109	(58.3)	23	(12.3)	24	(12.8)	31	(16.6)	160.
Croatia ^d	293	(63.7)	147	(32.0)	20	(4.3)	9	(45.0)	0	(0.0)	0	(0.0)	11	(55.0)	46
Cyprus	55	(91.7)	0	(0.0)	5	(8.3)	2	(40.0)	0	(0.0)	0	(0.0)	3	(60.0)	6
Czech Republic	490	(95.0)	0	(0.0)	26	(5.0)	21	(80.8)	0	(0.0)	1	(3.8)	4	(15.4)	51
Denmark ^c	292	(88.5)	0	(0.0)	38	(11.5)	-	(0 (0)	-	((, 0)		(12.0)	38	(100.0)	33
Estonia	167	(87.0)	0	(0.0)	25	(13.0) (5.1)	21	(84.0)	1	(4.0)	3	(12.0)	0	(0.0)	19
Finland	219 2441	(92.8)	5 2234	(45.1)	12 283	(5.7)	1	(8.3)	0	(0.0)	-	(0.0)	11	(91.7)	23 495
France ^e Germany	340	(49.2) (5.7)	5249	(88.7)	326	(5.7)	148	(45.4)	1	(0.3)	54	(16.6)	123	(37.7)	591
Greece	385	(86.9)	22	(5.0)	36	(8.1)	0	(0.0)	0	(0.0)	0	(0.0)	36	(100.0)	44
	677	(86.1)	0	(0.0)	109	(13.9)	60	(55.0)	0	(0.0)	31	(28.4)	18	(16.5)	78
Hungary Iceland	6	(100.0)	0	(0.0)	0	(0.0)	0	(55.0)	0	(0.0)	0	(20.4)	0	(10.5)	/0
Ireland ^c	216	(67.9)	77	(24.2)	25	(7.9)	-	_	-	_	-	_	25	(100.0)	31
Italy	2943	(73.0)	835	(20.7)	254	(6.3)	0	(0.0)	0	(0.0)	0	(0.0)	254	(100.0)	403
Latvia	560	(84.8)	0	(0.0)	100	(15.2)	81	(81.0)	0	(0.0)	19	(19.0)	254	(0.0)	66
Liechtenstein	500	(04.0)	-	(0.0)	100	(13.2)	-	(01.0)	-	(0.0)	-	(19.0)	-	(0.0)	00
Lithuania	1150	(79.8)	0	(0.0)	292	(20.2)	197	(67.5)	29	(9.9)	66	(22.6)	0	(0.0)	144.
Luxembourg	1 130	(3.4)	28	(96.6)	0	(0.0)	0	(0/.)/	0	().))	0	(22.0)	0	(0.0)	2
Malta	50	(100.0)	0	(0.0)	0	(0.0)	0	_	0	_	0	-	0	_	51
Netherlands	857	(96.4)	5	(0.6)	27	(3.0)	15	(55.6)	0	(0.0)	4	(14.8)	8	(29.6)	889
Norway	256	(85.6)	22	(7.4)	21	(7.0)	-	(55.0)	_	(0.0)	-	(14.0)	21	(100.0)	299
Poland	5713	(88.7)	0	(0.0)	731	(11.3)	430	(58.8)	0	(0.0)	0	(0.0)	301	(41.2)	644
Portugal	1715	(93.4)	0	(0.0)	121	(6.6)	79	(65.3)	1	(0.8)	13	(10.7)	28	(23.1)	1830
Romania	10741	(78.9)	0	(0.0)	2876	(21.1)	2049	(71.2)	404	(14.0)	423	(14.7)	0	(0.0)	13 61
Slovakia	257	(86.8)	0	(0.0)	39	(13.2)	24	(61.5)	3	(7.7)	0	(0.0)	12	(30.8)	290
Slovenia	113	(95.8)	0	(0.0)	5	(4.2)	5	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	118
Spain	2855	(58.5)	1879	(38.5)	143	(2.9)	0	(0.0)	0	(0.0)	0	(0.0)	143	(100.0)	4877
Sweden	641	(88.3)	56	(7.7)	29	(4.0)	5	(17.2)	0	(0.0)	1	(3.4)	23	(79.3)	726
United Kingdom ^c	5 476	(88.7)	317	(5.1)	382	(6.2)	_	-	-	-	_	-	382	(100.0)	6175
Subtotal EU/EEA	41531	(70.4)	11256	(19.1)	6207	(10.5)	3 2 7 5	(52.8)	462	(7.4)	639	(10.3)	1548	(24.9)	58994
Non-EU/EEA								, ,		, ,				, ,	
Albania	405	(97.6)	-	-	10	(2.4)	10	(100.0)	-	-	-	-	-	-	41
Andorra	4	(100.0)	-	-	0	(0.0)	0	(0.0)	-	-	-	-	-	-	
Armenia	818	(75.7)	-	-	262	(24.3)	209	(79.8)	-	-	-	-	-	-	108
Azerbaijan	3793	(56.6)	-	-	2914	(43.4)	1366	(46.9)	-	-	-	-	-	-	670
Belarus	2 653	(73.7)	-	-	945	(26.3)	558	(59.0)	-	-	-	-	-	-	3 598
Bosnia and Herzegovina	829	(91.4)	-	-	78	(8.6)	78	(100.0)	-	-	-	-	-	-	907
former Yugoslav Republic	243	(91.0)	_	_	24	(9.0)	20	(83.3)	_		_	_	_	_	267
of Macedonia, the													_		
Georgia	2463	(74.0)	-	-	867	(26.0)	520	(60.0)	-	-	-	-	-	-	3330
Israel	242	(96.8)	-	-	8	(3.2)	8	(100.0)	-	-	-	-	-	-	250
Kazakhstan	9381	(74.1)	-	-	3277	(25.9)	2941	(89.7)	-	-	-	-	-	-	12 658
Kyrgyzstan	5702	(71.3)	-	-	2293	(28.7)	1324	(57.7)	-	-	-	-	-	-	799
Moldova	2846	(68.8)	-	-	1288	(31.2)	725	(56.3)	-	-	-	-	-	-	4134
Monaco		,	-	-	0	(0.0)	0	(0.0)	-	-	-	-	-	-	(
Montenegro	73	(83.9)	-	-	14	(16.1)	14	(100.0)	-	-	-	-	-	-	8
Russia	78121	(64.5)	-	-	42 925	(35.5)	14286	(33.3)	-	-	-	-	-	-	121 040
San Marino		(-	-	0	(0.0)	0	(0.0)	-	-	-	-	-	-	(
Serbia	1348	(90.6)	-	-	140	(9.4)	124	(88.6)	-	-	-	-	-	-	1488
Serbia excluding UN Administered Province of Kosovo ^f	672	(87.6)	-	-	95	(12.4)	83	(87.4)	-	-	-	-	-	-	76
UN Administered Province of Kosovo ^f	676	(93.8)	-	-	45	(6.2)	41	(91.1)	-	-	-	-	-	-	72
Switzerland	573	(94.1)	-	-	36	(5.9)	0	(0.0)	-	-	-	-	-	-	60
Tajikistan	5241	(84.0)	-	-	1000	(16.0)	724	(72.4)	-	-	-	-	-	-	624
Turkey	11442	(92.1)	-	-	975	(7.9)	744	(76.3)	-	-	-	-	-	-	12 41
Turkmenistan	1952	(82.2)	-	-	424	(17.8)	152	(35.8)	-	-	-	-	-	-	237
Ukraine	23316	(68.4)	-	-	10772	(31.6)	5736	(53.2)	-	-	-	-	-	-	3408
Uzbekistan	14436	(78.3)	-	-	4005	(21.7)	1 614	(40.3)	-	-	-	-	-	-	1844
Subtotal non-EU/EEA	165 881	(69.7)	-	-	72 257	(30.3)	31153	(43.1)	-	-	-	-	-	-	23813
Total European Region	207412	(69.8)	11256	(3.8)	78 464	(26.4)	34428	(43.9)	-	-	-	-	-	-	29713
Subtotal 18 HPC		(70.0)	-		75 427	(30.0)		(44.2)	-						251 62

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in Italics.

Percentage among all TB cases.
Percentage among previously treated TB cases.
Distribution by previous diagnosis.
These data are subject to change as the national TB registry was under review when this report was being produced.
Provisional data for 2016 including overseas territories.
In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 6: Tuberculosis cases by site of disease, European Region, 2016

_ Country	Pulmonary	v only	Pulmon: Pulmona		Total pulm	onary	Extrapulmo	onary	No site rep	orted	Total
Country			extrapulm	onary			N	(0/)	N	(0/)	Total
EU/EEA	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	
Austria	425	(67.0)	57	(9.0)	482	(76.0)	152	(24.0)	0	(0.0)	634
	586	(56.0)		(12.3)	715			(31.7)	0	(0.0)	1047
Belgium			129			(68.3)	332				
Bulgaria	1129	(70.4)	57	(3.6)	1186	(74.0)	417	(26.0)	0	(0.0)	1603
Croatia	293	(63.7)	14	(3.0)	307	(66.7)	34	(7.4)	119	(25.9)	460
Cyprus	50	(83.3)	1	(1.7)	51	(85.0)	9	(15.0)	0	(0.0)	60
Czech Republic	420	(81.4)	26	(5.0)	446	(86.4)	70	(13.6)	0	(0.0)	516
Denmark	242	(73.3)	20	(6.1)	262	(79.4)	64	(19.4)	4	(1.2)	330
Estonia	146	(76.0)	31	(16.1)	177	(92.2)	15	(7.8)	0	(0.0)	192
Finland	175	(74.2)	0	(0.0)	175	(74.2)	61	(25.8)	0	(0.0)	236
Franceb	-	_	3319	(66.9)	3 3 1 9	(71.0)	1356	(27.3)	283	(5.7)	4958
Germany	3784	(64.0)	613	(10.4)	4397	(74.3)	1468	(24.8)	50	(0.8)	5 9 1 5
Greece	341	(77.0)	53	(12.0)	394	(88.9)	36	(8.1)	13	(2.9)	443
Hungary	742	(94.4)	15	(1.9)	757	(96.3)	29	(3.7)	0	(0.0)	786
Iceland	4	(66.7)	2	(33.3)	6	(100.0)	0	(0.0)	0	(0.0)	6
Ireland	177	(55.7)	34	(10.7)	211	(66.4)	97	(30.5)	10	(3.1)	318
Italy	2757	(68.4)	63	(1.6)	2820	(69.9)	1212	(30.1)	0	(0.0)	4032
Latvia	574	(87.0)	45	(6.8)	619	(93.8)	41	(6.2)	0	(0.0)	660
Liechtenstein	-	-	-	-	-	-	_	-	_	-	_
Lithuania	1327	(92.0)	0	(0.0)	1327	(92.0)	115	(8.0)	0	(0.0)	1442
Luxembourg	24	(82.8)	0	(0.0)	24	(82.8)	5	(17.2)	0	(0.0)	29
Malta	22	(44.0)	15	(30.0)	37	(74.0)	13	(26.0)	0	(0.0)	50
Netherlands	365	(41.1)	112	(12.6)	477	(53.7)	409	(46.0)	3	(0.3)	889
Norway	140	(46.8)	47	(15.7)	187	(62.5)	111	(37.1)	1	(0.3)	299
Poland	6 0 8 5	(94.4)	31	(0.5)	6116	(94.9)	328	(5.1)	0	(0.0)	6444
Portugal	1145	(62.4)	157	(8.6)	1302	(70.9)	519	(28.3)	15	(0.8)	1836
Romania	10747	(78.9)	776	(5.7)	11 523	(84.6)	2094	(15.4)	0	(0.0)	13 617
Slovakia	202	(68.2)	51	(17.2)	253	(85.5)	43	(14.5)	0	(0.0)	296
Slovenia	80	(67.8)	23	(19.5)	103	(87.3)	15	(12.7)	0	(0.0)	118
Spain	3192	(65.5)	323	(6.6)	3515	(72.1)	1362	(27.9)	0	(0.0)	4877
Sweden	389	(53.6)	93	(12.8)	482	(66.4)	244	(33.6)	0	(0.0)	726
United Kingdom	2539	(41.1)	815	(13.2)	3354	(54.3)	2799	(45.3)	22	(0.4)	6 175
Subtotal EU/EEA	38 102	(64.6)	6922	(11.7)	45 024	(76.3)	13 450	(22.8)	520	(0.9)	58 994
Non-EU/EEA											
Albania	-	-	-	-	301	(72.5)	114	(27.5)	0	(0.0)	415
Andorra	-	-	-	-	3	(75.0)	1	(25.0)	0	(0.0)	4
Armenia	-	-	-	-	829	(76.8)	198	(18.3)	53	(4.9)	1080
Azerbaijan	_	-	_	-	4122	(61.5)	1037	(15.5)	1548	(23.1)	6707
Belarus	-	_	_	-	2964	(82.4)	247	(6.9)	387	(10.8)	3 598
Bosnia and Herzegovina		-		-	792				0	(0.0)	907
•	_	_	_	_	192	(87.3)	115	(12.7)	U	(0.0)	907
former Yugoslav Republic	-	-	-	-	211	(79.0)	52	(19.5)	4	(1.5)	267
of Macedonia, the		_		-	2.274	(74.2)	(42	(40 ()	2/7	(40.1)	2220
Georgia	-		-		2371	(71.2)	612	(18.4)	347	(10.4)	3330
Israel	-	-	-	-	184	(73.6)	66	(26.4)		(0.0)	250
Kazakhstan	-	-	-	-	10 927	(86.3)	1395	(11.0)	336	(2.7)	12 658
Kyrgyzstan	-	-	-	-	5 5 1 4	(69.0)	1512	(18.9)	969	(12.1)	7995
Moldova	-	-	-	-	3235	(78.3)	336	(8.1)	563	(13.6)	4134
Monaco	-	_	-	-				,	0		0
Montenegro	_	_	_	-	77	(88.5)	10	(11.5)	0	(0.0)	87
Russia	_	_	_	_	84066	(69.4)	8341	(6.9)	28 639	(23.7)	121 046
	_	_	_		04 000	(09.4)	0341	(0.9)	20039	(23.7)	
San Marino	-	-	-	-							0
Serbia	-	-	-	-	1206	(81.0)	266	(17.9)	16	(1.1)	1488
Serbia excluding UN Administered Province of Kosovo ^c	-	-	-	-	673	(87.7)	82	(10.7)	12	(1.6)	767
UN Administered Province of Kosovo ^c	-	-	-	-	533	(73.9)	184	(25.5)	4	(0.6)	721
Switzerland	-	-	-	-	402	(66.0)	171	(28.1)	36	(5.9)	609
Tajikistan	-	-	-	-	4368	(70.0)	1597	(25.6)	276	(4.4)	6241
Turkey		-	-	-	8044	(64.8)	4142	(33.4)	231	(1.9)	12 417
,											
Turkmenistan	-	-	-	-	1616	(68.0)	488	(20.5)	272	(11.4)	2376
Ukraine	-	-	-	-	26357	(77.3)	2 6 9 5	(7.9)	5036	(14.8)	34088
	-	-	-	_	10709	(58.1)	5341	(29.0)	2391	(13.0)	18441
Uzbekistan					,.,						
Uzbekistan Subotal non-EU/EEA	-	-	-	-	168 298	(70.7)	28736	(12.1)	41104	(17.3)	238138
		-	-	-			28736 42186	(12.1) (14.2)	41104 41624	(17.3) (14.0)	238138 297132

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics.

These data are subject to change as the national TB registry was under review when this report was being produced.
 Provisional data on new and relapse cases including overseas territories reported to WHO Global TB database.
 In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 7: New and relapse pulmonary tuberculosis cases by diagnostic method, European Region, 2016

		No	ew ^a and rela	pse pulmo	nary tuberci	ılosis case	es					
					e, smear and	d/or nuclei		fication				
Country	N	(%)b	N	(%) ^c	Confirmed WHO-recor rapid diag such as MTB/I	cases by nmended gnostics Xpert RIF ^d	Confirmed bacteriolo	gićal test	Clinically d case	es	All pulmo case	es
PIL/PP A					N	(%)•	N	(%)°	N	(%)⁵	N	(%)
EU/EEA	(70	(07.5)	104	(05.2)	45	(2.7)	207	(0(2)	(0	(41.7)	400	(7(0)
Austria	470	(97.5)	401	(85.3)	15	(3.7)	386	(96.3)	69	(14.7)	482	(76.0)
Belgium Bulgaria	666 1113	(93.1) (93.8)	577	(86.6) (68.1)	13	(2.3)	564 <i>757</i>	(97.7) (99.9)	89 355	(13.4) (31.9)	715 1186	(68.3) (74.0)
Croatiag	297	(96.7)	<i>758</i> 188	(63.3)	0	(0.0)	188	(100.0)	109	(36.7)	307	(66.7)
Cyprus	48	(94.1)	37	(77.1)	0	(0.0)	37	(100.0)	11	(22.9)	51	(85.0)
Czech Republic	441	(98.9)	368	(83.4)	18	(4.9)	350	(95.1)	73	(16.6)	446	(86.4)
Denmark	232	(88.5)	187	(80.6)	0	(0.0)	187	(100.0)	45	(19.4)	262	(79.4)
Estonia	174	(98.3)	150	(86.2)	4	(2.7)	146	(97.3)	24	(13.8)	177	(92.2)
Finland	168	(96.0)	135	(80.4)	3	(2.2)	132	(97.8)	33	(19.6)	175	(74.2)
Franceh	3319	(100.0)	2338	(70.4)	_	-	-	-	981	(29.6)	3319	(100.0)
Germany	4248	(96.6)	3 4 5 0	(81.2)	220	(6.4)	3230	(93.6)	798	(18.8)	4397	(74.3)
Greece	360	(91.4)	308	(85.6)	18	(5.8)	290	(94.2)	52	(14.4)	394	(88.9)
Hungary	708	(93.5)	385	(54.4)	0	(0.0)	385	(100.0)	323	(45.6)	757	(96.3)
Iceland	6	(100.0)	5	(83.3)	0	(0.0)	5	(100.0)	1	(16.7)	6	(100.0)
Ireland	193	(91.5)	163	(84.5)	0	(0.0)	163	(100.0)	30	(15.5)	211	(66.4)
Italy	2610	(92.6)	2387	(91.5)	0	(0.0)	2387	(100.0)	223	(8.5)	2820	(69.9)
Latvia	600	(96.9)	517	(86.2)	0	(0.0)	517	(100.0)	83	(13.8)	619	(93.8)
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	1232	(92.8)	1076	(87.3)	0	(0.0)	1076	(100.0)	156	(12.7)	1327	(92.0)
Luxembourg	24	(100.0)	22	(91.7)	0	(0.0)	22	(100.0)	2	(8.3)	24	(82.8)
Malta	37	(100.0)	33	(89.2)	0	(0.0)	33	(100.0)	4	(10.8)	37	(74.0)
Netherlands	470	(98.5)	356	(75.7)	0	(0.0)	356	(100.0)	114	(24.3)	477	(53.7)
Norway	173	(92.5)	150	(86.7)	2	(1.3)	148	(98.7)	23	(13.3)	187	(62.5)
Poland	5820	(95.2)	4369	(75.1)	72	(1.6)	4297	(98.4)	1451	(24.9)	6116	(94.9)
Portugal	1269	(97.5)	1113	(87.7)	30	(2.7)	1083	(97.3)	156	(12.3)	1302	(70.9)
Romania	10706	(92.9)	8791	(82.1)	35	(0.4)	8756	(99.6)	1915	(17.9)	11 523	(84.6)
Slovakia	238	(94.1)	143	(60.1)	22	(15.4)	121	(84.6)	95	(39.9)	253	(85.5)
Slovenia	103	(100.0)	96	(93.2)	0	(0.0)	96	(100.0)	7	(6.8)	103	(87.3)
Spain	3399	(96.7)	2918	(85.8)	106	(3.6)	2812	(96.4)	481	(14.2)	3515	(72.1)
Sweden	463	(96.1)	411	(88.8)	8	(1.9)	403	(98.1)	52	(11.2)	482	(66.4)
United Kingdom	3133	(93.4)	2472	(78.9)	10	(0.4)	2462	(99.6)	661	(21.1)	3354	(54.3)
Subtotal EU/EEA Non-EU/EEA	42720	(94.9)	34304	(80.3)	577	(1.7)	31389	(91.5)	8 416	(18.7)	45024	(80.3)
Albania	301	_	207	(68.8)	_	_	-	_	94	(31.2)	-	_
Andorra	3	_	207	(66.7)	_	-	_	-	1	(33.3)	-	_
Armenia	829	_	438	(52.8)	_	-	_	_	391	(47.2)	-	_
Azerbaijan	4122	_	2529	(61.4)	-	-	_	-	1593	(38.6)	-	-
Belarus	2964	_	2350	(79.3)	_	_	-	_	614	(20.7)	-	_
Bosnia and Herzegovina	792	-	597	(75.4)	_	_	-	-	195	(24.6)	-	-
former Yugoslav Republic of												
Macedonia, the	211	-	178	(84.4)	_	_	_	_	33	(15.6)	-	_
Georgia	2371	-	1998	(84.3)	-	-	-	-	373	(15.7)	-	-
Israel	184	-	132	(71.7)	-	-	-	-	52	(28.3)	-	-
Kazakhstan	10 927	-	9679	(88.6)	-	-	-	-	1248	(11.4)	-	-
Kyrgyzstan	5 5 1 4	-	3183	(57.7)	-	-	-	-	2331	(42.3)	-	-
Moldova	3235	-	2019	(62.4)	-	-	-	-	1216	(37.6)	-	-
Monaco		-			-	-	-	-	0	(-	-
Montenegro	77	-	58	(75.3)	-	-	-	-	19	(24.7)	-	-
Russia	84066	-	42 681	(50.8)	-	-	-	-	41385	(49.2)	-	-
San Marino	4007	-	045	(17.0)	-	-	-	-	0	(22.1)		-
Serbia	1206	-	815	(67.6)	-	-	-	-	391	(32.4)	-	-
Serbia excluding UN Administered Province of Kosovo [†] UN Administered Province of	673	-	541	(80.4)	-	-	-	-	132	(19.6)	-	-
Kosovoi Switzerland	533	-	274	(51.4) (90.0)	-	-	-	-	259 40	(48.6)	-	-
Tajikistan Tajikistan	402 4368	-	362 3 <i>011</i>	(68.9)	-	_	-	-	1357	(10.0) (31.1)	-	
Turkey	8044	-	6334	(78.7)	-	-	_	-	1357	(21.3)	_	_
Turkmenistan	1616	_	1616	(100.0)	-	_	_	_	0	(0.0)	_	_
Ukraine	26357	-	18125	(68.8)	-	-	_	_	8232	(31.2)	_	_
Uzbekistan	10709	_	4854	(45.3)	-	_	_	_	5855	(54.7)	_	_
Subtotal non-EU/EEA	168 298	-	101168	(60.1)	_	_	-	_	67130	(39.9)	-	_
Total European Region	211018	-	135 472	(64.2)	577	_	31389	_	75 546	(35.8)	45024	
Subtotal 18 HPC	178 947	-	110109	(61.5)	40	-	11252	-	68838	(38.5)	14832	-

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein.
WHO European Region 18 TB high-priority countries presented in italics.

**Cases with unknown previous TB history are included among new TB cases.

**Microscopy results from any specimen are included for EU/EEA countries.

**Percentage among pulmonary TB cases.

All nucleic acid amplification tests are counted as 'confirmed by WHO-recommended rapid diagnostics' for EU/EEA member states.
 Percentage among confirmed new and relapse pulmonary TB cases.
 These data are subject to change as the national TB registry was under review when this report was being produced.
 Provisional data on new and relapse cases including overseas territories reported to WHO Global TB database.
 In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 7a: New and relapse tuberculosis cases by diagnostic method, European Region, 2016

		Ne	ew ^a and rela	pse pulmo	nary tuberc	ulosis cas	es				
			Confirme	by cultur	e, smear an		ic acid ampli	fication			
Country	N	(%) ^b	N	(%)°	Confirmed WHO-recon rapid dias such as MTB/	cases by mmended gnostics Xpert	Confirmed bacteriolo		Clinically di case		All pulmonary TB cases
					N	(%)•	N	(%)°	N	(%)e	N
EU/EEA											
Austria	619	(97.6)	525	(82.8)	319	(50.3)	206	(32.5)	94	(14.8)	634
Belgium	986	(94.2)	808	(77.2)	473	(45.2)	335	(32.0)	178	(17.0)	1047
Bulgaria	1525	(95.1)	781	(48.7)	6	(0.4)	775	(48.3)	744	(46.4)	1603
Croatiaf	449	(97.6)	256	(55.7)	0	-	256	(55.7)	193	(42.0)	460
Cyprus	57	(95.0)	40	(66.7)	4	(6.7)	36	(60.0)	17	(28.3)	60
Czech Republic	511	(99.0)	419	(81.2)	204	(39.5)	215	(41.7)	92	(17.8)	516
Denmark	292	(88.5)	235	(71.2)	118	(35.8)	117	(35.5)	57	(17.3)	330
Estonia	188	(97.9)	156	(81.3)	143	(74.5)	13	(6.8)	32	(16.7)	192
Finland	225	(95.3)	187	(79.2)	62	(26.3)	125	(53.0)	38	(16.1)	236
France ^g	-	-	-	-	-	-	-	-	-	-	-
Germany	5737	(97.0)	4545	(76.8)	3161	(53.4)	1384	(23.4)	1192	(20.2)	5915
Greece	407	(91.9)	333	(75.2)	163	(36.8)	170	(38.4)	74	(16.7)	443
Hungary	737	(93.8)	393	(50.0)	0	-	393	(50.0)	344	(43.8)	786
Iceland	6	(100.0)	5	(83.3)	5	(83.3)	0	(0.0)	1	(16.7)	6
Ireland	293	(92.1)	227	(71.4)	112	(35.2)	115	(36.2)	66	(20.8)	318
Italy	-	-	-	-	-	-	-	-	-	-	-
Latvia	641	(97.1)	541	(82.0)	0	(0.0)	541	(82.0)	100	(15.2)	660
Liechtenstein	-	-	-	(02.0)	_	(5.0)	-	(02.0)	0	(.).2)	-
Lithuania	1347	(93.4)	1106	(76.7)	0	(0.0)	1106	(76.7)	241	(16.7)	1442
Luxembourg	29	(100.0)	26	(89.7)	0	(0.0)	26	(89.7)	3	(10.3)	29
Malta	50	(100.0)	42	(84.0)	17	(0.0)	25	(50.0)	8	(16.0)	50
Netherlands	877	(98.7)	589	(66.3)	0	(0.0)	589	(66.3)	288	(32.4)	889
Norway	278	(93.0)	225	(75.3)	132	(44.1)	93	(31.1)	53	(17.7)	299
Poland	6143	(95.3)	4528	(70.3)	888	(13.8)	3640	(56.5)	1615	(25.1)	6444
	1794	(97.7)	1312	(71.5)	284	(15.5)	1028	(56.0)	482	(26.3)	1836
Portugal Romania	12790	(93.9)	9143	(67.1)	689	(5.1)	8454	(62.1)	3647	(26.8)	13 617
Slovakia	281	(93.9)	147	(49.7)	58	(19.6)	89	(30.1)	134	(45.3)	296
Slovenia	118	(100.0)	109	(92.4)	61	(51.7)	48	(40.7)	9	(7.6)	118
Spain	4734	(97.1)	3723	(76.3)	941	(19.3)	2782	(57.0)	1011	(20.7)	4877
Sweden	702	(96.7)	591	(81.4)	463	(63.8)	128	(17.6)	111	(15.3)	726
United Kingdom	5793	(93.8)	3874	(62.7)	298	(4.8)	3576	(57.9)	1919	(31.1)	6175
Subtotal EU/EEA	47609	(95.2)	34866	(73.2)	8 6 0 1	(24.7)	26 265	(75.3)	12743	(25.5)	50004
Non-EU/EEA		(++++)	***	(100)						()	
Albania	415	(100.0)	207	(49.9)	-	-	-	-	94	(22.7)	415
Andorra	4	(100.0)	2	(50.0)	-	-	-	-	1	(25.0)	4
Armenia	1027	(95.1)	438	(40.6)	-	-	-	-	391	(36.2)	1080
Azerbaijan	5159	(76.9)	2529	(37.7)	-	-	-	-	1593	(23.8)	6707
Belarus	3211	(89.2)	2350	(65.3)	-	-	-	-	614	(17.1)	3 5 9 8
Bosnia and Herzegovina	907	(100.0)	597	(65.8)	-	-	-	-	195	(21.5)	907
former Yugoslav Republic of	263	(98.5)	178	(66.7)	_	_	_	_	33	(12.4)	267
Macedonia, the											222
Georgia	2983	(89.6)	1998	(60.0)	-	-	-	-	373	(11.2)	3330
Israel	250	(100.0)	132	(52.8)	-	-	-	-	52	(20.8)	250
Kazakhstan	12322	(97.3)	9679	(76.5)	-	-	-	-	1248	(9.9)	12 658
Kyrgyzstan	7026	(87.9)	3183	(39.8)	-	-	-	-	2331	(29.2)	7995
Moldova	3 571	(86.4)	2019	(48.8)	-	-	-	-	1216	(29.4)	4134
Monaco		, ,		,	-	-	-	-		,	0
Montenegro	87	(100.0)	58	(66.7)	-	-	-	-	19	(21.8)	87
Russia	92407	(76.3)	42 681	(35.3)	-	-	-	-	41385	(34.2)	121 046
San Marino		(0.0)	0	(0.0)	-	-	-	-	0	(0.0)	0
Serbia	1472	(98.9)	815	(54.8)	-	-	-	-	391	(26.3)	1488
Serbia excluding UN Administered Province of Kosovo ^h	755	(98.4)	541	(70.5)	-	-	-	-	132	(17.2)	767
UN Administered Province of Kosovo ^h	717	(99.4)	274	(38.0)	-	-	-	-	259	(35.9)	721
Switzerland	573	(94.1)	362	(59.4)	-	-	-	-	40	(6.6)	609
Tajikistan	5965	(95.6)	3 011	(48.2)	-	-	-	-	1357	(21.7)	6241
Turkey	12186	(98.1)	6334	(51.0)	-	-	-	-	1710	(13.8)	12 417
Turkmenistan	2104	(88.6)	1 616	(68.0)	-	-	-	-	0	(0.0)	2376
Ukraine	29 052	(85.2)	18125	(53.2)	-	-	-	-	8232	(24.1)	34088
Uzbekistan	16 050	(87.0)	4854	(26.3)	-	-	-	-	5855	(31.7)	18441
Subtotal non-EU/EEA	197 034	(82.7)	101168	(51.3)	-	-	-	-	67130	(28.2)	238138
Total European Region	244643	(84.9)	136 034	(55.6)	8 6 0 1	-	26 265	-	79 873	(27.7)	288142
Subtotal 18 HPC	209554	(83.3)	110 544	(52.8)	838	-	10889	-	71069	(28.2)	251625

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WHO European Region 18 TB high-priority countries presented in italics.

**Cases with unknown previous TB history are included among new TB cases.

**Microscopy results from any specimen are included for EU/EEA countries.

**Percentage among pulmonary TB cases.

<sup>All nucleic acid amplification tests are counted as 'confirmed by WHO-recommended rapid diagnostics' for EU/EEA member states.
Percentage among confirmed new and relapse pulmonary TB cases.
These data are subject to change as the national TB registry was under review when this report was being produced.
Provisional data on new and relapse cases including overseas territories reported to WHO Global TB database.
In accordance with the UN Security Council Resolution No. 1244 (1999).</sup>

Table 8: Tuberculosis cases according to EU case definition, EU/EEA, 2016

		All la	boratory-co	nfirmed cas	sesª								S
Country	Sputum s positive and acid-test-p only	nucleic- ositive	Culture-p		Meetin crite		Confirmed	l cases ^b	Probable	cases	Possible	cases	All tuberculosis cases (N)
	N	(%) ^c	N	(%) ^c	N	(%) ^c	N	(%) ^d	N	(%) ^d	N	(%) ^d	₹
Austria	15	(3.1)	344	(70.3)	130	(26.6)	489	(77.1)	56	(8.8)	89	(14.0)	634
Belgium	6	(0.7)	551	(68.8)	244	(30.5)	801	(76.5)	111	(10.6)	135	(12.9)	1047
Bulgaria	0	(0.0)	764	(100.0)	0	(0.0)	764	(47.7)	123	(7.7)	716	(44.7)	1603
Croatiae	0	(0.0)	262	(100.0)	0	(0.0)	262	(57.0)	0	(0.0)	198	(43.0)	460
Cyprus	1	(2.4)	40	(95.2)	1	(2.4)	42	(70.0)	3	(5.0)	15	(25.0)	60
Czech Republic	3	(0.8)	288	(73.5)	101	(25.8)	392	(76.0)	56	(10.9)	68	(13.2)	516
Denmark	2	(0.8)	161	(62.4)	95	(36.8)	258	(78.2)	2	(0.6)	70	(21.2)	330
Estonia	2	(1.3)	68	(43.6)	86	(55.1)	156	(81.3)	11	(5.7)	25	(13.0)	192
Finland	0	(0.0)	168	(90.3)	18	(9.7)	186	(78.8)	20	(8.5)	30	(12.7)	236
France ^{fg}	-	-	-	-	-	-	4197	(84.7)	-	-	761	(15.3)	4958
Germany	65	(1.6)	3 0 1 3	(72.4)	1086	(26.1)	4164	(70.4)	514	(8.7)	1237	(20.9)	5 9 1 5
Greece	41	(16.7)	149	(60.6)	56	(22.8)	246	(55.5)	107	(24.2)	90	(20.3)	443
Hungary	0	(0.0)	404	(100.0)	0	(0.0)	404	(51.4)	22	(2.8)	360	(45.8)	786
Iceland	0	(0.0)	0	(0.0)	5	(100.0)	5	(83.3)	1	(16.7)	0	(0.0)	6
Ireland	0	(0.0)	191	(80.3)	47	(19.7)	238	(74.8)	26	(7.5)	55	(17.6)	318
Italy ^f	0	(0.0)	3 2 6 1	(100.0)	0	(0.0)	3 2 6 1	(80.9)	141	(3.5)	630	(15.6)	4032
Latvia	0	(0.0)	559	(100.0)	0	(0.0)	559	(84.7)	32	(4.8)	69	(10.5)	660
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	0	(0.0)	1201	(100.0)	0	(0.0)	1201	(83.3)	6	(0.4)	235	(16.3)	1442
Luxembourg	0	(0.0)	26	(100.0)	0	(0.0)	26	(89.7)	0	(0.0)	3	(10.3)	29
Malta	0	(0.0)	29	(69.0)	13	(31.0)	42	(84.0)	0	(0.0)	8	(16.0)	50
Netherlands	0	(0.0)	583	(100.0)	0	(0.0)	583	(65.6)	54	(6.1)	252	(28.3)	889
Norway	2	(0.9)	162	(70.1)	67	(29.0)	231	(77.3)	13	(4.3)	55	(18.4)	299
Poland	0	(0.0)	4 0 5 7	(87.8)	562	(12.2)	4 619	(71.7)	123	(1.9)	1702	(26.4)	6444
Portugal	20	(1.8)	989	(88.1)	114	(10.2)	1123	(61.2)	381	(20.8)	332	(18.1)	1836
Romania	7	(0.1)	8962	(94.2)	548	(5.8)	9517	(69.9)	896	(6.6)	3204	(23.5)	13 617
Slovakia	4	(3.4)	94	(80.3)	19	(16.2)	117	(39.5)	52	(17.6)	127	(42.9)	296
Slovenia	0	(0.0)	62	(56.9)	47	(43.1)	109	(92.4)	5	(4.2)	4	(3.4)	118
Spainf	65	(1.9)	2903	(86.1)	404	(12.0)	3372	(69.1)	620	(12.7)	885	(18.1)	4877
Sweden	0	(0.0)	474	(79.4)	123	(20.6)	597	(82.2)	32	(4.4)	97	(13.4)	726
United Kingdom	9	(0.2)	3746	(95.9)	152	(3.9)	3907	(63.3)	483	(7.8)	1785	(28.9)	6 175
Total EU/EEA	242	(0.6)	33511	(80.0)	3918	(9.4)	41868	(71.0)	3888	(6.6)	13 237	(22.4)	58994

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. EU/EEA countries designated as high-priority countries by WHO are presented in italics.

<sup>Laboratory-confirmed TB cases according to EU case definition.
Confirmed by microscopy and nucleic acid amplification or culture.
Percentage among all laboratory-confirmed TB cases.
Percentage among all TB cases.
These data are subject to change as the national TB registry was under review when this report was being produced.
Data reported to TESSy may differ from numbers reported to TME by French, Italian and Spanish National Reference Laboratories.
Provisional data for 2016 including overseas territories reported to WHO Global TB database.</sup>

Table 9: New TB cases and relapses by age group and male-to-female ratio, European Region, 2016^a

		0-	4			5-1	4			15-	-24			25-	-44		
Country	N	(%)	Rate	M:F ratio	N	(%)	Rate	M:F ratio	N	(%)	Rate	M:F ratio	N	(%)	Rate	M:F ratio	
EU/EEA				1000													
Austria	19	(3.1)	4.6	1.4	12	(1.9)	1.4	3.0	138	(22.3)	13.6	3.3	186	(30.0)	8.0	1.7	
Belgium	26	(2.6)	4.1	1.4	31	(3.1)	2.4	2.1	159	(16.1)	12.0	1.4	378	(38.3)	12.8	1.8	
Bulgaria	30	(2.0)	9.0	1.1	94	(6.2)	14.2	0.9	101	(6.6)	14.7	1.1	477	(31.3)	23.5	2.1	
Croatia ^b	0	(0.0)	0.0	-	6	(1.3)	1.5	0.5	20	(4.5)	4.2	0.4	96	(21.4)	8.6	2.4	
Cyprus	0	(0.0)	0.0	-	0	(0.0)	0.0	-	7	(12.3)	6.0	0.8	36	(63.2)	14.0	1.4	
Czech Republic	10	(2.0)	1.8	1.5	0	(0.0)	0.0	-	28	(5.5)	2.7	1.3	152	(29.7)	4.8	2.7	
Denmark	6	(2.1)	2.0	5.0	12	(4.1)	1.8	0.3	37	(12.7)	5.0	2.1	117	(40.1)	8.2	1.9	
Estonia	2	(1.1)	2.8	N/M	2	(1.1)	1.4	N/M	5	(2.7)	3.7	0.7	51	(27.1)	13.6	2.9	
Finland	1	(0.4)	0.3	N/F	5	(2.2)	0.8	0.3	40	(17.8)	6.2	1.7	57	(25.3)	4.2	1.1	
France ^c	127	(2.7)	3.2	1.4	142	(3.0)	1.7	1.2	618	(13.2)	7.9	2.1	1730	(37.0)	10.4	2.1	
Germany	104	(1.8)	2.9	1.0	126	(2.2)	1.7	1.3	1456	(25.4)	16.6	3.5	2005	(34.9)	9.8	2.0	
Greece	8	(2.0)	1.7	7.0	12	(2.9)	1.1	1.0	36	(8.8)	3.3	5.0	111	(27.3)	3.8	2.1	
Hungary	3	(0.4)	0.7	N/F	3	(0.4)	0.3	N/F	39	(5.3)	3.5	1.3	151	(20.5)	5.3	1.1	
Iceland	0	(0.0)	0.0	-	0	(0.0)	0.0	-	0	(0.0)	0.0	-	4	(66.7)	4.4	3.0	
Ireland	4	(1.4)	1.1	0.3	12	(4.1)	1.8	1.0	28	(9.6)	5.3	1.2	120	(41.0)	8.5	2.0	
Italy	73	(1.9)	2.8	1.5	77	(2.0)	1.3	1.1	702	(18.6)	11.9	3.7	1326	(35.1)	8.5	1.8	
Latvia	10	(1.6)	9.7	0.7	13	(2.0)	6.6	1.6	32	(5.0)	16.0	1.3	251	(39.2)	46.3	2.2	
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	
Lithuania	12	(0.9)	7.9	2.0	35	(2.6)	12.9	1.3	85	(6.3)	23.7	1.1	446	(33.1)	60.1	2.4	
Luxembourg	0	(0.0)	0.0	-	1	(3.4)	1.6	N/F	3	(10.3)	4.4	N/F	11	(37.9)	6.3	4.5	
Malta	0	(0.0)	0.0	-	0	(0.0)	0.0	-	11	(22.0)	20.8	2.7	35	(70.0)	28.1	2.9	
Netherlands	18	(2.1)	2.1	1.3	31	(3.5)	1.6	0.6	167	(19.0)	8.0	1.5	340	(38.8)	8.1	1.5	
Norway	4	(1.4)	1.3	1.0	10	(3.6)	1.6	1.5	67	(24.1)	10.0	2.4	126	(45.3)	8.8	0.9	
Poland	30	(0.5)	1.6	0.9	73	(1.2)	1.9	1.0	250	(4.1)	5.7	1.2	1555	(25.3)	13.4	2.1	
Portugal	20	(1.1)	4.6	0.8	13	(0.7)	1.3	0.6	154	(8.6)	13.9	1.1	520	(29.0)	18.8	1.4	
Romania	180	(1.4)	18.9	1.2	416	(3.3)	19.7	1.0	1 5 1 5	(11.8)	70.1	1.2	4378	(34.2)	76.6	2.0	
Slovakia	44	(15.7)	15.4	0.9	16	(5.7)	2.9	0.6	8	(2.8)	1.3	7.0	56	(19.9)	3.3	1.8	
Slovenia	2	(1.7)	1.9	1.0	1	(0.8)	0.5	N/M	6	(5.1)	3.0	1.0	21	(17.8)	3.6	2.5	
Spain	135	(2.9)	6.1	1.0	132	(2.8)	2.7	0.9	389	(8.2)	8.7	1.4	1605	(33.9)	11.9	1.4	
Sweden	11	(1.6)	1.9	0.8	46	(6.6)	4.1	1.6	236	(33.6)	20.0	5.1	248	(35.3)	9.7	1.6	
United Kingdom	98	(1.7)	2.4	1.1	126	(2.2)	1.7	0.8	702	(12.1)	8.7	1.4	2524	(43.6)	14.6	1.5	
Subtotal EU/EEA	977	(1.7)	3.7	1.1	1447	(2.6)	2.7	1.0	7039	(12.6)	12.3	1.9	19 113	(34.1)	13.8	1.8	
Non-EU/EEA	777	(11)		.,,		(=:0)	= 17		, , ,	(1210)		- 1	1, 11,	(5 111)	1910		
Albania	3	(0.7)	1.7	0.0	10	(2.4)	2.9	1.0	86	(20.7)	18.2	2.4	122	(29.4)	15.4	2.1	
Andorra	0	(0.0)	0.0	-	0	(0.0)	0.0	-	0	(0.0)	0.0	-	1	(25.0)	10.1	N/F	
Armenia	6	(0.6)	3.0	0.2	15	(1.5)	3.9	2.0	149	(14.5)	37.2	2.5	342	(33.3)	38.5	2.6	
Azerbaijan	32	(0.8)	3.6	1.9	143	(3.8)	10.5	1.8	989	(26.1)	63.8	1.9	1411	(37.2)	45.2	2.1	
Belarus	3	(0.1)	0.5	2.0	10	(0.3)	1.0	0.7	176	(5.5)	17.2	1.6	1314	(40.9)	46.0	2.4	
Bosnia and Herzegovina	3	(0.3)	1.9	2.0	7	(0.8)	2.0	0.8	88	(9.7)	19.1	1.3	183	(20.2)	18.7	1.3	
former Yugoslav Republic																	
of Macedonia, the	11	(4.2)	9.3	1.2	14	(5.3)	6.1	0.8	33	(12.5)	11.9	0.7	84	(31.9)	13.3	2.0	
Georgia	34	(1.1)	12.5	1.8	89	(3.0)	18.8	1.4	364	(12.2)	73.6	0.9	1190	(39.9)	109.5	1.9	
Israel	11	(4.4)	1.3	4.5	2	(0.8)	0.1	N/F	12	(4.8)	1.0	2.0	125	(50.0)	5.7	1.7	
Kazakhstan	84	(0.7)	4.2	1.0	242	(2.0)	8.3	0.8	2 073	(16.8)	82.1	1.1	5 5 2 9	(44.9)	100.1	1.7	
Kyrgyzstan	77	(1.1)	10.1	0.9	330	(4.7)	29.6	1.3	1637	(23.3)	156.6	1.2	2581	(36.7)	148.4	1.3	
Moldova	35	(1.0)	16.1	1.1	68	(1.9)	16.2	1.4	302	(8.5)	56.0	1.4	1616	(45.3)	117.4	2.6	
Monaco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Montenegro	0	(0.0)	0.0	-	0	(0.0)	0.0	-	8	(9.2)	9.5	-	22	(25.3)	12.6	-	
Russia	1094	(1.2)	11.4	1.0	1782	(1.9)	11.6	1.0	6296	(6.8)	43.6	1.3	50841	(55.0)	112.4	2.4	
San Marino	0	(0.0)	0.0	-	0	(0.0)	0.0	-	0	(0.0)	0.0	-	0	(0.0)	0.0	-	
Serbia	3	(0.2)	0.6	0.0	14	(1.0)	1.4	1.0	201	(13.7)	18.3	0.9	378	(25.7)	15.6	1.4	
Serbia excluding UN Administered Province of	0	(0.0)	0.0	-	0	(0.0)	0.0	-	62	(8.2)	8.1	-	177	(23.4)	9.5	-	
Kosovo ^d UN Administered	3	(0.4)	1.9	0.0	14	(2.0)	4.2	1.0	139	(19.4)	41.3	0.9	201	(28.0)	35.4	1.1	
Province of Kosovo ^d																	
Switzerland	13	(2.3)	3.0	0.6	17	(3.0)	2.1	1.8	159	(27.7)	16.9	2.9	220	(38.4)	9.5	1.7	
Tajikistan	107	(1.8)	9.0	1.2	282	(4.7)	14.9	1.0	1536	(25.8)	90.2	1.3	2294	(38.5)	93.9	1.3	
Turkey	208	(1.7)	3.1	1.4	420	(3.4)	3.1	0.8	1908	(15.7)	14.5	1.1	3767	(30.9)	15.5	1.2	
Turkmenistan	0	(0.0)	0.0	-	0	(0.0)	0.0	-	387	(18.6)	38.8	-	970	(46.7)	56.2	-	
Ukraine	262	(0.9)	11.2	1.1	309	(1.1)	7.0	1.0	2000	(6.9)	43.5	1.4	15 599	(53.7)	113.7	2.7	
Uzbekistan	393	(2.4)	12.3	1.4	1 617	(10.1)	28.8	1.4	1793	(11.2)	30.5	1.2	5444	(33.9)	54.8	1.4	
Subtotal non-EU/EEA	2379	(1.2)	7.7	1.1	5 3 7 1	(2.7)	10.0	1.1	20197	(10.3)	38.2	1.3	94033	(48.1)	76.2	2.1	
Total European Region	3356	(1.3)	5.9	1.1	6 8 1 8	(2.7)	6.4	1.1	27236	(10.8)	25.0	1.4		(45.0)	43.6	2.1	
Subtotal 18 HPC	2569	(1.2)	8.5	1.1	5867	(2.8)	11.1	1.1	21348	(10.3)	41.2	1.3	98501	(47.3)	79.9	2.1	

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics. N/F: no female in subgroup. N/M: no male in subgroup.

Cases with missing information on previous history of TB treatment are included among new cases.
 These data are subject to change as the national TB registry was under review when this report was being produced.
 Provisional data on new and relapse cases including overseas territories reported to WHO Global TB database.
 In accordance with the UN Security Council Resolution No. 1244 (1999).

	45-	64			> 6	4		į	Jnknown		Tot	al	
N	(%)	Rate	M:F ratio	N	(%)	Rate	M:F ratio	N	(%)	M:F ratio	N	M:F ratio	Country
			Tatio				Tatio			Tatio		Tatio	EU/EEA
152	(24.6)	6.1	2.1	112	(18.1)	7.0	1.4	0	(0.0)	-	619	2.0	Austria
233	(23.6)	7.6	2.1	159	(16.1)	7.7	1.7	0	(0.0)	-	986	1.8	Belgium
522	(34.2)	26.4	3.0	301	(19.7)	20.6	1.8	0	(0.0)	-	1525	2.0	Bulgaria
170	(37.9)	14.4	2.5	157	(35.0)	19.5	0.9	0	(0.0)	-	449	1.5	Croatia ^b
12 188	(21.1)	5.8 6.8	1.0 3.5	133	(3.5)	1.6 6.9	N/M 1.2	0	(0.0)	-	57 511	1.1	Cyprus Czech Republic
89	(30.5)	5.9	2.0	31	(10.6)	2.9	1.1	0	(0.0)	_	292	1.7	Denmark
81	(43.1)	23.5	5.2	47	(25.0)	18.8	1.0	0	(0.0)	-	188	2.4	Estonia
40	(17.8)	2.7	1.7	82	(36.4)	7.3	1.2	0	(0.0)	-	225	1.3	Finland
1084	(23.2)	6.3	2.3	974	(20.8)	7.8	1.9	0	(0.0)	-	4 675	2.0	France ^c
1109	(19.3)	4.5	2.2	936	(16.3)	5.4	1.3	1	(0.0)	-	5737	2.1	Germany
115	(28.3)	3.9	3.0	121	(29.7)	5.3	2.1	4	(1.0)	-	407	2.4	Greece
375	(50.9) (16.7)	14.1	2.6	166	(22.5)	9.2	1.0 N/M	0	(0.0)	_	737	1.7	Hungary Iceland
77	(26.3)	6.8	1.3	51	(17.4)	8.2	1.2	1	(0.3)	_	293	1.5	Ireland
713	(18.9)	4.1	2.0	554	(14.7)	4.1	1.3	333	(8.8)	-	3778	1.9	Italy
261	(40.7)	48.3	3.9	74	(11.5)	19.1	1.0	0	(0.0)	-	641	2.3	Latvia
-	-	-	-	_	-	-	-	-	-	-	-	-	Liechtenstein
593	(44.0)	72.7	3.5	176	(13.1)	32.1	1.5	0	(0.0)	-	1347	2.4	Lithuania
11 2	(37.9)	7.1	N/F	3	(10.3)	3.7	0.5 N/E	0	(0.0)	-	29 50	4.8	Luxembourg Malta
190	(4.0) (21.7)	4.0	1.0	131	(4.0) (14.9)	2.4 4.2	N/F 1.2	0	(0.0)	_	877	2.8	Netherlands
46	(16.5)	3.5	1.6	25	(9.0)	2.9	1.5	0	(0.0)	-	278	1.3	Norway
2668	(43.4)	26.2	3.5	1567	(25.5)	25.9	1.3	0	(0.0)	-	6143	2.2	Poland
640	(35.7)	22.3	3.0	443	(24.7)	20.7	1.9	4	(0.2)	-	1794	1.9	Portugal
4503	(35.2)	83.7	4.2	1798	(14.1)	52.3	1.4	0	(0.0)	-	12790	2.2	Romania
84	(29.9)	5.8	1.7	73	(26.0)	9.3	1.4	0	(0.0)	-	281	1.4	Slovakia
1276	(33.1)	6.5	2.5	1006	(41.5)	12.9	0.8	0	(0.0)	-	118	1.4	Slovenia
1376 99	(29.1) (14.1)	10.7	2.3	1096	(23.2)	12.6	1.7 0.9	0	(0.0)	-	4734 702	1.6	Spain Sweden
1463	(25.3)	8.7	1.6	880	(15.2)	7.5	1.2	0	(0.0)	-	5793	1.4	United Kingdom
16936	(30.2)	12.0	2.9	10 206	(18.2)	10.3	1.4	344	(0.6)	-	56062	1.5	Subtotal EU/EEA
													Non-EU/EEA
95	(22.9)	12.4	2.7	99	(23.9)	26.4	2.5	0	(0.0)	-	415	2.3	Albania
404	(25.0) (39.3)	10.2 55.4	N/F 4.8	2 111	(50.0) (10.8)	35.3 34.3	3.0	0	(0.0)	_	1027	3.2	Andorra Armenia
1036	(27.3)	46.4	2.6	182	(4.8)	32.0	1.5	0	(0.0)	-	3793	2.1	Azerbaijan
1288	(40.1)	48.4	4.5	420	(13.1)	30.4	0.9	0	(0.0)	-	3211	2.5	Belarus
278	(30.7)	27.6	2.4	348	(38.4)	61.3	0.7	0	(0.0)	-	907	1.3	Bosnia and Herzegovina
77	(29.3)	13.9	3.1	44	(16.7)	16.4	1.8	0	(0.0)	_	263	1.8	former Yugoslav Republic of Macedonia, the
951	(31.9)	93.0	3.8	355	(11.9)	61.4	1.7	0	(0.0)	-	2983	2.0	Georgia Georgia
60	(24.0)	3.8	1.3	40	(16.0)	4.3	0.4	0	(0.0)	-	250	1.3	Israel
3319	(26.9)	87.8	2.6	1075	(8.7)	87.4	1.0	0	(0.0)	-	12322	1.6	Kazakhstan
1747	(24.9)	168.8	1.8	654	(9.3)	252.1	1.2	0	(0.0)	-	7026	1.3	Kyrgyzstan
1288	(36.1)	118.6	3.7	262	(7.3)	62.5	1.6	0	(0.0)	-	3 571		Moldova
39	(44.8)	23.6	-	18	(20.7)	20.0	-	0	(0.0)	-	87	-	Monaco Montenegro
26152	(28.3)	66.2	3.2	5845	(6.3)	29.4	1.2	397	(0.4)	_	92407	2.3	Russia
0	(0.0)	0.0	-	0	(0.0)	0.0	-	0	(0.0)	-	0	-	San Marino
483	(32.8)	20.6	2.0	393	(26.7)	26.5	0.9	0	(0.0)	-	1472	1.3	Serbia
288	(38.1)	14.3	-	228	(30.2)	16.8	-	0	(0.0)	-	755	-	Serbia excluding UN Administered Province of Kosovo ^d
195	(27.2)	57.8	1.4	165	(23.0)	128.0	0.8	0	(0.0)	-	717	1.0	UN Administered Province of Kosovo ^d
85	(14.8)	3.6	1.7	79	(13.8)	5.2	1.0	0	(0.0)	-	573	1.8	Switzerland
1273	(21.3)	104.2	1.2	473	(7.9)	160.0	0.8	0	(0.0)	-	5965	1.2	,
3 680	(30.2)	23.4	1.8	2203	(18.1)	34.8	1.2	0	(0.0)	-	12186		Turkey
557	(26.8)	58.1	- // 2	128	(6.2)	54.4	12	36	(1.7)	-	2078	2 7	Turkmenistan Ukraine
8586 4694	(29.6)	70.5 85.6	4.3	2296 2109	(7.9) (13.1)	32.0 154.9	1.2	0	(0.0)	_	29 052 16 050	2.7 1.3	Uzbekistan
56093	(28.7)	58.2	2.8	17136	(8.8)	37.8	1.2	433	(0.0)	-	195642		Subtotal non-EU/EEA
73029	(29.0)	30.6	2.8	27342	(10.9)	18.8	1.2	777	(0.3)	-	251704		Total European Region
60 935	(29.3)	63.0	2.9	18509	(8.9)	40.1	1.2	433	(0.2)	-	208162	2.0	Subtotal 18 HPC

Table 10: Tuberculosis cases by origin, European Region, 2016

Country	Origin	Nati		Fore			n origin	All TB cases
*	criterion	N	(%)	N	(%)	N	(%)	N
EU/EEA			(22.4)		(4.4.4)		(0.0)	
Austria	citizenship	210	(33.1)	424	(66.9)	0	(0.0)	634
Belgium	citizenship	500	(47.8)	547	(52.2)	0	(0.0)	1047
Bulgaria	birthplace	1599	(99.8)	4	(0.2)	0	(0.0)	1603
Croatia	birthplace	161	(35.0)	3	(0.7)	296	(64.3)	460
Cyprus	birthplace	4	(6.7)	56	(93.3)	0	(0.0)	60
Czech Republic	birthplace	365	(70.7)	151	(29.3)	0	(0.0)	516
Denmark ^b	birthplace	109	(33.0)	221	(67.0)	0	(0.0)	330
Estonia	birthplace	150	(78.1)	42	(21.9)	0	(0.0)	192
Finland	birthplace	117	(49.6)	111	(47.0)	8	(3.4)	236
France ^c	birthplace	2200	(44.4)	2758	(55.6)	-	-	4958
Germany	birthplace	1427	(24.1)	4125	(69.7)	363	(6.1)	5 9 1 5
Greece	citizenship	254	(57.3)	189	(42.7)	0	(0.0)	443
Hungary	citizenship	756	(96.2)	30	(3.8)	0	(0.0)	786
Iceland	birthplace	2	(33.3)	4	(66.7)	0	(0.0)	6
Ireland	birthplace	145	(45.6)	160	(50.3)	13	(4.1)	318
Italy	birthplace	1180	(29.3)	2509	(62.2)	343	(8.5)	4032
Latvia	birthplace	617	(93.5)	43	(6.5)	0	(0.0)	660
Liechtenstein	-	-	-	-	-	-	-	-
Lithuania	birthplace	1429	(99.1)	13	(0.9)	0	(0.0)	1442
Luxembourg	birthplace	7	(24.1)	22	(75.9)	0	(0.0)	29
Malta	birthplace	2	(4.0)	48	(96.0)	0	(0.0)	50
Netherlands	birthplace	214	(24.1)	669	(75.3)	6	(0.7)	889
Norway	birthplace	34	(11.4)	265	(88.6)	0	(0.0)	299
Poland	citizenship	6352	(98.6)	92	(1.4)	0	(0.0)	6444
Portugal	birthplace	1500	(81.7)	336	(18.3)	0	(0.0)	1836
Romania	birthplace	13 593	(99.8)	24	(0.2)	0	(0.0)	13 617
Slovakia	,	285	(96.3)	11	(3.7)	0	(0.0)	296
	birthplace							
Slovenia	birthplace	75	(63.6)	43	(36.4)	0	(0.0)	118
Spain	birthplace	2886	(59.2)	1391	(28.5)	600	(12.3)	4877
Sweden	birthplace	74	(10.2)	652	(89.8)	0	(0.0)	726
United Kingdom	birthplace	1662	(26.9)	4369	(70.8)	144	(2.3)	6175
Subtotal EU/EEA		37909	(64.3)	19 312	(32.7)	1773	(3.0)	58 994
Non-EU/EEA			()					
Albania	citizenship	415	(100.0)	0	0	-	-	415
Andorra	citizenship	4	(100.0)	0	0	-	-	4
Armenia	citizenship	1080	(100.0)	0	0	-	-	1080
Azerbaijan	citizenship	6 6 9 5	(99.8)	12	0	-	-	6707
Belarus	citizenship	3 5 9 8	(100.0)	0	0	-	-	3 598
Bosnia and Herzegovina	citizenship	907	(100.0)	0	0	-	-	907
former Yugoslav Republic of	histhalasa	250	(97.0)	0	2	_	_	2/7
Macedonia, the	birthplace	259	(97.0)	8	3	_	_	267
Georgia	citizenship	-	-	-	-	-	-	-
Israel	birthplace	48	(19.2)	202	81	-	-	250
Kazakhstan	citizenship	12 5 0 5	(98.8)	153	1	-	-	12 658
Kyrgyzstan	birthplace	7995	(100.0)	0	0	-	-	7995
Moldova	citizenship	4095	(99.1)	39	1	-	-	4134
Monaco	birthplace	_	-	-	-	-	-	_
Montenegro	citizenship	85	(97.7)	2	2	_	_	87
Russia	citizenship	118249	(97.7)	2797	2	_	_	121 046
San Marino	- Citizensinp	0	(27.7)	0	_	_	_	0
Serbia	_	1483	(99.7)	5	0	_	_	1488
Serbia excluding UN Administered Province of Kosovo ^d	citizenship	766	(99.9)	1	0	-	-	767
UN Administered Province of Kosovo ^d	birthplace	717	(99.4)	4	1	-	-	721
Switzerland	birthplace	123	(20.2)	486	80	-	-	609
Tajikistan	birthplace	6241	(100.0)	0	0	-	-	6241
Turkey	birthplace	11 513	(92.7)	904	7	_	_	12 417
Turkmenistan	citizenship	-	(/21/)	-	_	_	_	12-717
Ukraine	citizenship	34068	(99.9)	20	0	_	_	34088
	UIULUIJIIIU	27000	(17.7)	20				
			(100.0)	Λ	Λ	_	_	
Uzbekistan	birthplace	18441	(100.0)	0 4628	(2 n)			
			(100.0) (98.0) (91.2)	4628 23940	(2.0) (8.2)	1773	(0.6)	18441 232432 291426

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics.

These data are subject to change as the national TB registry was under review when this report was being produced.
 By birthplace of parents for Danish-born cases under 26 years of age.
 Provisional data on new and relapse cases including overseas territories reported to WHO Global TB database.
 Cases with unknown origin are included among natives.
 In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 11: Drug resistance surveillance of pulmonary bacteriologically-confirmed tuberculosis cases, **European Region, 2016**

Country	Source of data	Coverage	Bacteriolo confirmed		Cases with D at least RIF		Cases resi any anti-T		Multidrug TB ca		Reporting completeness
			N	(%)	N	(%)	N	(%)	N	(%)	Completeness
EU/EEA	7500			(00.0)		(22.5)		()		(12.2)	
Austria	TESSy	national	400	(83.0)	374	(93.5)	45	(3.7)	14	(12.0)	Υ
Belgium	TESSy	national	606	(84.8)	568	(93.7)	34	(1.6)	9	(6.0)	Υ
Bulgaria	TESSy	national	746	(62.9)	653	(87.5)	71	(2.9)	19	(10.9)	Υ
Croatiad	TESSy	national	193	(62.9)	193	(100.0)	6	(0.0)	0	(3.1)	Υ
Cyprus	TESSy	national	39	(76.5)	38	(97.4)	6	(0.0)	0	(15.8)	Υ
Czech Republic	TESSy	national	368	(82.5)	330	(89.7)	22	(1.8)	6	(6.7)	Υ
Denmark	TESSy	national	208	(79.4)	203	(97.6)	12	(1.5)	3	(5.9)	Υ
Estonia	TESSy	national	153	(86.4)	145	(94.8)	48	(15.9)	23	(33.1)	Υ
Finland	TESSy	national	139	(79.4)	134	(96.4)	12	(2.2)	3	(9.0)	Υ
France ^e	NRL-TME ^f	sub-national	3120	(84.7)	3120	(100.0)	-	-	51	(4.1)	Υ
Germany	TESSy	national	3501	(79.6)	2959	(84.5)	361	(3.0)	90	(12.2)	Υ
Greece	TESSy	-	246	(62.4)	115	(46.7)	19	(4.3)	5	(16.5)	N
Hungary	TESSy	national	396	(52.3)	332	(83.8)	48	(5.4)	18	(14.5)	Υ
Iceland	TESSy	national	5	(83.3)	4	(80.0)	0	(0.0)	0	(0.0)	Υ
Ireland	TESSy	national	171	(81.0)	167	(97.7)	20	(3.6)	6	(12.0)	Υ
Italy ^e	NRL-TME ^f	sub-national	1967	(69.8)	869	(44.2)	-	-	33	(3.8)	N
Latvia	TESSy	national	535	(86.4)	512	(95.7)	138	(10.4)	53	(27.0)	Υ
Liechtenstein	-	_	-	_	-	-	-	-	-	-	-
Lithuania	TESSy	national	1171	(88.2)	1171	(100.0)	382	(20.7)	242	(32.6)	Υ
Luxembourg	TESSy	national	22	(91.7)	21	(95.5)	2	(4.8)	1	(9.5)	Ϋ́
Malta	TESSy	national	33	(89.2)	33	(100.0)	1	(0.0)	0	(3.0)	Υ
Netherlands	TESSy	national	353	(74.0)	353	(100.0)	44	(2.3)	8	(12.5)	Ϋ́
Norway	TESSy	national	162	(86.6)	157	(96.9)	23	(5.1)	8	(14.6)	Y
Poland	TESSy	national	4548	(74.4)	4114	(90.5)	235	(1.1)	45	(5.7)	Y
Portugal	TESSy	national	975	(74.4)	677	(69.4)	64	(1.1)	10	(9.5)	N N
Romania		national		(80.0)		(89.0)	863	(5.6)	458		Y
	TESSy		9222		8211					(10.5)	Y
Slovakia	TESSy	national	137	(54.2)	111	(81.0)	8	(2.7)	3	(7.2)	
Slovenia	TESSy	national	96	(93.2)	96	(100.0)	6	(0.0)	0	(6.3)	Υ
Spaine	NRL-TME ^f	sub-national	896	(100.0)	896	(100.0)	-	(4.4)	39	(4.4)	N
Sweden	TESSy	national	427	(88.6)	418	(97.9)	50	(3.3)	14	(12.0)	Υ
United Kingdom	TESSy	national	2548	(76.0)	2 4 5 2	(96.2)	198	(1.8)	43	(8.1)	Υ
Subtotal EU/EEA			33383	(80.0)	29426	(88.1)	2718	(9.8)	1204	(4.1)	
Non-EU/EEA						(11.5)				(2.5)	
Albania	NRL-TME	national	97	-	40	(41.2)	-	-	1	(2.5)	N
Andorra	NRL-TME	national	2	-	1	(50.0)	-	-	0	(0.0)	N
Armenia	NRL-TME	national	485	-	461	(95.1)	-	-	115	(24.9)	Υ
Azerbaijan	NRL-TME	national	3759	-	2 614	(69.5)	-	-	777	(29.7)	N
Belarus	NRL-TME	national				(07.5)		_			1/
Bosnia and Herzegovina			2 621	-	2 5 5 5	(97.5)	-	_	1222	(47.8)	Υ
former Yugoslav	NRL-TME	national	2 621 597	-	2 555 597	(100.0)	-	-	1222	(47.8) (0.0)	Ϋ́Υ
Republic of Macedonia,	NRL-TME										
Republic of Macedonia, the	NRL-TME	national national	597 178	-	597 143	(100.0)	-	-	0	(0.0)	Y
Republic of Macedonia, the <i>Georgia</i>	NRL-TME	national national national	597 178 2313	-	597 143 1791	(100.0) (80.3) (77.4)	-	-	0 2 296	(0.0) (1.4) (16.5)	Y Y Y
Republic of Macedonia, the <i>Georgia</i> Israel	NRL-TME NRL-TME NRL-TME	national national national national	597 178 2313 132	- - -	597 143 1791 123	(100.0) (80.3) (77.4) (93.2)	-	-	2 296 9	(0.0) (1.4) (16.5) (7.3)	Y Y Y Y
Republic of Macedonia, the Georgia Israel Kazakhstan	NRL-TME NRL-TME NRL-TME NRL-TME	national national national national national	597 178 2313 132 10015	- - - -	597 143 1791 123 5213	(100.0) (80.3) (77.4) (93.2) (52.1)	- - - -	- - - -	2 296 9 1231	(0.0) (1.4) (16.5) (7.3) (23.6)	Y Y Y Y
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME	national national national national national national	597 178 2313 132 10015 3753	- - -	597 143 1791 123 5213 2642	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4)	-	-	2 296 9 1231 864	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7)	Y Y Y Y N N
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME	national national national national national national national	597 178 2313 132 10015	- - - - -	597 143 1791 123 5213 2642 1574	(100.0) (80.3) (77.4) (93.2) (52.1)	-	- - - -	2 296 9 1231 864 525	(0.0) (1.4) (16.5) (7.3) (23.6)	Y Y Y Y N N N
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME	national national national national national national national	597 178 2313 132 10015 3753 2454	- - - - - -	597 143 1791 123 5213 2642 1574	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1)	-	- - - - -	2 296 9 1231 864 525	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4)	Y Y Y Y N N N Y
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME	national national national national national national national - national	597 178 2313 132 10015 3753 2454 - 57	- - - - - -	597 143 1791 123 5213 2642 1574 - 57	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1) (100.0)	-	- - - - -	2 296 9 1231 864 525 -	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4) - (0.0)	Y Y Y Y N N N Y Y Y
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME	national national national national national national national	597 178 2313 132 10015 3753 2454 - 57 63638	- - - - - - -	597 143 1791 123 5213 2642 1574 - 57 57910	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1) (100.0) (91.0)	-	-	0 2 296 9 1231 864 525 - 0 25971	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8)	Y Y Y Y N N N Y Y Y Y
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME	national national national national national national national - national	597 178 2313 132 10015 3753 2454 - 57	- - - - - -	597 143 1791 123 5213 2642 1574 - 57	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1) (100.0)	-	- - - - -	2 296 9 1231 864 525 -	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4) - (0.0)	Y Y Y Y N N N Y Y Y
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME - NRL-TME NRL-TME NRL-TME	national national national national national national national - national national	597 178 2313 132 10015 3753 2454 - 57 63638 0	- - - - - - - -	597 143 1791 123 5213 2642 1574 - 57 57910 0	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1) - (100.0) (91.0) (0.0)	-	-	0 2 296 9 1231 864 525 - 0 25971	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0)	Y Y Y Y N N N Y Y N N N N N N N N N N N
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia excluding UN Administered Province	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME - NRL-TME NRL-TME - NRL-TME - - - - - - - - - - - - -	national national national national national national - national national national national	597 178 2313 132 10015 3753 2454 - 57 63 638 0 815	- - - - - - - -	597 143 1791 123 5213 2642 1574 - 57 57910 0 668	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1) - (100.0) (91.0) (0.0) (82.0)	-	-	0 2 296 9 1231 864 525 - 0 25971 0 8	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0) (1.2)	Y Y Y Y N N N Y Y Y Y Y Y Y Y Y Y Y Y Y
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia excluding UN Administered Province of Kosovo' UN Administered	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME - NRL-TME - NRL-TME - NRL-TME	national national national national national national - national national national national national	597 178 2313 132 10015 3753 2454 - 57 63 638 0 815	- - - - - - - - - -	597 143 1791 123 5213 2642 1574 - 57 57910 0 668 398	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1) - (100.0) (91.0) (0.0) (82.0)	-	-	0 2 296 9 1231 864 525 - 0 25971 0 8	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0) (1.2)	Y Y Y Y N N N Y Y Y Y N N N N N N N N N
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia Serbia excluding UN Administered Province of Kosovo' UN Administered Province of Kosovo'	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME - NRL-TME - NRL-TME - NRL-TME	national national national national national national - national national - national national national	597 178 2313 132 10015 3753 2454 - 57 63 638 0 815	- - - - - - - - - -	597 143 1791 123 5213 2642 1574 - 57 57910 0 668 398	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1) – (100.0) (91.0) (0.0) (82.0) (73.6)	-	-	0 2 296 9 1231 864 525 - 0 25971 0 8	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0) (1.2) (1.5)	Y Y Y Y N N N Y Y Y Y Y N N Y Y Y Y Y Y
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia excluding UN Administered Province of Kosovo' UN Administered Province of Kosovo' Switzerland Tajikistan	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME - NRL-TME - NRL-TME - NRL-TME - NRL-TME - NRL-TME NRL-TME	national national national national national national - national national national national national national	597 178 2313 132 10015 3753 2454 - 57 63 638 0 815 541 274 314 3011	- - - - - - - - - - -	597 143 1791 123 5213 2642 1574 - 57 57910 0668 398 270 296 2702	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1) - (100.0) (91.0) (92.0) (73.6) (98.5) (94.3) (89.7)	-	-	2 296 9 1231 864 525 - 0 25971 0 8	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0) (1.2) (1.5) (0.7) (4.4) (23.9)	Y Y Y Y N N N Y Y Y Y Y Y Y Y Y Y Y Y Y
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia excluding UN Administered Province of Kosovo' UN Administered Province of Kosovo' Switzerland Tajikistan Turkey	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME - NRL-TME - NRL-TME - NRL-TME - NRL-TME - NRL-TME	national	597 178 2313 132 10015 3753 2454 - 57 63 638 0 815 541	- - - - - - - - - - - - -	597 143 1791 123 5213 2642 1574 - 57 57910 0 668 398 270 296	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1) - (100.0) (91.0) (0.0) (82.0) (73.6) (98.5) (94.3)	-	-	0 2 296 9 1231 864 525 - 0 25971 0 8	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0) (1.2) (1.5)	Y Y Y Y N N N Y Y Y Y Y Y Y Y Y Y Y Y Y
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia excluding UN Administered Province of Kosovo' UN Administered Province of Kosovo' Switzerland Tajikistan Turkey Turkmenistan	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME - NRL-TME NRL-TME - NRL-TME - NRL-TME	national	597 178 2313 132 10015 3753 2454 - 57 63638 0 815 541 274 314 3011 6514	- - - - - - - - - - - - -	597 143 1791 123 5213 2642 1574 - 57 57910 0 668 398 270 296 2702 5612	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1) - (100.0) (91.0) (0.0) (82.0) (73.6) (98.5) (94.3) (89.7) (86.2)	-	-	0 2 296 9 1231 864 525 0 25971 0 8 6 2	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4) (0.0) (44.8) (0.0) (1.2) (1.5) (0.7) (4.4) (23.9) (3.4)	Y Y Y Y N N N Y Y Y Y Y N Y Y N N Y N N Y N N N Y N
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo' UN Administered Province of Kosovo' Switzerland Tajikistan Turkey Turkmenistan Ukraine	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME - NRL-TME NRL-TME	national national national national national national national - national national - national national national national national national national national	597 178 2313 132 10015 3753 2454 - 57 63638 0 815 541 274 3011 6514 - 21957	- - - - - - - - - - - - - - - - - - -	597 143 1791 123 5213 2642 1574 - 57 57910 0 668 398 270 296 2702 5612 - 20147	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1) (100.0) (91.0) (0.0) (82.0) (73.6) (98.5) (94.3) (89.7) (86.2) (91.8)	-	-	0 2 296 9 1231 864 525 0 25971 0 8 6 6 2 13 646 190	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4) (0.0) (44.8) (0.0) (1.2) (1.5) (0.7) (4.4) (23.9) (3.4) (28.6)	Y Y Y Y N N N Y Y Y Y Y N Y Y N Y N Y
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia excluding UN Administered Province of Kosovo' UN Administered Province of Kosovo' Switzerland Tajikistan Turkey Turkmenistan Ukraine Uzbekistan	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME - NRL-TME NRL-TME - NRL-TME - NRL-TME	national	597 178 2313 132 10015 3753 2454 - 57 63638 0 815 541 274 314 3011 6514 - 21957 2309	- - - - - - - - - - - - - - - - - - -	597 143 1791 123 5213 2642 1574 - 57 57910 0 668 398 270 296 2702 5612 - 20147 1086	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1) (100.0) (91.0) (0.0) (82.0) (73.6) (98.5) (94.3) (89.7) (86.2) (91.8) (47.0)	-	-	0 2 296 9 1231 864 525 - 0 25971 0 8 6 6 2 13 646 190 - 5756 603	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4) (0.0) (44.8) (0.0) (1.2) (1.5) (0.7) (4.4) (23.9) (3.4) (28.6) (55.5)	Y Y Y Y N N N Y Y Y Y Y N Y Y N N Y N N Y N N N Y N
Republic of Macedonia, the Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo' UN Administered Province of Kosovo' Switzerland Tajikistan Turkey Turkmenistan Ukraine	NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME NRL-TME - NRL-TME NRL-TME	national national national national national national national - national national - national national national national national national national national	597 178 2313 132 10015 3753 2454 - 57 63638 0 815 541 274 3011 6514 - 21957	- - - - - - - - - - - - - - - - - - -	597 143 1791 123 5213 2642 1574 - 57 57910 0 668 398 270 296 2702 5612 - 20147	(100.0) (80.3) (77.4) (93.2) (52.1) (70.4) (64.1) (100.0) (91.0) (0.0) (82.0) (73.6) (98.5) (94.3) (89.7) (86.2) (91.8)	-	-	0 2 296 9 1231 864 525 0 25971 0 8 6 6 2 13 646 190	(0.0) (1.4) (16.5) (7.3) (23.6) (32.7) (33.4) (0.0) (44.8) (0.0) (1.2) (1.5) (0.7) (4.4) (23.9) (3.4) (28.6)	Y Y Y Y N N N Y Y Y Y Y N Y Y N Y N Y

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in Italics.

^a Bacteriologically confirmed cases – cases with positive identification for Mycobacterium tuberculosis complex confirmed by culture and/or line probe assay for all a Bacteriologically confirmed cases – cases with positive identification for *Mycoducterium tadercations* compress compress compress.

b Any resistance to isoniazid, rifampicin, ethambutol or streptomycin expressed as a percentage of cases with DST results available for at least isoniazid and rifampicin. No routine testing for ethambutol and streptomycin in all countries.

Data considered complete when national coverage 100% or culture results available for 90% of all cases, and 50% of all cases culture-positive, and 75% of them with DST results, and EQA results accurate in 95% of samples of reported year.

These data are subject to change as the national TB registry was under review when this report was being produced.

Data from France, Italy and Spain reported by NRL may differ from data shown elsewhere in this report. Spain reported the DST results only for pulmonary TB cases.

NRL: National reference laboratory; TME: WHO Tuberculosis Monitoring and Evaluation Database.

1 naccordance with the UN Security Council Resolution No. 1244 (1999).

Table 12: Drug resistance surveillance of bacteriologically-confirmed a pulmonary tuberculosis cases by previous TB treatment history, European Region, 2016

Country	New								Previously treated								
	Cases with DST results		MDR-	MDR-TB		bacteriologically confirmed pulmonary TB cases		pulmonary TB cases		Cases with DST results		MDR-TB		bacteriologically confirmed pulmonary TB cases		pulmonary TB cases	
	N	(%) ^d	N	(%)e	N	(%) ^f	N	(%)	N	(%) ^d	N	(%)°	N	(%) ^f	N	(%)	
EU/EEA																	
Austria	267	(97.8)	6	(2.2)	273	(80.3)	340	(92.4)	17	(94.4)	3	(17.6)	18	(64.3)	28	(7.6)	
Belgium	429	(97.1)	6	(1.4)	442	(83.7)	528	(91.5)	35	(87.5)	2	(5.7)	40	(81.6)	49	(8.5)	
Bulgaria	572	(87.7)	5	(0.9)	652	(63.8)	1022	(86.2)	81	(87.1)	14	(17.3)	93	(56.7)	164	(13.8)	
Croatia ^h	168	(100.0)	0	(0.0)	168	(64.1)	262	(93.2)	8	(100.0)	0	(0.0)	8	(42.1)	19	(6.8)	
Cyprus	36	(97.3)	0	(0.0)	37	(78.7)	47	(92.2)	2	(100.0)	0	(0.0)	2	(50.0)	4	(7.8)	
Czech Republic	318	(95.2)	4	(1.3)	334	(78.8)	424	(95.1)	12	(80.0)	2	(16.7)	15	(68.2)	22	(4.9)	
Denmark	181	(0.0)	3	(1.7)	186	(0.0)	232	(88.5)	22	(100.0)	0	(0.0)	22	(73.3)	30	(11.5)	
Estonia	132	(99.2)	17	(12.9)	133	(85.8)	155	(87.6)	13	(81.3)	6	(46.2)	16	(72.7)	22	(12.4)	
Finland	125	(98.4)	2	(1.6)	127	(77.4)	164	(95.3)	6	(100.0)	0	(0.0)	6	(75.0)	8	(4.7)	
France		(100.0)	33	(1.4)	2 4 4 1	(100.0)	2441	(68.1)	264	(100.0)	18	(6.8)		(100.0)	264	(7.4)	
	2441										19		264				
Germany	179	(93.7)	4	(2.2)	191	(72.9)	262	(49.3)	133	(89.3)		(14.3)	149	(55.4)	269	(50.7)	
Greece	102	(49.3)	2	(2.0)	207	(60.0)	345	(91.0)	11	(84.6)	3	(27.3)	13	(38.2)	34	(9.0)	
Hungary	295	(85.5)	12	(4.1)	345	(53.0)	651	(86.0)	37	(72.5)	6	(16.2)	51	(48.1)	106	(14.0)	
Iceland	4	(80.0)	0	(0.0)	5	(83.3)	6	(100.0)	0	- ()	0	-	0	-	0	(0.0)	
Ireland	127	(98.4)	4	(3.1)	129	(84.9)	152	(89.4)	11	(100.0)	2	(18.2)	11	(61.1)	18	(10.6)	
Italy	772	(100.0)	24	(3.1)	772	(100.0)	772	(78.6)	97	(100.0)	9	(9.3)	97	(46.2)	210	(21.4)	
Latvia	422	(95.5)	32	(7.6)	442	(84.8)	521	(84.2)	90	(96.8)	21	(23.3)	93	(94.9)	98	(15.8)	
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lithuania	880	(100.0)	117	(13.3)	880	(84.9)	1036	(78.1)	291	(100.0)	125	(43.0)	291	(100.0)	291	(21.9)	
Luxembourg	1	(100.0)	0	(0.0)	1	(100.0)	1	(100.0)	0	-	0	-	0	-	0	(0.0)	
Malta	33	(100.0)	0	(0.0)	33	(89.2)	37	(100.0)	0	-	0	-	0	-	0	(0.0)	
Netherlands	341	(100.0)	6	(1.8)	341	(74.1)	460	(97.0)	10	(100.0)	2	(20.0)	10	(71.4)	14	(3.0)	
Norway	136	(99.3)	7	(5.1)	137	(86.2)	159	(91.9)	11	(91.7)	0	(0.0)	12	(85.7)	14	(8.1)	
Poland	3660	(92.1)	27	(0.7)	3973	(73.5)	5407	(88.4)	454	(90.4)	18	(4.0)	502	(70.8)	709	(11.6)	
Portugal	626	(70.9)	8	(1.3)	883	(72.8)	1213	(93.2)	51	(82.3)	2	(3.9)	62	(69.7)	89	(6.8)	
Romania	6074	(88.7)	124	(2.0)	6844	(78.1)	8761	(76.0)	2137	(91.3)	334	(15.6)	2341	(84.8)	2762	(24.0)	
Slovakia	93	(96.9)	2	(2.2)	96	(44.4)	216	(85.4)	18	(94.7)	1	(5.6)	19	(51.4)	37	(14.6)	
Slovenia	93	(100.0)	0	(0.0)		(93.9)			3	(100.0)	0	(0.0)		(75.0)		(3.9)	
					93		99	(96.1)			5		3		4		
Spain	855	(100.0)	34	(4.0)	855	(100.0)	855	(88.1)	41	(100.0)		(12.2)	41	(35.3)	116	(11.9)	
Sweden	369	(99.7)	11	(3.0)	370	(87.3)	424	(94.9)	19	(100.0)	3	(15.8)	19	(82.6)	23	(5.1)	
United Kingdom	2184	(96.7)	34	(1.6)	2258	(76.8)	2942	(93.0)	148	(97.4)	7	(4.7)	152	(68.8)	221	(7.0)	
Subtotal EU/EEA	21915	(92.7)	524	(2.4)	23648	(79.0)	29934	(82.1)	4022	(92.5)	602	(15.0)	4350	(77.3)	5625	(15.4)	
Non-EU/EEA		(1.1.1)		()		()				()		()					
Albania	38	(40.9)	0	(0.0)	93	(31.8)	292		2	(50.0)	1	(50.0)	4	-	-	-	
Andorra	1	(50.0)	0	(0.0)	2	(66.7)	3		0	(0.0)	0	(0.0)	0	-	-	-	
Armenia	357	(95.2)	55	(15.4)	375	(58.3)	643	-	104	(94.5)	60	(57.7)	110	-	-	-	
Azerbaijan	1047	(63.1)	161	(15.4)	1660	(56.1)	2960		1567	(74.7)	616	(39.3)	2099	-	-	-	
Belarus	1762	(97.7)	654	(37.1)	1804	(74.7)	2416		793	(97.1)	568	(71.6)	817	-	-	-	
Bosnia and Herzegovina	545	(100.0)	0	(0.0)	545	(76.3)	714		52	(100.0)	0	(0.0)	52	-	-	-	
former Yugoslav Republic of	131	(81.4)	2	(1.5)	161	(83.4)	193		12	(70.6)	0	(0.0)	17	_	_	_	
Macedonia, the	ازا	(01.4)	2	(1.3)	101	(63.4)	190		12	(/0.0)	0	(0.0)	1/				
Georgia	1386	(84.7)	142	(10.2)	1636	(86.1)	1901		405	(59.8)	154	(38.0)	677	-	-	-	
Israel	121	(93.1)	9	(7.4)	130	(73.0)	178		2	(100.0)	0	(0.0)	2	-	-	-	
Kazakhstan	3264	(47.1)	832	(25.5)	6930	(84.7)	8178		1949	(63.2)	399	(20.5)	3 085	-	-	-	
Kyrgyzstan	1815	(71.8)	398	(21.9)	2 527	(58.7)	4303		827	(67.5)	466	(56.3)	1226	-	-	-	
Moldova	1189	(74.7)	304	(25.6)	1592	(62.7)	2539		385	(44.7)	221	(57.4)	862	-	-	-	
Monaco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Montenegro	50	(100.0)	0	(0.0)	50	(78.1)	64		7	(100.0)	0	(0.0)	7	-	_	_	
Russia	31 039	(88.4)	8463	(27.3)	35109	(49.8)	70436		26871	(94.2)	17508	(65.2)	28529	_	_	_	
San Marino	0	(00.4)	0	(27.3)	0	(77.0)	0	(0.0)	0	(94.2)	0	(03.2)	0	_	_	_	
San Marino Serbia		(01 F)	3			(47.2)		(0.0)			5	(6.9)	84	_	_	_	
Serbia excluding UN	596	(81.5)		(0.5)	731	(67.2)	1088	-	72	(85.7))		84	_	-	-	
Administered Province of Kosovo ¹	358	(73.2)	3	(0.8)	489	(82.6)	592	-	40	(76.9)	3	(7.5)	52	-	-	-	
UN Administered Province of Kosovo ⁱ	238	(98.3)	0	(0.0)	242	(48.8)	496	-	32	(100.0)	2	(6.3)	32	-	-	-	
Switzerland	282	(94.6)	12	(4.3)	298	(74.1)	402		14	(87.5)	1	(7.1)	16	-	-	-	
Tajikistan	2376	(91.6)	495	(20.8)	2593	(68.4)	3792		326	(78.0)	151	(46.3)	418	-	-	-	
Turkey	5029	(86.0)	110	(2.2)	5845	(78.3)	7463		583	(87.1)	80	(13.7)	669	-	-	-	
Turkmenistan	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	
Ukraine	13 097	(93.2)	2881	(22.0)	14 049	(67.1)	20953		7050	(89.2)	2875	(40.8)	7908	-	-	-	
Uzbekistan	757	(18.5)	292	(38.6)	4093	(45.0)	9100	-	1229	(80.2)	311	(25.3)	1533	-	-	-	
Subtotal non-EU/EEA	64125	(80.9)	14813	(22.8)	80223	(58.3)	137618	-	42250	(87.8)	23416	(55.4)	48 115	-	-	-	
Total European Region	86797	(83.6)	15 3 3 7	(17.7)	103871	(62.0)	167552	-	46 272	(88.2)	24018	(51.9)	52465	-	-	-	
Subtotal 18 HPC	71 198	(81.7)	15 085	(21.2)	87164	(59.6)	146 179	-	44701	(88.1)	23909	(53.5)	50767	-	-	-	

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics.

Bacteriologically-confirmed cases – cases with positive identification for Mycobacterium tuberculosis complex confirmed by culture and/or line probe assay for non-EU countries, culture-positive and microscopy-positive/nucleic acid amplification test-positive cases for EU/EEA countries.

Cases with DST results		MDR-TB		All bacteriologically confirmed pulmonary TB cases		All pulmo cas	onary TB ses	Country		
N	(%) ^d	N	(%)°	N	(%) ^f	N	(%)g			
								EU/EEA		
284	(97.6)	9	(3.2)	291	(79.1)	368		Austria		
464 653	(96.3) (87.7)	8	(1.7)	482 745	(83.5) (62.8)	577 1186	(70.5) (74.0)	Belgium <i>Bulgaria</i>		
176	(100.0)	0	(0.0)	176	(62.6)	281	(89.8)	Croatia ^h		
38	(97.4)	0	(0.0)	39	(76.5)	51		Cyprus		
330	(94.6)	6	(1.8)	349	(78.3)	446	(86.4)	Czech Republic		
203	(97.6)	3	(1.5)	208	(79.4)	262	(689.5)			
145	(97.3)	23	(15.9)	149	(84.2)	177	(92.2)	Estonia		
131 2705	(98.5) (100.0)	2 51	(1.5)	133 2705	(77.3) (75.4)	172 3587		Finland France		
312	(91.8)	23	(7.4)	340	(64.0)	531		Germany		
113	(51.4)	5	(4.4)	220	(58.0)	379	(90.0)	Greece		
332	(83.8)	18	(5.4)	396	(52.3)	757		Hungary		
4	(80.0)	0	(0.0)	5	(83.3)	6		Iceland		
138	(98.6)	6	(4.3)	140	(82.4)	170	(,	Ireland		
869	(100.0)	33	(3.8)	869	(88.5)	982	(30.7)	Italy		
512	(95.7)	53	(10.4)	535	(86.4)	619	(93.8)	Latvia Liechtenstein		
1171	(100.0)	242	(20.7)	1171	(88.2)	1327	(92.0)	Lithuania		
1	(100.0)	0	(0.0)	1	(100.0)	1		Luxembourg		
33	(100.0)	0	(0.0)	33	(89.2)	37	(74.0)	Malta		
351	(100.0)	8	(2.3)	351	(74.1)	474	(53.6)	Netherlands		
147	(98.7)	7	(4.8)	149	(86.1)	173	(62.5)	,		
4114 677	(91.9) (71.6)	45 10	(1.1)	4 475 945	(73.2) (72.6)	6116 1302	(70.9)	Poland Portugal		
8211	(89.4)	458	(5.6)	9185	(72.0)	11523	(84.6)	Romania		
111	(96.5)	3	(2.7)	115	(45.5)	253	(85.5)			
96	(100.0)	0	(0.0)	96	(93.2)	103	(87.3)	Slovenia		
896	(100.0)	39	(4.4)	896	(92.3)	971	(32.4)			
388	(99.7)	14	(3.6)	389	(87.0)	447	(66.7)	Sweden		
2332	(96.8) (92.6)	41 1126	(1.8)	2 410	(76.2) (76.8)	3163 36441		United Kingdom Subtotal EU/EEA		
25937	(92.0)	1120	(4.3)	27998	(/0.0)	30441	(/0.3)	Non-EU/EEA		
40	(41.2)	1	(2.5)	97	-	-	-	Albania		
1	(50.0)	0	(0.0)	2	-	-	-	Andorra		
461	(95.1)	115	(24.9)	485	-	-	-	Armenia		
2 614	(69.5)	777	(29.7)	3759	-	-	_	Azerbaijan		
2 555 597	(97.5) (100.0)	1222	(47.8)	2 621 597	-	-	_	Belarus Bosnia and Herzegovina		
								former Yugoslav Republic of		
143	(80.3)									
		2	(1.4)	178	-	-		Macedonia, the		
1791	(77.4)	296	(16.5)	2313	-	-	-	Georgia		
123	(77.4) (93.2)	296 9	(16.5) (7.3)	<i>2313</i> 132	-	-	-	Georgia Israel		
123 5213	(77.4) (93.2) (52.1)	296 9 1231	(16.5) (7.3) (23.6)	2313 132 10015	-	- - -		Georgia Israel Kazakhstan		
123 5213 2642	(77.4) (93.2) (52.1) (70.4)	296 9 1231 864	(16.5) (7.3) (23.6) (32.7)	2313 132 10015 3753	-	- - -		Georgia Israel Kazakhstan Kyrgyzstan		
123 5213	(77.4) (93.2) (52.1)	296 9 1231	(16.5) (7.3) (23.6)	2313 132 10015	- - -	- - -		Georgia Israel Kazakhstan		
123 5213 2642 1574	(77.4) (93.2) (52.1) (70.4)	296 9 1231 864 525	(16.5) (7.3) (23.6) (32.7)	2313 132 10 015 3753 2454	- - - -	- - - -	- - -	Georgia Israel Kazakhstan Kyrgyzstan Moldova		
123 5213 2642 1574 - 57 57910	(77.4) (93.2) (52.1) (70.4) (64.1) - (100.0) (91.0)	296 9 1231 864 525 - 0 25971	(16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8)	2313 132 10015 3753 2454 - 57 63638	- - - - -	- - - - -	- - - -	Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia		
123 5213 2642 1574 - 57 57910	(77.4) (93.2) (52.1) (70.4) (64.1) (100.0) (91.0) (0.0)	296 9 1231 864 525 - 0 25971	(16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0)	2313 132 10015 3753 2454 - 57 63638 0	- - - - - -	- - - - - -	- - - - -	Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino		
123 5213 2642 1574 - 57 57910	(77.4) (93.2) (52.1) (70.4) (64.1) - (100.0) (91.0)	296 9 1231 864 525 - 0 25971	(16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8)	2313 132 10015 3753 2454 - 57 63638	- - - - -	- - - - -	- - - -	Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia		
123 5213 2642 1574 - 57 57910	(77.4) (93.2) (52.1) (70.4) (64.1) (100.0) (91.0) (0.0)	296 9 1231 864 525 - 0 25971	(16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0)	2313 132 10015 3753 2454 - 57 63638 0	- - - - - -	- - - - - -	- - - - -	Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovol		
123 5213 2642 1574 - 57 57910 0 668	(77.4) (93.2) (52.1) (70.4) (64.1) (100.0) (91.0) (0.0) (82.0)	296 9 1231 864 525 - 0 25971 0 8	(16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0) (1.2)	2313 132 10015 3753 2454 - 57 63638 0 815	- - - - - -	-	- - - - -	Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo' UN Administered Province		
123 5213 2642 1574 - 57 57910 0 668 398	(77.4) (93.2) (52.1) (70.4) (64.1) - (100.0) (91.0) (0.0) (82.0) (73.6)	296 9 1231 864 525 - 0 25971 0 8	(16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0) (1.2) (1.5)	2313 132 10015 3753 2454 - 57 63638 0 815 541	- - - - - -	-	- - - - -	Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo¹ UN Administered Province of Kosovo¹		
123 5213 2642 1574 - 57 57910 0 668	(77.4) (93.2) (52.1) (70.4) (64.1) - (100.0) (91.0) (0.0) (82.0)	296 9 1231 864 525 - 0 25971 0 8	(16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0) (1.2)	2313 132 10015 3753 2454 - 57 63638 0 815		-	- - - - - - -	Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo' UN Administered Province		
123 5213 2642 1574 - 57 57910 0 668 398 270	(77.4) (93.2) (52.1) (70.4) (64.1) - (100.0) (91.0) (92.0) (73.6) (98.5) (94.3)	296 9 1231 864 525 - 0 25971 0 8 6	(16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0) (1.2) (1.5) (0.7)	2313 132 10015 3753 2454 - 57 63638 0 815 541 274	- - - - - - - - -	-	- - - - - - - -	Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia Serbia excluding UN Administered Province of Kosovo¹ UN Administered Province of Kosovo¹ Switzerland Tajikistan Turkey		
123 5213 2642 1574 - 57 57910 0 668 398 270 296 2702 5612	(77.4) (93.2) (52.1) (70.4) (64.1) - (100.0) (91.0) (0.0) (82.0) (73.6) (98.5) (94.3) (89.7) (86.2)	296 9 1231 864 525 - 0 25971 0 8 6 6	(16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0) (1.2) (1.5) (0.7) (4.4) (23.9) (3.4)	2313 132 10015 3753 2454 - 57 63 638 0 815 541 274 314 3011 6514	-	-	- - - - - - - - -	Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo¹ UN Administered Province of Kosovo¹ Switzerland Tajikistan Turkey Turkmenistan		
123 5213 2642 1574 - 577 57910 0 668 398 270 296 2702 5612 - 20147	(77.4) (93.2) (52.1) (70.4) (64.1) (100.0) (91.0) (0.0) (82.0) (73.6) (98.5) (94.3) (89.7) (86.2) (91.8)	296 9 1231 864 525 - 0 25971 0 8 6 2 13 646 190 - 5756	(16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0) (1.2) (1.5) (0.7) (4.4) (23.9) (3.4) - (28.6)	2313 132 10015 3753 2454 - 57 63 638 0 815 541 274 314 3011 6514 - 21957	-	-	-	Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo¹ UN Administered Province of Kosovo¹ Turkey Turkmenistan Ukraine		
123 5213 2642 1574 - 57710 0 668 398 270 296 2702 5612 - 20147 1986	(77.4) (93.2) (52.1) (70.4) (64.1) - (100.0) (91.0) (82.0) (73.6) (98.5) (94.3) (89.7) (86.2) - (91.8) (35.3)	296 9 1231 864 525 - 0 25971 0 8 6 6 2 13 646 190 - 5756 603	(16.5) (7.3) (23.6) (32.7) (33.4) (0.0) (44.8) (0.0) (1.2) (1.5) (0.7) (4.4) (23.9) (3.4) (28.6) (30.4)	2313 132 10015 3753 2454 - 57 63638 0 815 541 274 314 3011 6514 - 21957 5626	-	-	-	Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo¹ UN Administered Province of Kosovo¹ Switzerland Tajikistan Turkey Turkmenistan Ukraine Uzbekistan		
123 5213 2642 1574 - 577 57910 0 668 398 270 296 2702 5612 - 20147	(77.4) (93.2) (52.1) (70.4) (64.1) (100.0) (91.0) (0.0) (82.0) (73.6) (98.5) (94.3) (89.7) (86.2) (91.8)	296 9 1231 864 525 - 0 25971 0 8 6 2 13 646 190 - 5756	(16.5) (7.3) (23.6) (32.7) (33.4) - (0.0) (44.8) (0.0) (1.2) (1.5) (0.7) (4.4) (23.9) (3.4) - (28.6)	2313 132 10015 3753 2454 - 57 63638 0 815 541 274 314 3011 6514 - 21957 5626	-	-	-	Georgia Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo¹ UN Administered Province of Kosovo¹ Turkey Turkmenistan Ukraine		

<sup>Cases classified according to previous TB treatment history. For Belgium, Denmark, Ireland, Norway and the United Kingdom previous diagnosis was used as a proxy for previous treatment.
Previous treatment unknown pulmonary TB cases are excluded.
Percentage among laboratory-confirmed pulmonary TB cases.
Percentage among laboratory-confirmed pulmonary TB cases with DST results.
Percentage among all pulmonary TB cases.
Percentage among all TB cases.
These data are subject to change as the national TB registry was under review when this report was being produced.
In accordance with the UN Security Council Resolution No. 1244 (1999).</sup>

Table 13: Drug resistance in all laboratory-confirmed tuberculosis cases, EU/EEA, 2016

Country	Source of data	Coverage	Laboratory-confirmed TB cases ^a		Cases with D (at least Ison Rifamp	iazid and	Cases resis		MDR cases		Reporting completeness
			N	(%)	N	(%)	N	(%)	N	(%)	l mptotoness
EU/EEA											
Austria	TESSy	national	489	(77.1)	473	(96.7)	60	(12.3)	16	(3.4)	Υ
Belgium	TESSy	national	801	(76.5)	769	(96.0)	48	(6.0)	10	(1.3)	Υ
Bulgaria	TESSy	national	764	(47.7)	670	(87.7)	72	(9.4)	19	(2.8)	N
Croatia ^d	TESSy	national	262	(57.0)	262	(100.0)	9	(3.4)	0	(0.0)	Υ
Cyprus	TESSy	national	42	(70.0)	41	(97.6)	7	(16.7)	1	(2.4)	Υ
Czech Republic	TESSy	national	392	(76.0)	367	(93.6)	23	(5.9)	6	(1.6)	Υ
Denmark	TESSy	national	258	(78.2)	252	(97.7)	15	(5.8)	4	(1.6)	Υ
Estonia	TESSy	national	156	(81.3)	152	(97.4)	49	(31.4)	24	(15.8)	Υ
Finland	TESSy	national	186	(78.8)	183	(98.4)	17	(9.1)	6	(3.3)	Υ
Francee	NRL-TME ^f	sub-national	4197	(84.7)	4197	(100.0)	71	(1.7)	71	(1.7)	Υ
Germany	TESSy	national	4164	(70.4)	3757	(90.2)	422	(10.1)	101	(2.7)	Υ
Greece	TESSy	national	246	(55.5)	124	(50.4)	21	(8.5)	5	(4.0)	N
Hungary	TESSy	national	404	(51.4)	340	(84.2)	48	(11.9)	18	(5.3)	Υ
Iceland	TESSy	national	5	(83.3)	4	(80.0)	0	(0.0)	0	(0.0)	Υ
Ireland	TESSy	national	238	(74.8)	231	(97.1)	28	(11.8)	6	(2.6)	Υ
Italy ^e	NRL-TME ^f	sub-national	2666	(66.1)	2666	(100.0)	85	(3.2)	70	(2.6)	Υ
Latvia	TESSy	national	559	(84.7)	536	(95.9)	144	(25.8)	56	(10.4)	Υ
Liechtenstein	_	_	_	_	-	_	-	_	-	_	-
Lithuania	TESSV	national	1201	(83.3)	1201	(100.0)	387	(32.2)	244	(20.3)	Υ
Luxembourg	TESSy	national	26	(89.7)	25	(96.2)	2	(7.7)	1	(4.0)	Υ
Malta	TESSy	national	42	(84.0)	42	(100.0)	1	(2.4)	0	(0.0)	Υ
Netherlands	TESSy	national	583	(65.6)	583	(100.0)	77	(13.2)	12	(2.1)	Υ
Norway	TESSy	national	231	(77.3)	229	(99.1)	30	(13.0)	11	(4.8)	Υ
Poland	TESSy	national	4 619	(71.7)	4236	(91.7)	242	(5.2)	46	(1.1)	Υ
Portugal	TESSy	national	1123	(61.2)	789	(70.3)	84	(7.5)	12	(1.5)	N
Romania	TESSV	national	9517	(69.9)	8440	(88.7)	877	(9.2)	463	(5.5)	Y
Slovakia	TESSy	national	117	(39.5)	113	(96.6)	8	(6.8)	3	(2.7)	N
Slovenia	TESSV	national	109	(92.4)	109	(100.0)	6	(5.5)	0	(0.0)	Y
Spain ^e	NRL-TME ^f	sub-national	3372	(69.1)	896	(26.6)	39	(1.2)	39	(4.4)	N
Sweden	TESSy	national	597	(82.2)	595	(99.7)	73	(12.2)	22	(3.7)	Y
United Kingdom	TESSy	national	3907	(63.3)	3789	(97.0)	271	(6.9)	56	(1.5)	Y
Total EU/EEA	. 200,		41273	(76.4)	36 071	(87.4)	3216	(9.9)	1322	(3.7)	

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in Italics.

Includes only countries reporting first-line anti-TB drug susceptibility testing. Laboratory-confirmed cases consist of culture-positive and smear-positive/nucleic acid amplification test-positive cases.
 Any resistance to isoniazid, rifampicin, ethambutol or streptomycin expressed as a percentage of cases with available DST results, at least for isoniazid and rifampicin. No routine testing for ethambutol and streptomycin in all countries.
 Data considered complete when national coverage 100% or culture results available for 90% of all cases, 50% of all cases culture-positive, 75% of them with DST results, and EQA results accurate in 95% of samples for reported year.
 These data are subject to change as the national TB registry was under review when this report was being produced.
 Data from France, Italy and Spain reported from NRL may differ from data shown elsewhere in this report.
 NRL: National reference laboratory; TME: WHO Tuberculosis Monitoring and Evaluation Database.

Table 14: XDR TB cases among all laboratory-confirmed MDR TB cases, European Region, 2016

Country	TB cases with	MDR TB among all T		MDR TB with second-		XDR TB	
Country	first-line DST ^a	N	%	N	%	N	%
EU/EEA							
Austria	473	16	(3.4)	16	(100.0)	2	(12.5)
Belgium	769	10	(1.3)	10	(100.0)	0	(0.0)
Bulgaria	670	19	(2.8)	19	(100.0)	0	(0.0)
Croatiad	262	0	(0.0)	0	-	0	-
Cyprus	41	1	(2.4)	1	(100.0)	0	(0.0)
Czech Republic	367	6	(1.6)	5	(83.3)	0	(0.0)
Denmark	252	4	(1.6)	4	(100.0)	0	(0.0)
Estonia	152	24	(15.8)	24	(100.0)	7	(29.2)
Finland	183	6	(3.3)	6	(100.0)	1	(16.7)
France	4197	71	(1.7)	69	(97.2)	6	(8.7)
Germany	3757	101	(2.7)	64	(63.4)	5	(7.8)
,					, ,		(7.0)
Greece	124	5	(4.0)	0	(0.0)	0	(,,,=)
Hungary	340	18	(5.3)	15	(83.3)	7	(46.7)
Iceland	4	0	(0.0)	0		0	
Ireland	231	6	(2.6)	5	(83.3)	0	(0.0)
Italy	2666	70	(2.6)	55	(78.6)	7	(12.7)
Latvia	536	56	(10.4)	56	(100.0)	21	(37.5)
Liechtenstein	_	_	-	-	-	-	-
Lithuania	1201	244	(20.3)	244	(100.0)	58	(23.8)
Luxembourg	25	1	(4.0)	0	(0.0)	0	
Malta	42	0	(0.0)	0		0	
Netherlands	583	12	(2.1)	12	(100.0)	0	(0.0)
Norway	229	11	(4.8)	11	(100.0)	0	(0.0)
Poland	4236	46	(1.1)	39	(84.8)	8	(20.5)
Portugal	789	12	(1.5)	5	(41.7)	2	(40.0)
Romania	8440	463	(5.5)	210	(45.4)	63	(30.0)
Slovakia	113	3	(2.7)	3	(100.0)	0	(0.0)
Slovenia	109	0		0	(100.0)		(0.0)
			(0.0)		(02.0)	0	(0.0)
Spain	898	39	(4.7)	39	(92.9)	0	(0.0)
Sweden	595	22	(3.7)	22	(100.0)	4	(18.2)
United Kingdom	3789	56	(1.5)	50	(89.3)	7	(14.0)
Subtotal EU/EEA	36073	1322	(3.7)	984	(74.4)	198	(20.1)
Non-EU/EEA							
Albania	-	-	-	-	-	-	-
Andorra	1	0	(0.0)	0	(0.0)	0	(0.0)
Armenia	461	115	(24.9)	53	(48.6)	6	(11.3)
Azerbaijan	2614	777	(29.7)	535	(68.9)	71	(13.3)
Belarus	2 5 5 5	1222	(47.8)	1246	(102.0)	572	(45.9)
Bosnia and Herzegovina	597	0	(0.0)	0	(0.0)	0	(0.0)
former Yugoslav Republic of							
Macedonia, the	143	2	(1.4)	0	(0.0)	0	(0.0)
Georgia	1791	296	(16.5)	296	(100.0)	52	(17.6)
Israel	123	9	(7.3)	9	(100.0)	2	(22.2)
Kazakhstan	-	_	(7.5)	_	(100.0)	_	(22,2)
	2642	864	(32.7)	407	(47.1)	72	(17.7)
Kyrgyzstan							
Moldova	1574	525	(33.4)	514	(97.9)	42	(8.2)
Monaco	-	_	(0.0)	_	-	_	-
Montenegro	57	0	(0.0)	0		0	-
Russia	57910	25971	(44.8)	25258	(97.3)	3402	(13.5)
San Marino	0	0	(0.0)	0	(0.0)	0	(0.0)
Serbia	668	8	(1.2)	14	(175.0)	1	(7.1)
Serbia excluding UN Administered Province of Kosovo ^e	398	6	(1.5)	14	(233.3)	1	(7.1)
UN Administered Province of Kosovo ^e	270	2	(0.7)	0	(0.0)	0	(0.0)
Switzerland	296	13	(4.4)	13	(100.0)	0	(0.0)
Tajikistan	2702	646	(23.9)	646	(100.0)	59	(8.5)
Turkey	5 612	190	(3.4)	130	(68.4)	9	(6.9)
Turkmenistan	-	190	(3.4)	-	(00.4)	_	(0.7)
Ukraine	20147	E7E4	(28.6)	5756	(100.0)	247	(3.3)
	2014/	5756	(28.0)		(100.0)		
	_	-	-	1802	-	184	(10.2)
Uzbekistan	00.003	26.204	(26.4)	24.077	(07.0)	4.740	(42.0)
Subtotal non-EU/EEA Total European Region	99 893 135 966	36 394 37 716	(36.4)	34877 35861	(95.8) (95.1)	4719 4917	(12.9) (13.1)

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics. XDR TB – Extensively drug-resistant tuberculosis. MDR TB – Multidrug-resistant tuberculosis.

First-line DST – drug susceptibility testing for at least 2 main first-line TB drugs: isoniazid and rifampicin.
 Second-line DST – drug susceptibility testing for second-line TB drugs.
 Includes only countries reporting second-line anti-TB drug susceptibility testing (at least one fluoroquinolone (ofloxacin, moxifloxacin and levofloxacin) and one injectable drug (amikacin, kanamycin and capreomycin).
 These data are subject to change as the national TB registry was under review when this report was being produced.
 In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 15: MDR and XDR TB cases enrolled in treatment, European Region, 2016

Country	Total number of RR/MDR TB detected ^a	RR/MDR TB cases en	rolled on treatment	Total number of XDR TB detected	XDR TB cases enrolle	ed on treatment
	N	N	%	N	N	%
EU/EEA						
Austria	14	14	(100.0)	1	1	(100.0)
Belgium	9	9	(100.0)	0	0	-
Bulgaria	15	15	(100.0)	0	0	-
Croatia ^b	0	0	-	0	0	-
Cyprus	1	1	(100.0)	0	0	-
Czech Republic	5	4	(80.0)	0	0	-
Denmark	4	4	(100.0)	0	0	-
Estonia	23	22	(95.7)	6	5	(83.3)
Finland	6	6	(100.0)	1	1	(100.0)
France	71	71	(100.0)	6	6	(100.0)
Germany	101	101	(100.0)	3	3	(100.0)
Greece	3	3	(100.0)	0	0	_
Hungary	15	15	(100.0)	6	6	-
Iceland	0	0	-	0	0	-
Ireland	5	5	(100.0)	0	0	-
Italy	70	70	(100.0)	7	7	(100.0)
Latvia	49	49	(100.0)	16	16	(100.0)
Liechtenstein	-	-	-	-	-	_
Lithuania	195	195	(100.0)	29	29	(100.0)
Luxembourg	1	1	(100.0)	0	0	_
Malta	0	0	-	0	0	-
Netherlands	12	12	(100.0)	0	0	-
Norway	11	11	(100.0)	0	0	-
Poland	44	44	(100.0)	8	8	(100.0)
Portugal	15	15	(100.0)	2	2	(100.0)
Romania	311	309	(99.4)	19	19	(100.0)
Slovakia	2	2	(100.0)	0	0	-
Slovenia	0	0	-	0	0	_
Spain	39	39	(100.0)	0	0	_
Sweden	22	22	(100.0)	3	3	(100.0)
United Kingdom	50	48	(96.0)	6	6	(100.0)
Subtotal EU/EEA	1093	1087	(99.5)	113	112	(99.1)
Non-EU/EEA			(*****)			(,,,,
Albania	4	1	(25.0)	0	0	(0.0)
Andorra	0	0	(0.0)	0	0	(0.0)
Armenia	128	128	(100.0)	29	29	(100.0)
Azerbaijan	925	798	(86.3)	77	0	(0.0)
Belarus	1543	1345	(87.2)	572	572	(100.0)
Bosnia and Herzegovina	0	0	(0.0)	0	0	(0.0)
former Yugoslav Republic of						
Macedonia, the	2	2	(100.0)	0	0	(0.0)
Georgia	401	351	(87.5)	56	51	(91.1)
Israel	11	11	(100.0)	2	2	(100.0)
Kazakhstan	5817	5817	(100.0)	386	435	(112.7)
Kyrgyzstan	1236	1200	(97.1)	73	67	(91.8)
Moldova	1031	979	(95.0)	72	65	(90.3)
Monaco	_	_	_	-	-	-
Montenegro	0	0	(0.0)	0	0	(0.0)
Russia	27363	25713	(94.0)	3402	1772	(52.1)
San Marino	0	0	(0.0)	0	0	(0.0)
Serbia	12	10	(83.3)	3	1	(33.3)
Serbia excluding UN Administered Province of Kosovo ^c	8	8	(100.0)	1	1	(100.0)
UN Administered Province of Kosovo ^c	4	2	(50.0)	2	0	(0.0)
Switzerland	18	18	(100.0)	0	0	(0.0)
Tajikistan	748	681	(91.0)	59	43	(72.9)
Turkey	256		(82.4)	9	9	(100.0)
Turkmenistan	557	557	(100.0)	-	-	_
Ukraine	8 6 5 1	8581	(99.2)	1195	1429	(119.6)
Uzbekistan	1956	1956	(100.0)	184	184	(100.0)
	50659	48359	(95.5)	6119	4659	(76.1)
Subtotal non-EU/EEA						
Total European Region	51752		(95.5)	6232	4771	(76.6)

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics. RR-MDR TB – rifampicin-resistant and multidrug-resistant tuberculosis. XDR TB – Extensively drug-resistant tuberculosis.

For countries that do not provide information on treatment start all reported cases were used as proxy.
 These data are subject to change as the national TB registry was under review when this report was being produced.
 In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 16: New and relapse tuberculosis cases with HIV infection, European Region, 2016

Country	New and relapse	Cases with known H		HIV-positive TB o		HIV-positive cases s	arted ART ^b
	TB cases (N) ^a	N	%	N	%	N	%
EU/EEA							
Austria	-	-	-	-	-	-	-
Belgium	986	448	(45.4)	32	(7.1)	-	- (0.0)
Bulgaria	1525	1205	(79.0)	0	(0.0)	0	(0.0)
Croatia	-	-	(00.7)	-	- (0.0)	-	_
Cyprus	57	46	(80.7)	0	(0.0)	0	
Czech Republic	511	202	(39.5)	5	(2.5)	-	_
Denmark	292	134	(45.9)	9	(6.7)	-	(05.0)
Estonia	188	180	(95.7)	21	(11.7)	20	(95.2)
Finland	-	-	-	-	-	-	_
France	-	-	-	-	-	-	_
Germany	-	-	-	-	-	-	-
Greece	-	-	- (- 1)	-	- (- ()	-	_
Hungary	737	18	(2.4)	1	(5.6)	-	-
Iceland	6	6	(100.0)	0	(0.0)	0	()
Ireland	293	121	(41.3)	4	(3.3)	3	(75.0)
Italy	-	-	-	-	-	-	-
Latvia	641	500	(78.0)	55	(11.0)	34	(61.8)
Liechtenstein	-	-	-	-	-	-	-
Lithuania	1347	1047	(77.7)	34	(3.2)	-	-
Luxembourg	29	5	(17.2)	2	(40.0)	-	-
Malta	50	46	(92.0)	8	(17.4)	8	(100.0)
Netherlands	877	546	(62.3)	21	(3.8)	15	(71.4)
Norway	278	239	(86.0)	8	(3.3)	8	(100.0)
Poland ^c	-	-	-	-	-	-	-
Portugal	1794	1184	(66.0)	164	(13.9)	-	-
Romania	12790	9968	(77.9)	254	(2.5)	254	(100.0)
Slovakia	281	124	(44.1)	0	(0.0)	0	
Slovenia	118	95	(80.5)	1	(1.1)	1	(100.0)
Spain	4734	2823	(59.6)	207	(7.3)	-	-
Sweden	_	_	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-
Subtotal EU/EEA	27534	18 937	(68.8)	826	(4.4)	343	(94.2)
Non-EU/EEA							
Albania	415	223	(53.7)	6	(2.7)	6	(100.0)
Andorra	4	0	(0.0)	0	(0.0)	0	(0.0)
Armenia	1027	1027	(100.0)	57	(5.6)	57	(100.0)
Azerbaijan	5159	4722	(91.5)	99	(2.1)	78	(78.8)
Belarus	3211	3148	(98.0)	275	(8.7)	229	(83.3)
Bosnia and Herzegovina	907	1	(0.1)	1	(100.0)	1	(100.0)
former Yugoslav Republic of		207		0			
Macedonia, the	263	207	(78.7)	0	(0.0)	0	(0.0)
Georgia	2983	2866	(96.1)	61	(2.1)	56	(91.8)
Israel	250	250	(100.0)	18	(7.2)	16	(88.9)
Kazakhstan	12322	10 616	(86.2)	576	(5.4)	478	(83.0)
Kyrgyzstan	7026	6254	(89.0)	210	(3.4)	144	(68.6)
Moldova	3571	3366	(94.3)	293	(8.7)	193	(65.9)
Monaco	_	-	-	-	-	-	-
Montenegro	87	60	(69.0)	0	(0.0)	0	(0.0)
Russiae	92 407	79935	(86.5)	16570	(20.7)	10549	(63.7)
San Marino	0	0	(0.0)	0	(0.0)	0	(0.0)
Serbia	1472	482	(32.7)	5	(1.0)	5	(100.0)
Serbia excluding UN			(= 17)				, , , ,
Administered Province of Kosovo ^d	755	84	(11.1)	5	(6.0)	5	(100.0)
UN Administered Province of Kosovo ^d	717	398	(55.5)	0	(0.0)	0	(0.0)
Switzerland	-	-	(22.2)	-	- (- 1)	-	/ '
Tajikistan	5965	5850	(98.1)	201	(3.4)	182	(90.5)
Turkey	12 186	8549	(70.2)	56	(0.7)	51	(91.1)
Turkmenistan	0	0	(0.0)	0	(0.0)	0	(0.0)
Ukraine	29 052	28194	(97.0)	5832	(20.7)	3945	(67.6)
Uzbekistan ^e	18 4 4 1	18 4 4 1	(100.0)	758	(4.1)	496	(65.4)
Subtotal non-EU/EEA	196748	174 191	(88.5)	25 018	(14.4)	16 486	(65.9)
Total European Region	224282	193128	(86.1)	25844	(13.4)	16 829	(65.1)
Subtotal 18 HPC	209841	185 868	(88.6)	25352	(13.6)	16766	(66.1)

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics. HIV – Human immunodeficiency virus. ART – Antiretroviral therapy.

Countries were only included in this analysis if total number of cases tested for HIV and test results were provided.
 Data from WHO Global TB database. Percentages calculated for countries which reported antiretroviral treatment (ART).
 Finland reported HIV-positive cases, but not the number of cases tested for HIV, therefore excluded from this analysis.
 In accordance with the UN Security Council Resolution No. 1244 (1999).
 Uzbekistan reported data among all TB cases.

Table 16a: All tuberculosis cases with HIV infection, EU/EEA, 2016

Countries	All TD (Al)	Cases with know	wn HIV-status	HIV-positive	TB cases
Country	All TB cases (N) ^a	N	%	N	%
EU/EEA					
Austria	-	-	-	-	-
Belgium	1047	479	(45.7)	33	(6.9)
Bulgaria	1603	1260	(78.6)	0	(0.0)
Croatia	-	-	-	-	-
Cyprus	60	48	(80.0)	0	(0.0)
Czech Republic	516	205	(39.7)	5	(2.4)
Denmark	330	150	(45.5)	9	(6.0)
Estonia	192	184	(95.8)	22	(12.0)
Finland ^b	-	-	-	-	-
France	_	-	-	-	-
Germany	-	-	-	-	-
Greece	-	-	-	-	-
Hungary	786	19	(2.4)	1	(5.3)
Iceland	6	6	(100.0)	0	(0.0)
Ireland	318	132	(41.5)	4	(3.0)
Italy	-	-	-	-	-
Latvia	660	507	(76.8)	57	(11.2)
Liechtenstein	-	-	-	-	-
Lithuania	1442	1138	(78.9)	41	(3.6)
Luxembourg	29	5	(17.2)	2	(40.0)
Malta	50	46	(92.0)	8	(17.4)
Netherlands	889	554	(62.3)	21	(3.8)
Norway	299	257	(86.0)	10	(3.9)
Poland	-	-	-	-	-
Portugal	1836	1212	(66.0)	168	(13.9)
Romania	13 617	10 634	(78.1)	287	(2.7)
Slovakia	296	132	(44.6)	0	(0.0)
Slovenia	118	95	(80.5)	1	(1.1)
Spain	4877	2925	(60.0)	226	(7.7)
Sweden	-	-	-	-	_
United Kingdom	-	-	-	-	-
Total EU/EEA	28971	19988	(69.0)	895	(4.5)

WHO European Region 18 TB high-priority countries presented in italics. HIV – Human immunodeficiency virus.

Countries were only included in this analysis if total number of cases tested for HIV and test results were provided.
 Finland reported HIV-positive cases, but not the number of cases tested for HIV, therefore excluded from this analysis.

Table 17: Tuberculosis in prisons, European Region, 2016a

	Dricon population	New and relapsed Ti		Proportion of new and	TP rolative rick in
Country	Prison population (N)	notified in	Prisons Rate	relapsed TB cases in prisons out of the country total (%)	TB relative risk in prisons (RR) ^b
EU/EEA					
Austria	-		-	-	
Belgium	11769	19	161.4	(1.9)	18.4
Bulgaria	7921	22	277.7	(1.4)	13.1
Croatia	-	-	-	-	-
Cyprus	-	-	-	-	-
Czech Republic	22 481	14	62.3	(2.7)	12.8
Denmark	-	-	-	-	-
Estonia	2841	8	281.6	(4.3)	19.7
Finland	-	-	-	-	-
France	66 474	65	97.8	(1.4)	13.9
Germany	-	-	-	-	-
Greece	-	-	-	-	-
Hungary	19 000	9	47.4	(1.2)	-
Iceland	-	-	-	-	-
Ireland	12579	0	0.0	(0.0)	0.0
Italy	-	-	-	- ()	-
Latvia	4243	32	754.2	(5.0)	23.4
Liechtenstein	- (045	-	- 540.4	(2.6)	-
Lithuania	6815	35	513.6	(2.6)	11.1
Luxembourg	700	0	0.0	(0.0)	0.0
Malta	569	0	0.0	(0.0)	0.0
Netherlands	37166	14	37.7	(1.6)	7.3
Norway	71.45.6	- 216	202.2	(3.5)	10.7
Poland	71456	216	302.3		18.7
Portugal Romania	13779 27114	36	261.3	(2.0) (1.2)	15.1
Slovakia		157 17	579.0	(6.0)	9.0
Slovania	8023 3730	0	211.9	(0.0)	40.9
Spain	5/30	-	0.0	(0.0)	0.0
Sweden	_	_	_	_	_
United Kingdom	93097	27	29.0	(0.5)	3.2
Subtotal EU/EEA	409757	671	163.8	(1.7)	(11.1)
Non-EU/EEA	407131	0/1	103.0	(1.7)	(11.1)
Albania	6100	3	49.2	(0.7)	3.5
Andorra	41	0	0.0	(0.0)	0.0
Armenia	4873	9	184.7	(0.9)	5.3
Azerbaijan	20860	254	1217.6	(4.9)	23.0
Belarus	29776	121	406.4	(3.8)	12.0
Bosnia and Herzegovina	0	0	0.0	(0.0)	0.0
former Yugoslav Republic of					
Macedonia, the	2700	3	111.1	(1.1)	8.8
Georgia	9334	57	610.7	(1.9)	8.0
Israel	0	0	0.0	(0.0)	0.0
Kazakhstan	0	0	0.0	(0.0)	0.0
Kyrgyzstan	8300	216	2 602.4	(3.1)	22.1
Moldova	7762	173	2228.8	(4.8)	25.3
Monaco	-	-	-	-	-
Montenegro	-	-	-	-	-
Russia	639 042	9 610	1503.8	(10.4)	23.4
San Marino	10	0	0.0	(0.0)	0.0
Serbia	11641	12	103.1	(0.8)	6.2
Serbia excluding UN Administered Province of Kosovo ^c	10 069	11	109.2	(1.5)	10.1
UN Administered Province of Kosovo ^c	1572	1	63.6	(0.1)	1.6
Switzerland	-	-	-	-	-
Tajikistan	10 0 0 0	99	990.0	(1.7)	14.5
Turkey	200 600	151	75.3	(1.2)	4.9
Turkmenistan	-	-	-	-	_
Ukraine	65398	919	1405.2	(3.2)	21.5
Uzbekistan	-	_	-	-	_
Subtotal non-EU/EEA	1016437	11627	1143.9	(7.1)	22.7
Total European Region	1426194	12 298	862.3	(6.0)	25.0
				(6.6)	

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in Italics.

Data obtained from WHO Tuberculosis Monitoring and Evaluation database (TME).
 In the calculation of summary results only countries reporting data on prison population and TB notification in prisons are included.
 In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 18: Treatment outcome for all TB cases notified in 2014, European Region, 2016

Country	Cases notified	Succ	ess	Die	d	Faile	d	Lost to foll	ow-up ^a	Still on tre	atment	Not evalu	ıated ^b
	in 2015	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
EU/EEA													
Austria	583	417	(71.5)	37	(6.3)	0	(0.0)	12	(2.1)	52	(8.9)	65	(11.1)
Belgium	977	764	(78.2)	68	(7.0)	1	(0.1)	85	(8.7)	29	(3.0)	30	(3.1)
Bulgaria	1660	1385	(83.4)	139	(8.4)	23	(1.4)	90	(5.4)	8	(0.5)	15	(0.9)
Croatia	486	50	(10.3)	43	(8.8)	0	(0.0)	0	(0.0)	2	(0.4)	391	(80.5)
Cyprus	63	35	(55.6)	3	(4.8)	0	(0.0)	3	(4.8)	2	(3.2)	20	(31.7)
Czech Republic	517	350	(67.7)	97	(18.8)	5	(1.0)	24	(4.6)	24	(4.6)	17	(3.3)
Denmark Estonia	357	171	(47.9)	10	(2.8)	10	(2.8)	1	(0.3)	14	(3.9)	151	(42.3)
Finland ^d	217 272	149	(68.7) (34.9)	33 15	(15.2) (5.5)	0	(0.0)	7	(3.2)	26	(12.0)	2	(0.9)
France	2/2	95	(34.9)	-	(5.5)	_	(0.0)	_	(0.4)	_	(0.7)	159	(50.5)
Germany	5852	3728	(63.7)	382	(6.5)	6	(0.1)	160	(2.7)	307	(5.2)	1269	(21.7)
Greece	7032	7/20	(03.7)	-	(0.5)	_	(0.1)	-	(2.7)	-	(3.2)	1209	(21.7)
Hungary	906	631	(69.6)	107	(11.8)	18	(2.0)	89	(9.8)	24	(2.6)	37	(4.1)
Iceland	7	7	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Ireland	283	157	(55.5)	10	(3.5)	0	(0.0)	1	(0.4)	1	(0.4)	114	(40.3)
Italy	_	-	(33.3)	-	(3.3)	_	(0.0)	_	(0.4)	_	-	-	(+0.5)
Latvia	721	551	(76.4)	71	(9.8)	1	(0.1)	36	(5.0)	59	(8.2)	3	(0.4)
Liechtenstein	-	-	-	-	-	-	(0.1)	-	(3.0)	-	-	-	(0.1)
Lithuania	1507	987	(65.5)	192	(12.7)	15	(1.0)	118	(7.8)	194	(12.9)	1	(0.1)
Luxembourg	-	-	-	-	-	-	-	-	-	-	-	-	-
Malta	_	-	-	-	-	-	-	-	-	-	-	-	-
Netherlands	862	733	(85.0)	38	(4.4)	0	(0.0)	23	(2.7)	22	(2.6)	46	(5.3)
Norway	313	268	(85.6)	7	(2.2)	3	(1.0)	9	(2.9)	11	(3.5)	15	(4.8)
Poland	6 4 3 0	3387	(52.7)	632	(9.8)	4	(0.1)	391	(6.1)	12	(0.2)	2004	(31.2)
Portugal	2178	1539	(70.7)	151	(6.9)	0	(0.0)	84	(3.9)	344	(15.8)	60	(2.8)
Romania	15 183	12 185	(80.3)	1227	(8.1)	496	(3.3)	971	(6.4)	284	(1.9)	20	(0.1)
Slovakia	317	271	(85.5)	23	(7.3)	0	(0.0)	2	(0.6)	2	(0.6)	19	(6.0)
Slovenia	130	106	(81.5)	21	(16.2)	0	(0.0)	0	(0.0)	3	(2.3)	0	(0.0)
Spain	-	-	-	-	-	-	-	-	-	-	-	-	-
Sweden	815	688	(84.4)	24	(2.9)	1	(0.1)	10	(1.2)	40	(4.9)	52	(6.4)
United Kingdom	6 2 3 4	4865	(78.0)	379	(6.1)	0	(0.0)	325	(5.2)	549	(8.8)	116	(1.9)
Subtotal EU/EEA	46870	33519	(71.5)	3709	(7.9)	583	(1.2)	2 442	(5.2)	2 011	(4.3)	4606	(9.8)
Non-EU/EEA													
Albania	409	354	(86.6)	11	(2.7)	3	(0.7)	21	(5.1)	-	-	20	(4.9)
Andorra	4	4	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	-	-	0	(0.0)
Armenia	923	731	(79.2)	47	(5.1)	11	(1.2)	134	(14.5)	-	-	0	(0.0)
Azerbaijan	4213	3230	(76.7)	216	(5.1)	146	(3.5)	488	(11.6)	-	-	133	(3.2)
Belarus	2788	2444	(87.7)	100	(3.6)	87	(3.1)	100	(3.6)	-	-	57	(2.0)
Bosnia and Herzegovina	1095	707	(64.6)	84	(7.7)	19	(1.7)	2	(0.2)	-	-	283	(25.8)
former Yugoslav Republic of Macedonia, the	284	245	(86.3)	25	(8.8)	3	(1.1)	7	(2.5)	-	-	4	(1.4)
Georgia	3144	2582	(82.1)	135	(4.3)	70	(2.2)	293	(9.3)	_	_	64	(2.0)
Israel	263	218	(82.9)	19	(7.2)	1	(0.4)	8	(3.0)	_	-	17	(6.5)
Kazakhstan	14 631	13172	(90.0)	751	(5.1)	476	(3.3)	232	(1.6)	_	_	0	(0.0)
Kyrgyzstan	6686	5423	(81.1)	418	(6.3)	159	(2.4)	674	(10.1)	_	-	12	(0.2)
Moldova	3209	2480	(77.3)	375	(11.7)	102	(3.2)	177	(5.5)	_	_	75	(2.3)
Monaco	-	- 100	-	-	-	-	-	0	(3.3)	-	-	-	(2.5)
Montenegro	80	74	(92.5)	3	(3.8)	0	(0.0)	3	(3.8)	_	-	0	(0.0)
Russia	88718	61238	(69.0)	9174	(10.3)	6861	(7.7)	4986	(5.6)	_	-	6459	(7.3)
San Marino	0	_	-	_	-	-	-	0	-	_	-	-	_
Serbia	1669	1484	(88.9)	83	(5.0)	13	(0.8)	65	(3.9)	-	-	24	(1.4)
Serbia excluding UN Administered Province of	897	739	(82.4)	67	(7.5)	12	(1.3)	56	(6.2)	-	-	23	(2.6)
Kosovo ^e UN Administered Province of Kosovo ^e	772	745	(96.5)	16	(2.1)	1	(0.1)	9	(1.2)	_	-	1	(0.1)
Switzerland	_	_	_	_	_	_	_	0	_	-	-	_	_
Taiikistan	5584	4964	(88.9)	265	(4.7)	116	(2.1)	194	(3.5)	_	_	45	(0.8)
Turkey	12520	10807	(86.3)	707	(5.6)	34	(0.3)	480	(3.8)	-	-	492	(3.9)
Turkmenistan	2753	2352	(85.4)	125	(4.5)	115	(4.2)	96	(3.5)	_	_	65	(2.4)
Ukraine	27548	20034	(72.7)	2926	(10.6)	2376	(8.6)	2141	(7.8)	_	-	71	(0.3)
Uzbekistan	17837	15 694	(88.0)	826	(4.6)	227	(1.3)	209	(1.2)	_	_	881	(4.9)
Subtotal non-EU/EEA	194358	148 237	(76.3)	16 290	(8.4)	10 819	(5.6)	10 310	(5.3)	0	(0.0)	8702	(4.5)
Total European Region	241228	181756	(75.3)	19999	(8.3)	11402	(4.7)	12752	(5.3)	2 011	(0.8)	13308	(5.5)
							\T.1/		(0.0)		(0.0)	.5500	(5.5)

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in Italics.

a In previous reports defined as 'defaulted'.
b In previous reports defined as 'transferred out and unknown'.
c These data are subject to change as the national TB registry was under review when this report was being produced.
d Treatment outcome data collected consistently only for confirmed pulmonary cases.
ln accordance with the UN Security Council Resolution No. 1244 (1999).

Table 19: Treatment outcome of new tuberculosis cases and relapses notified in 2014, European Region, 2016

Country	New and relapsed TB cases started	Succ	ess	Die	d	Faile	d	Lost to foll	low-up ^b	Still on trea	atment	Not eval	uated ^c
Country	on treatment in 2014 ^a	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
EU/EEA													
Austria	553	402	(72.7)	37	(6.7)	0	(0.0)	10	(1.8)	45	(8.1)	59	(10.7)
Belgium	905	719	(79.4)	62	(6.9)	1	(0.1)	79	(8.7)	15	(1.7)	29	(3.2)
Bulgaria	1598	1350	(84.5)	133	(8.3)	20	(1.3)	80	(5.0)	2	(0.1)	13	(0.8)
Croatiad	483	50	(10.4)	43	(8.9)	0	(0.0)	0	(0.0)	2	(0.4)	388	(80.3)
Cyprus	63	35	(55.6)	3	(4.8)	0	(0.0)	3	(4.8)	2	(3.2)	20	(31.7)
Czech Republic	499	343	(68.7)	95	(19.0)	5	(1.0)	23	(4.6)	17	(3.4)	16	(3.2)
Denmark	314	157	(50.0)	9	(2.9)	6	(1.9)	1	(0.3)	11	(3.5)	130	(41.4)
Estonia	172	142	(82.6)	25	(14.5)	0	(0.0)	3	(1.7)	0	(0.0)	2	(1.2)
Finlande	260	94	(36.2)	15	(5.8)	0	(0.0)	1	(0.4)	2	(0.8)	148	(56.9)
France	-	-	-	-	-	-	-	-	-	-	-	-	-
Germany	5543	3600	(64.9)	366	(6.6)	6	(0.1)	141	(2.5)	259	(4.7)	1171	(21.1)
Greece	-	-	-	-	-	-	-	-	-	-	-	-	-
Hungary	851	600	(70.5)	101	(11.9)	18	(2.1)	80	(9.4)	19	(2.2)	33	(3.9)
Iceland	7	7	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Ireland	265	151	(57.0)	8	(3.0)	0	(0.0)	1	(0.4)	0	(0.0)	105	(39.6)
Italy	-	-	-	-	_	-	-	-	-	-	-	-	-
Latvia	642	540	(84.1)	63	(9.8)	1	(0.2)	32	(5.0)	3	(0.5)	3	(0.5)
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	1219	962	(78.9)	135	(11.1)	14	(1.1)	79	(6.5)	28	(2.3)	1	(0.1)
Luxembourg	-	-	-	-	-	-	-	-	-	-	-	-	-
Malta	-	-	-	-	-	-	-	-	-	-	-	-	-
Netherlands	837	723	(86.4)	37	(4.4)	0	(0.0)	20	(2.4)	16	(1.9)	41	(4.9)
Norway	276	243	(88.0)	6	(2.2)	3	(1.1)	8	(2.9)	4	(1.4)	12	(4.3)
Poland	6196	3293	(53.1)	607	(9.8)	4	(0.1)	368	(5.9)	4	(0.1)	1920	(31.0)
Portugal	2114	1516	(71.7)	146	(6.9)	0	(0.0)	79	(3.7)	321	(15.2)	52	(2.5)
Romania	13908	11 828	(85.0)	1070	(7.7)	234	(1.7)	732	(5.3)	24	(0.2)	20	(0.1)
Slovakia	305	263	(86.2)	22	(7.2)	0	(0.0)	2	(0.7)	0	(0.0)	18	(5.9)
Slovenia	129	105	(81.4)	21	(16.3)	0	(0.0)	0	(0.0)	3	(2.3)	0	(0.0)
Spain	-	-	-	-	-	-	-	-	-	-	-	-	-
Sweden	754	659	(87.4)	23	(3.1)	1	(0.1)	9	(1.2)	17	(2.3)	45	(6.0)
United Kingdom	5802	4594	(79.2)	341	(5.9)	0	(0.0)	297	(5.1)	461	(7.9)	109	(1.9)
Subtotal EU/EEA	43 695	32376	(74.1)	3368	(7.7)	313	(0.7)	2048	(4.7)	1255	(2.9)	4335	(9.9)
Non-EU/EEA													
Albania	409	354	(86.6)	11	(2.7)	3	(0.7)	21	(5.1)	-	-	20	(4.9)
Andorra	4	4	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	-	-	0	(0.0)
Armenia	910	721	(79.2)	47	(5.2)	11	(1.2)	131	(14.4)	-	-	0	(0.0)
Azerbaijan	1475	1221	(82.8)	49	(3.3)	34	(2.3)	132	(8.9)	-	-	39	(2.6)
Belarus	2 5 2 5	2243	(88.8)	76	(3.0)	72	(2.9)	77	(3.0)	-	-	57	(2.3)
Bosnia and Herzegovina	1092	707	(64.7)	84	(7.7)	19	(1.7)	2	(0.2)	-	-	280	(25.6)
former Yugoslav Republic of Macedonia, the	282	243	(86.2)	25	(8.9)	3	(1.1)	7	(2.5)	-	-	4	(1.4)
Georgia	2841	2386	(84.0)	110	(3.9)	60	(2.1)	225	(7.9)	-	-	60	(2.1)
Israel	263	218	(82.9)	19	(7.2)	1	(0.4)	8	(3.0)	-	-	17	(6.5)
Kazakhstan	14006	12 691	(90.6)	674	(4.8)	440	(3.1)	201	(1.4)	-	-	0	(0.0)
Kyrgyzstan	6139	5063	(82.5)	364	(5.9)	138	(2.2)	564	(9.2)	-	-	10	(0.2)
Moldova	2992	2379	(79.5)	338	(11.3)	86	(2.9)	137	(4.6)	-	_	52	(1.7)
Monaco	_	-	-	-	-	-	_	-	_	-	-	-	_
Montenegro	80	74	(92.5)	3	(3.8)	0	(0.0)	3	(3.8)	-	-	0	(0.0)
Russia	80 424	57060	(70.9)	8 0 3 5	(10.0)	5 646	(7.0)	4 074	(5.1)	-	-	5609	(7.0)
San Marino	0	-	-	_	-	-	_	-	-	-	-	-	_
Serbia	1647	1471	(89.3)	82	(5.0)	12	(0.7)	60	(3.6)	-	-	22	(1.3)
Serbia excluding UN Administered Province of	882	733	(83.1)	66	(7.5)	11	(1.2)	51	(5.8)	_	_	21	(2.4)
Kosovo ^f UN Administered													
Province of Kosovo ^f Switzerland	765	738	(96.5)	16	(2.1)	1 -	(0.1)	9	(1.2)	-	-	1	(0.1)
Tajikistan	5298	4734	(89.4)	237	(4.5)	111	(2.1)	172	(3.2)	_	-	44	(0.8)
Turkey	12362	10735	(86.8)	695	(5.6)	30	(0.2)	432	(3.5)	-	-	470	(3.8)
Turkmenistan	2472	2126	(86.0)	105	(4.2)	105	(4.2)	82	(3.3)	_	-	54	(2.2)
Ukraine	23892	17939	(75.1)	2393	(10.0)	1950	(8.2)	1552	(6.5)	-	-	58	(0.2)
Uzbekistan	15 220	13 536	(88.9)	688	(4.5)	193	(1.3)	172	(1.1)	_	-	631	(4.1)
Subtotal non-EU/EEA	174333	135 905	(78.0)	14 035	(8.1)	8 9 14	(5.1)	8052	(4.6)	-	-	7427	(4.3)
Total European Region	218 028	168 281	(77.2)	17 403	(8.0)	9227	(4.2)	10100	(4.6)	1255	(0.6)	11762	(5.4)
P 11091011	188 095	147656	(78.5)	15 237	(8.1)	9145	(4.9)	8877	(4.7)	57	(0.0)	7123	(3.8)

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics.

Patients started on second-line treatment are excluded.
 in previous annual reports classified as 'defaulted'.
 In previous reports defined as 'transferred out and unknown'.
 These data are subject to change as the national TB registry was under review when this report was being produced.
 Treatment outcome collected consistently only for confirmed pulmonary cases.
 In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 20: Treatment outcome of new and relapse tuberculosis cases in children (0-14 years) notified in 2015, European Region, 2016

Country	All TB cases reported in	Succ	ess	Died		Faile	d	Lost to foll	ow-up ^b	Still on trea	atment	Not eval	uated ^c
	2015 under 15 year of age ^a	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
EU/EEA													
Austria	19	14	(73.7)	1	(5.3)	0	(0.0)	0	(0.0)	2	(10.5)	2	(10.5)
Belgium	69	67	(97.1)	1	(1.4)	0	(0.0)	0	(0.0)	1	(1.4)	0	(0.0)
Bulgaria	118	112	(94.9)	1	(0.8)	0	(0.0)	5	(4.2)	0	(0.0)	0	(0.0)
Croatia	13	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	13	(100.0)
Cyprus	0 5	0	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Czech Republic Denmark	14	5	(14.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0 12	(85.7)
Estonia	2	2	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Finland ^e	11	3	(27.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	8	(72.7)
France	-	_	(21.3)	_	(0.0)	_	(0.0)	_	(0.0)	_	(0.0)	-	(/ 2./ ,
Germany	192	128	(66.7)	2	(1.0)	0	(0.0)	5	(2.6)	14	(7.3)	43	(22.4)
Greece	-	-	(00.7)	_	(1.0)	_	(0.0)	_	(2.0)	-	(1.5)	-	(22.7)
Hungary	9	8	(88.9)	0	(0.0)	0	(0.0)	1	(11.1)	0	(0.0)	0	(0.0)
Iceland	0	0	(00.7)	0	(0.0)	0	(0.0)	0	(11.1)	0	(0.0)	0	(0.0)
Ireland	14	11	(78.6)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(21.4)
Italy	-	-	-	_	-	_	(0.0)	_	(0.0)	-	(0.0)	_	(2117)
Latvia	25	25	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	(0.0)
Lithuania	34	31	(91.2)	1	(2.9)	0	(0.0)	1	(2.9)	1	(2.9)	0	(0.0)
Luxembourg	-	-	_	-	-	-	-	-	-	-	-	-	_
Malta	-	-	-	_	-	-	-	-	_	-	-	-	-
Netherlands	42	39	(92.9)	0	(0.0)	0	(0.0)	0	(0.0)	1	(2.4)	2	(4.8)
Norway	18	18	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Poland	81	44	(54.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	37	(45.7)
Portugal	33	29	(87.9)	0	(0.0)	0	(0.0)	0	(0.0)	4	(12.1)	0	(0.0)
Romania	651	614	(94.3)	9	(1.4)	0	(0.0)	23	(3.5)	2	(0.3)	3	(0.5)
Slovakia	65	65	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Slovenia	1	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Spain	-	-	-	-	-	-	-	-	-	-	-	-	-
Sweden	46	42	(91.3)	0	(0.0)	1	(2.2)	0	(0.0)	0	(0.0)	3	(6.5)
United Kingdom	224	202	(90.2)	1	(0.4)	0	(0.0)	5	(2.2)	14	(6.3)	2	(0.9)
Subtotal EU/EEA	1686	1462	(86.7)	16	(0.9)	1	(0.1)	40	(2.4)	39	(2.3)	128	(7.6)
Non-EU/EEA													
Albania	11	10	(90.9)	0	(0.0)	0	(0.0)	0	(0.0)	-	-	1	(9.1)
Andorra	-	-	-	-	-	-	-	-	-	-	-	-	_
Armenia	23	19	(82.6)	0	(0.0)	0	(0.0)	4	(17.4)	-	-	0	(0.0)
Azerbaijan	-	-	-	-	-	-	-	-	-	-	-	-	-
Belarus	7	7	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	-	-	0	(0.0)
Bosnia and Herzegovina	14	12	(85.7)	0	(0.0)	0	(0.0)	0	(0.0)	-	-	2	(14.3)
former Yugoslav Republic of Macedonia, the	14	14	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	-	-	0	(0.0)
Georgia Georgia	137	127	(92.7)	1	(0.7)	0	(0.0)	6	(4.4)	_	-	3	(2.2)
Israel	9	7	(77.8)	0	(0.0)	0	(0.0)	1	(11.1)	_	-	1	(11.1)
Kazakhstan	354	348	(98.3)	1	(0.3)	4	(1.1)	1	(0.3)	_	-	0	(0.0)
Kyrgyzstan	516	488	(94.6)	4	(0.8)	4	(0.8)	20	(3.9)	-	-	0	(0.0)
Moldova	101	96	(95.0)	1	(1.0)	1	(1.0)	2	(2.0)	-	-	1	(1.0)
Monaco	-	-	-	-	-	-	-	-	-	-	-	-	-
Montenegro	1	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	-	-	0	(0.0)
Russia	2906	2736	(94.2)	19	(0.7)	20	(0.7)	5	(0.2)	-	-	126	(4.3)
San Marino	0	-	-	-	-	-	-	-	-	-	-	-	_
Serbia	28	27	(96.4)	0	(0.0)	0	(0.0)	0	(0.0)	-	-	1	(3.6)
Serbia excluding UN Administered Province of Kosovo ^f	9	8	(88.9)	0	(0.0)	0	(0.0)	0	(0.0)	-	-	1	(11.1)
UN Administered Province of Kosovo ^f	19	19	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	-	-	0	(0.0)
Switzerland	-	-	-	-	-	-	-	-	-	-	-	-	-
Tajikistan	316	296	(93.7)	7	(2.2)	2	(0.6)	9	(2.8)	-	-	2	(0.6)
Turkey	623	545	(87.5)	15	(2.4)	1	(0.2)	11	(1.8)	-	-	51	(8.2)
Turkmenistan	-	-	-	-	-	-	-	-	-	-	-	-	-
Ukraine	469	434	(92.5)	7	(1.5)	23	(4.9)	4	(0.9)	-	-	1	(0.2)
Uzbekistan	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal non-EU/EEA	5529	5167	(93.5)	55	(1.0)	55	(1.0)	63	(1.1)	0	(0.0)	189	(3.4)
Total European Region	7 2 1 5	6629	(91.9)	71	(1.0)	56	(0.8)	103	(1.4)	39	(0.5)	317	(4.4)
Subtotal 18 HPC	6282	5880	(93.6)	66	(1.1)	55	(0.9)	91	(1.4)	3	(0.0)	187	(3.0)

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in Italics.

Patients started on second-line treatment are excluded.
In previous reports defined as 'defaulted'.
In previous reports defined as 'transferred out and unknown'.
These data are subject to change as the national TB registry was under review when this report was being produced.
Treatment outcome collected consistently only for confirmed pulmonary cases.
In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 21: Treatment outcome of HIV positive new and relapse tuberculosis cases notified in 2015, European Region, 2016

Country	HIV positive TB cases	Succe	ess	Die	d	Faile	d	Lost to fol	low-up ^b	Still on tre	atment	Not evalu	uated
	notified in 2015ª	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
EU/EEA													
Austria	-	-	-	-	-	-	-	-	-	-	-	-	-
Belgium	29	21	(72.4)	1	(3.4)	0	(0.0)	6	(20.7)	0	(0.0)	1	(3.4)
Bulgaria	1	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Croatia	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyprus	-	-	-	-	-	-	-	-	-	-	-	-	-
Czech Republic	1	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Denmark	-	-	-	-	-	-	-	-	-	-	-	-	-
Estonia	16	13	(81.3)	3	(18.8)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Finland	-	-	-	-	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-	-	-	-	-
Hungary	0	0	-	0	-	0	-	0	-	0	-	0	-
Iceland	0	0	-	0	-	0	-	0	-	0	-	0	-
Ireland	7	3	(42.9)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(57.1)
Italy	-	-	-	-	-	-	-	_	-	_	_	-	_
Latvia	66	50	(75.8)	11	(16.7)	0	(0.0)	4	(6.1)	1	(1.5)	0	(0.0)
Liechtenstein	_	-	-	-	-	_	-	_	-	-	-	-	(515)
Lithuania	26	17	(65.4)	4	(15.4)	1	(3.8)	2	(7.7)	2	(7.7)	0	(0.0)
Luxembourg	_	-	(03.4)	-	(13.4)	_	(5.0)	_	(/.//	_	-	_	(0.0)
Malta	_	_	_	-	_	_	_	-	_	_	_	_	_
Netherlands	34	29	(85.3)	3	(8.8)	0	(0.0)	0	(0.0)	2	(5.9)	0	(0.0)
Norway	5	4	(80.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(20.0)
,	-	4	(00.0)	-	(0.0)	-	(0.0)	-	(0.0)	-	(0.0)	_	(20.0)
Poland			([1 4)		(7.8)		(0,0)		(0.7)		(25.7)		((1)
Portugal	218	112	(51.4)	17		0	(0.0)	19	(8.7)	56	(25.7)	14	(6.4)
Romania	261	164	(62.8)	54	(20.7)	4	(1.5)	35	(13.4)	3	(1.1)	1	(0.4)
Slovakia	0	0	-	0	_	0	_	0	-	0		0	_
Slovenia	0	0	-	0	-	0	-	0	-	0	-	0	
Spain	-	-	-	-	-	-	-	-	-	-	-	-	_
Sweden	-	-	-	-	-	-	-	-	-	-	-	-	_
United Kingdom	-	-	-	-	-	-	-	-	>	-		-	-
Subtotal EU/EEA	664	413	(62.2)	95	(14.3)	5	(8.0)	66	(9.9)	64	(9.6)	21	(3.2)
Non-EU/EEA			(=)		(00.0)		(2.2)		(2.2)		(2.2)		(+ + =)
Albania	6	3	(50.0)	2	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(16.7)
Andorra	0	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Armenia	72	47	(65.3)	18	(25.0)	0	(0.0)	7	(9.7)	0	(0.0)	0	(0.0)
Azerbaijan	-	-		-	-	-	-	-	-	-	-	-	
Belarus	113	89	(78.8)	11	(9.7)	0	(0.0)	1	(0.9)	0	(0.0)	12	(10.6)
Bosnia and Herzegovina	0	-	-	-	-	-	-	-	-	-	-	-	-
former Yugoslav Republic of	0	_	_	_	_	_	_	_	_	_	_	_	_
Macedonia, the		10	((0,0)	44	(45.5)	2	(0.0)		(0.5)	•	(0.0)	0	((a)
Georgia	71	49	(69.0)	11	(15.5)	2	(2.8)	6	(8.5)	0	(0.0)	3	(4.2)
Israel	14	10	(71.4)	2	(14.3)	0	(0.0)	1	(7.1)	0	(0.0)	1	(7.1)
Kazakhstan	376	260	(69.1)	77	(20.5)	19	(5.1)	20	(5.3)	0	(0.0)	0	(0.0)
Kyrgyzstan	151	92	(60.9)	41	(27.2)	6	(4.0)	12	(7.9)	0	(0.0)	0	(0.0)
Moldova	227	125	(55.1)	71	(31.3)	15	(6.6)	11	(4.8)	0	(0.0)	5	(2.2)
Monaco	-	-	-	-	-	-	-	-	-	-	-	-	-
Montenegro	0	-	-	-	-	-	-	-	-	-	-	-	-
Russia	694	351	(50.6)	206	(29.7)	36	(5.2)	61	(8.8)	0	(0.0)	40	(5.8)
San Marino	0	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Serbia	4	2	(50.0)	0	(0.0)	0	(0.0)	2	(50.0)	0	(0.0)	0	(0.0)
Serbia excluding UN Administered Province of Kosovo ^d	4	2	(50.0)	0	(0.0)	0	(0.0)	2	(50.0)	0	(0.0)	0	(0.0)
UN Administered Province of Kosovo ^d	0	-	-	-	-	-	-	-	-	-	-	-	-
Switzerland	0	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Tajikistan	131	94	(71.8)	28	(21.4)	3	(2.3)	6	(4.6)	0	(0.0)	0	(0.0)
Turkey	57	33	(57.9)	7	(12.3)	0	(0.0)	6	(10.5)	0	(0.0)	11	(19.3)
Turkmenistan	0	-	(3/.)	_	(12.3)	_	(0.0)	_	(10.5)	_	(0.0)	-	(17.3)
Ukraine	4597	2893	(62.9)	973	(21.2)	370	(8.0)	355	(7.7)	0	(0.0)	6	(0.1)
Uzbekistan	4597	2093	(02.9)	7/3	(21.2)	3/0	(0.0)	כככ	(7.7)	U	(0.0)	0	(0.1)
	6513	4048	(62.2)	1447	(22.2)	451	(6.9)	488	(7.5)	0	(0.0)	79	(1.2)
	0013	4040	(02.2)	1447	(44.4)	401	(0.7)	400		U	(0.0)	17	
Subtotal non-EU/EEA Total European Region	7177	4461	(62.2)	1542	(21.5)	456	(6.4)	554	(7.7)	64	(0.9)	100	(1.4)

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics. HIV – human immunodeficiency virus.

Patients started on second-line treatment are excluded.
 In previous reports defined as 'defaulted'.
 In previous reports defined as 'transferred out and unknown'.
 In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 22: Treatment outcome after 24 months of RR TB/MDR TB cases started on second-line treatment in 2014, European Region, 2016

Country	RR/MDR TB cases started on second-line	Succe	ess	Die	d	Faile	ed	Lost to fol	low-up ^b	Still on tre	atment	Not evalu	ıated
Country	treatment in	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
EU/EEA													
Austria	21	13	(61.9)	0	(0.0)	0	(0.0)	1	(4.8)	1	(4.8)	6	(28.6)
Belgium	13	7	(53.8)	1	(7.7)	0	(0.0)	1	(7.7)	4	(30.8)	0	(0.0)
Bulgaria	44	22	(50.0)	13	(29.5)	0	(0.0)	7	(15.9)	0	(0.0)	2	(4.5)
Croatiad	2	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)
Cyprus	-	-	-	-	-	-	-	-	-	-	-	-	_
Czech Republic	7	3	(42.9)	0	(0.0)	0	(0.0)	2	(28.6)	0	(0.0)	2	(28.6)
Denmark	2	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)
Estonia	50	32	(64.0)	7	(14.0)	3	(6.0)	3	(6.0)	3	(6.0)	2	(4.0)
Finland	-	-	_	-	-	-	-	-	-	-	-	-	-
France	- 104	-		-	(0.7)	1		-	(2.0)	- 15			
Germany Greece	104	35	(33.7)	9	(8.7)	-	(1.0)	3	(2.9)	15	(14.4)	41	_
Hungary	4	4	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Iceland	-	-	(100.0)	_	(0.0)	-	(0.0)	-	(0.0)	_	(0.0)	_	(0.0)
Ireland	2	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)
Italy	_	-	(50.0)	-	(0.0)	_	(0.0)	-	(0.0)	-	(0.0)	-	(50.0)
Latvia	71	52	(73.2)	5	(7.0)	1	(1.4)	12	(16.9)	0	(0.0)	1	(1.4)
Liechtenstein	-	-	(/).2)	-	(7.0)	_	(1.4)	-	(10.9)	-	(0.0)	-	(1.4)
Lithuania	279	35	(12.5)	61	(21.9)	7	(2.5)	40	(14.3)	131	(47.0)	5	(1.8)
Luxembourg	-	-	(12.5)	-	(21.7)	_	(2.)	-	(14.5)	-	(47.0)	_	(1.0)
Malta	_	-	_	-	_	_	_	_	_	-	-	-	_
Netherlands	7	6	(85.7)	0	(0.0)	0	(0.0)	0	(0.0)	1	(14.3)	0	(0.0)
Norway	11	9	(81.8)	0	(0.0)	0	(0.0)	1	(9.1)	0	(0.0)	1	(9.1)
Poland	49	9	(18.4)	14	(28.6)	0	(0.0)	5	(10.2)	0	(0.0)	21	(42.9)
Portugal	28	15	(53.6)	7	(25.0)	0	(0.0)	0	(0.0)	1	(3.6)	5	(17.9)
Romania	596	245	(41.1)	99	(16.6)	163	(27.3)	85	(14.3)	4	(0.7)	0	(0.0)
Slovakia	4	2	(50.0)	2	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Slovenia	0	0	-	0	-	0	-	0	-	0	-	0	-
Spain	_	-	_	-	-	_	_	_	_	-	_	-	-
Sweden	17	15	(88.2)	1	(5.9)	0	(0.0)	0	(0.0)	0	(0.0)	1	(5.9)
United Kingdom	56	33	(58.9)	2	(3.6)	0	(0.0)	7	(12.5)	11	(19.6)	3	(5.4)
Subtotal EU/EEA	1367	539	(39.4)	222	(16.2)	175	(12.8)	167	(12.2)	171	(12.5)	93	(6.8)
Non-EU/EEA													
Albania	-	-	-	-	-	-	-	-	-	-	-	-	-
Andorra	0	-	-	-	-	-	-	-	-	-	-	-	_
Armenia	118	68	(57.6)	8	(6.8)	19	(16.1)	23	(19.5)	0	(0.0)	0	(0.0)
Azerbaijan	745	441	(59.2)	127	(17.0)	135	(18.1)	42	(5.6)	0	(0.0)	0	(0.0)
Belarus	1472	872	(59.2)	126	(8.6)	289	(19.6)	181	(12.3)	0	(0.0)	4	(0.3)
Bosnia and Herzegovina	3	2	(66.7)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
former Yugoslav Republic	3	1	(33.3)	0	(0.0)	0	(0.0)	2	(66.7)	0	(0.0)	0	(0.0)
of Macedonia, the Georgia	411	201	(48.9)	32	(7.8)	27	(6.6)	118	(28.7)	0	(0.0)	33	(8.0)
Israel	16	12	(75.0)	2	(12.5)	0	(0.0)	1	(6.3)	0	(0.0)	1	(6.3)
Kazakhstan	6320	4813	(76.2)	604	(9.6)	371	(5.9)	468	(7.4)	0	(0.0)	64	(1.0)
Kyrgyzstan	1157	650	(56.2)	142	(12.3)	105	(9.1)	260	(22.5)	0	(0.0)	0	(0.0)
Moldova	919	457	(49.7)	129	(14.0)	142	(15.5)	188	(20.5)	0	(0.0)	3	(0.3)
Monaco	-	-	(42.77	-	(14.0)	-	(13.3)	-	(20.5)	_	(0.0)	_	(0.5)
Montenegro	2	0	(0.0)	1	(50.0)	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)
Russia	20089	10170	(50.6)	3409	(17.0)	2655	(13.2)	1830	(9.1)	0	(0.0)	2025	(10.1)
San Marino	0	-	-	-	-	-	-	-	-	-	-	-	-
Serbia	19	12	(63.2)	2	(10.5)	2	(10.5)	3	(15.8)	0	(0.0)	0	(0.0)
Serbia excluding UN Administered Province	13	7	(53.8)	2	(15.4)	1	(7.7)	3	(23.1)	0	(0.0)	0	(0.0)
of Kosovo ^e UN Administered Province of Kosovo ^e	6	5	(83.3)	0	(0.0)	1	(16.7)	0	(0.0)	0	(0.0)	0	(0.0)
Switzerland	12	9	(75.0)	0	(0.0)	1	(8.3)	0	(0.0)	0	(0.0)	2	(16.7)
Tajikistan	804	398	(49.5)	170	(21.1)	67	(8.3)	159	(19.8)	0	(0.0)	10	(1.2)
Turkey	257	163	(63.4)	27	(10.5)	15	(5.8)	30	(11.7)	0	(0.0)	22	(8.6)
Turkmenistan	213	143	(67.1)	24	(11.3)	32	(17.3)	14	(6.6)	0	(0.0)	0	(0.0)
Ukraine	7174	3297	(46.0)	1210	(16.9)	1284	(17.9)	1186	(16.5)	0	(0.0)	197	(2.7)
	3602	2216	(61.5)	587	(16.3)	221	(6.1)	220	(6.1)	0	(0.0)	358	(9.9)
	3 (3()/									-	(3.0)	220	
Uzbekistan Subtotal non-EU/EEA				6601		5365		4726	(10.9)	0	(0.0)	2719	(6.3)
Uzbekistan	43336 44703	23 925 24 624	(55.2) (54.7)		(15.2) (15.3)		(12.4) (12.4)	4726 4893	(10.9) (11.0)	0 171	(0.0)	2719 2812	(6.3) (6.3)

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. RR/MDR TB – rifampicin-resistant and multidrug-resistant tuberculosis. WHO European Region 18 TB high-priority countries presented in italics.

For countries that do not provide information on treatment start, all reported cases were used as proxy.
 In previous reports defined as 'defaulted'.
 In previous reports defined as 'transferred out and unknown'.
 These data are subject to change as the national TB registry was under review when this report was being produced.
 In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 23: Treatment outcome after 24 months of laboratory-confirmed MDR TB cases notified in 2014, EU/EEA, 2016

	All MDR TB	Succ	ess	Die	d	Faile	d	Lost to fol	low-up ^a _	Still on tre	atment	Not evalu	ıated ^b
Country	cases notified in 2014	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
EU/EEA													
Austria	20	13	(65.0)	0	(0.0)	0	(0.0)	1	(5.0)	1	(5.0)	5	(25.0)
Belgium	11	6	(54.5)	1	(9.1)	0	(0.0)	0	(0.0)	4	(36.4)	0	(0.0)
Bulgaria	37	18	(48.6)	12	(32.4)	0	(0.0)	5	(13.5)	0	(0.0)	2	(5.4)
Croatiac	2	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)
Cyprus	-	-	-	-	-	-	-	-	-	-	-	-	-
Czech Republic	5	2	(40.0)	0	(0.0)	0	(0.0)	1	(20.0)	0	(0.0)	2	(40.0)
Denmark	2	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)
Estonia	50	29	(58.0)	10	(20.0)	3	(6.0)	3	(6.0)	3	(6.0)	2	(4.0)
Finland	-	-	-	-	-	-	-	-	-	-	-	-	-
France	_	-	-	-	-	-	-	-	-	-	-	-	-
Germany	92	29	(31.5)	9	(9.8)	1	(1.1)	3	(3.3)	12	(13.0)	38	(41.3)
Greece	_	-	-	-	-	-	-	-	-	-	-	-	-
Hungary	3	3	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Iceland	_	-	-	-	-	-	-	-	-	-	-	-	-
Ireland	2	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)
Italy	-	-	-	-	-	-	-	-	-	-	-	-	-
Latvia	70	52	(74.3)	5	(7.1)	1	(1.4)	11	(15.7)	0	(0.0)	1	(1.4)
Liechtenstein	_	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	271	32	(11.8)	59	(21.8)	7	(2.6)	37	(13.7)	131	(48.3)	5	(1.8)
Luxembourg	_	-	-	-	-	-	-	-	-	-	-	-	-
Malta	-	-	-	-	-	-	-	-	-	-	-	-	-
Netherlands	7	5	(71.4)	0	(0.0)	0	(0.0)	0	(0.0)	1	(14.3)	1	(14.3)
Norway	11	9	(81.8)	0	(0.0)	0	(0.0)	1	(9.1)	0	(0.0)	1	(9.1)
Poland	_	-	-	-	-	-	-	-	-	-	-	-	-
Portugal	25	13	(52.0)	7	(28.0)	0	(0.0)	0	(0.0)	1	(4.0)	4	(16.0)
Romania	532	199	(37.4)	93	(17.5)	156	(29.3)	80	(15.0)	4	(0.8)	0	(0.0)
Slovakia	3	1	(33.3)	2	(66.7)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Slovenia	0	0	-	0	-	0	-	0	-	0	-	0	_
Spain	-	-	-	-	-	-	-	-	-	-	-	-	-
Sweden	15	13	(86.7)	1	(6.7)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.7)
United Kingdom	56	29	(51.8)	2	(3.6)	0	(0.0)	12	(21.4)	10	(17.9)	3	(5.4)
Total EU/EEA	1214	455	(37.5)	202	(16.6)	168	(13.8)	154	(12.7)	167	(13.8)	68	(5.6)

European Region' comprises the 53 countries of the WHO European Region and Liechtenstein RR/MDR TB – Multidrug-resistant tuberculosis. WHO European Region 18 TB high-priority countries presented in italics.

In previous reports defined as 'defaulted'.
 In previous reports defined as 'transferred out and unknown'.
 These data are subject to change as the national TB registry was under review when this report was being produced.

Table 24: Treatment outcome after 24 months of XDR TB cases started on second-line treatment in 2014, European Region, 2016

Country	XDR TB cases started on second-line	Succ	ess	Die	d	Faile	ed .	Lost to fo	llow-up ^b	Still on tre	eatment	Not eval	uated
Country	treatment in	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%
EU/EEA								,					
Austria	2	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)
Belgium	1	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Bulgaria	3	0	-	0	-	0	-	0	-	0	-	3	(100.0)
Croatia d	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyprus	0	0	-	0	-	0	-	0	-	0	-	0	-
Czech Republic	0	0	-	0	-	0	-	0	-	0	-	0	-
Denmark	0	0	-	0	-	0	-	0	-	0	-	0	-
Estonia	8	1	(12.5)	1	(12.5)	3	(37.5)	0	(0.0)	2	(25.0)	1	(12.5)
Finland	-	-	-	-	-	-	-	-	-	-	-	-	-
France e	_	-	-	-	-	-	-	-	-	-	-	-	-
Germany	11	2	(18.2)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	9	(81.8)
Greece	-	-	-	-	-	-	-	-	-	-	-	-	-
Hungary	0	0	-	0	-	0	-	0	-	0	-	0	-
Iceland	0	0	-	0	-	0	-	0	-	0	-	0	-
Ireland	0	0	-	0	-	0	-	0	-	0	-	0	-
Italy	-	-	-	-	-	-	-	-	-	-	-	-	-
Latvia	13	10	(76.9)	2	(15.4)	1	(7.7)	0	(0.0)	0	(0.0)	0	(0.0)
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	61	0	(0.0)	16	(26.2)	3	(4.9)	4	(6.6)	36	(59.0)	2	(3.3)
Luxembourg	-	-	-	-	-	-	-	-	-	-	-	-	-
Malta	-	-	-	-	-	-	-	-	-	-	-	-	-
Netherlands	0	0	-	0	-	0	-	0	-	0	-	0	-
Norway	-	-	-	-	-	-	-	-	-	-	-	-	-
Poland	5	1	(20.0)	1	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(60.0)
Portugal	3	2	(66.7)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Romania	57	9	(15.8)	15	(26.3)	28	(49.1)	5	(8.8)	0	(0.0)	0	(0.0)
Slovakia	0	0	-	0	-	0	-	0	-	0	-	0	-
Slovenia	0	0	-	0	-	0	-	0	-	0	-	0	-
Spain	-	-	-	-	-	-	-	-	-	-	-	-	-
Sweden	1	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
United Kingdom	3	1	(33.3)	0	(0.0)	0	(0.0)	1	(33.3)	1	(33.3)	0	(0.0)
Subtotal EU/EEA	168	28	(16.7)	37	(22.0)	35	(20.8)	10	(6.0)	40	(23.8)	18	(10.7)
Non-EU/EEA													
Albania	-	-	-	-	-	-	-	-	-	-	-	-	,
Andorra	0	-	-	-	-	-	-	-	-	-	-	-	-
Armenia	10	4	(40.0)	0	(0.0)	5	(50.0)	1	(10.0)	0	(0.0)	0	(0.0)
Azerbaijan	69	16	(23.2)	17	(24.6)	31	(44.9)	5	(7.2)	0	(0.0)	0	(0.0)
Belarus	431	157	(36.4)	58	(13.5)	174	(40.4)	34	(7.9)	0	(0.0)	8	(1.9)
Bosnia and Herzegovina	0	-	-	-	-	-	-	-	-	-	-	-	-
former Yugoslav Republic of	0	_	_	_	_	_	_	_	_	_	_	_	_
Macedonia, the			()		(()		()		()		(- 1
Georgia	56	18	(32.1)	6	(10.7)	7	(12.5)	14	(25.0)	0	(0.0)	11	(19.6)
Israel	2	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)
Kazakhstan	318	98	(30.8)	79	(24.8)	96	(30.2)	25	(7.9)	0	(0.0)	20	(6.3)
Kyrgyzstan	32	5	(15.6)	16	(50.0)	6	(18.8)	5	(15.6)	0	(0.0)	0	(0.0)
Moldova	9	3	(33.3)	3	(33.3)	2	(22.2)	1	(11.1)	0	(0.0)	0	(0.0)
Monaco	-	-	-	-	-	-	-	-	-	-	-	-	-
Montenegro	0	-		-				-	-		-	-	-
Russia	2209	687	(31.1)	507	(23.0)	502	(22.7)	157	(7.1)	0	(0.0)	356	(16.1)
San Marino	0	-	-	-	-	-	-	-	-	-	-	-	_
Serbia	0	-	-	-	-	-	-	-	-	-	-	-	-
Serbia excluding UN Administered Province of Kosovo ^f	0	-	-	-	-	-	-	-	-	-	-	-	-
UN Administered Province of Kosovo ^f	0	-	-	-	-	-	-	-	-	-	-	-	-
Switzerland	1	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)
Tajikistan	0	-	-	-	-	-	-	-	_	-	-	-	-
Turkey	2	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)	1	(50.0)
Turkmenistan	-	-	-	-	-	-	-	-	-	-	-	-	-
Ukraine	1097	278	(25.3)	285	(26.0)	330	(30.1)	167	(15.2)	0	(0.0)	37	(3.4)
Uzbekistan	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal non-EU/EEA	4 2 3 6	1267	(29.9)	971	(22.9)	1153	(27.2)	411	(9.7)	0	(0.0)	434	(10.2
Total European Region	4404	1295	(29.4)	1008	(22.9)	1188	(27.0)	421	(9.6)	40	(0.9)	452	(10.3)
Subtotal 18 HPC	4375	1286	(29.4)	1005	(23.0)	1188	(27.2)	419	(9.6)	38	(0.9)	439	(10.0)

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. XDR TB - Extensively drug-resistant tuberculosis. WHO European Region 18 TB high-priority countries presented in italics.

^a For countries that do not provide information on treatment start, all reported cases were used as proxy.
^b In previous reports defined as 'defaulted'.
^c In previous reports defined as 'transferred out and unknown'.
^d These data are subject to change as the national TB registry was under review when this report was being produced.
^e In previous reports defined as 'transferred out and unknown'.
^f In accordance with the UN Security Council Resolution No. 1244 (1999).

Table 25: Treatment outcome after 36 months of XDR TB notified in 2013, EU/EEA, 2016

Country	XDR TB notified in	Succ	ess	Die	ed .	Fail	led	Lost to fo	llow-up⁵	Not eval	uated ^c
	2013ª	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
EU/EEA											
Austria	3	2	(66.7)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)
Belgium	0	0	-	0	-	0	-	0	-	0	-
Bulgaria	4	0	(0.0)	2	(50.0)	1	(25.0)	1	(25.0)	0	(0.0)
Croatia	_	-	-	-	-	-	-	-	-	-	-
Cyprus	0	0	-	0	-	0	-	0	-	0	-
Czech Republic	0	0	-	0	-	0	-	0	-	0	-
Denmark	1	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Estonia	10	5	(50.0)	1	(10.0)	2	(20.0)	2	(20.0)	0	(0.0)
Finland	-	-	-	-	-	-	-	-	-	-	-
France	_	-	-	-	-	-	-	-	-	-	-
Germany	3	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)
Greece	_	-	_	-	_	-	_	-	-	-	_
Hungary	1	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
Iceland	_	-	-	-	_	-	-	-	_	-	_
Ireland	1	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Italy	_	-	_	-	-	-	-	_	-	-	_
Latvia	15	11	(73.3)	3	(20.0)	0	(0.0)	1	(6.7)	0	(0.0)
Liechtenstein	-	-	_	-	_	-	_	-	-	-	_
Lithuania	47	11	(23.4)	12	(25.5)	5	(10.6)	19	(40.4)	0	(0.0)
Luxembourg	_	-	_	-	_	-	_	-	-	-	_
Malta	_	-	-	_	-	_	_	-	_	-	_
Netherlands	0	0	-	0	-	0	-	0	-	0	-
Norway	_	-	-	_	_	_	_	-	_	-	-
Poland	1	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
Portugal	4	4	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Romania	56	11	(19.6)	12	(21.4)	29	(51.8)	4	(7.1)	0	(0.0)
Slovakia	0	0	-	0	-	0	-	0	-	0	-
Slovenia	0	0	-	0	-	0	-	0	-	0	-
Spain	-	-	-	-	-	-	-	-	_	-	-
Sweden	2	2	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
United Kingdom	3	3	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Total EU/EEA	151	51	(33.8)	33	(21.9)	37	(24.5)	27	(17.9)	3	(2.0)

XDR TB – Extensively drug-resistant tuberculosis. WHO European Region 18 TB high-priority countries presented in italics.

For countries that do not provide information on treatment start, all reported cases were used as proxy.
 In previous reports defined as 'defaulted'.

Table 26: Monitoring the WHO Europe Roadmap to Implement the Tuberculosis Action Plan for the WHO European Region, 2016 – 2020

		•		•						•		-	
									1. INTEGRATE	D, PATIENT-CEN	TRED CARE AND	PREVENTION	
	Systematic screening of contacts and high-risk groups		an	d universal acce	s of all forms of ss to drug-susc g the use of rapi	eptibility testin	g,		Eqi	uitable access to of care for a including d I patient suppor	o quality treatm Il people with tu rug-resistant tu t to facilitate tre	ent and continuu herculosis, berculosis; aatment adheren	m ce
Country	1A.1 Coverage of population at risk with systematic for active TB and LTBI (TB contacts for 2016 assessment). Target = 80%	.18.1 Percentage of TB patients diagnosed using WHO recommended rapid tests (G9). Target = 40%	18.2 First-line DST coverage (%) among all bacteriologically confirmed TB cases (G1). Target = 100%	18.3 RR/MDR-TF case detection rate (%) (G3). Target = 85%	1B.4 TB notification rate per 100 000 population (E1). Target = 24.6"	1B. 5 TB ca se detection rate (%) Target: Increase	18.6 Percentage of RR/MDR-TB among new TB patients. Target = Decrease	18.7 Percentage of RR/MDR-TB among previously treated TB patients. Target = Decrease	.tC.1 Percentage of hospitalization of new TB patients (E3).Target = Decrease	1C.2 Percentage of detected RR/MDR-TB enrolled in treatment (63). Target = 100%	1C.3 Treatment success rate (%) among all new and relapsed TB patients (64). Target = 85%	1C-4 Treatment success rate(%) among the MDR-TBireatment cohort (G4) (E4). Target = 75%	1C.5 TB mortality rate (ICD Ass-19) (G10) (E6). Iarget = 2.7"
EU/EEA													
Austria	-	50.3%	93.5%	87.5%	7.1	87.2%	2.2%	17.6%	-	100.0%	72.7%	61.9%	0.8
Belgium		45.2%	93.7%	68.8%	8.7	89.6%	1.4%	5.7%	1%	100.0%	79.4%	53.8%	0.4
Bulgaria	96.7%	0.4%	87.5%	50.0%	21.3	80.3%	0.9%	17.3%	90%	100.0%	84.5%	50.0%	1.7
Croatia Cyprus	_	6.7%	100.0% 97.4%	_	10.7	86.3% 86.4%	0.0%	0.0%	0%	100.0%	10.4% 55.6%	0.0%	0.6
Czech Republic	_	39.5%	89.7%	_	4.8	96.4%	1.3%	16.7%	95%	80.0%	68.7%	42.9%	0.4
Denmark	_	35.8%	97.6%	-	5.1	83.4%	1.7%	0.0%	-	100.0%	50.0%	50.0%	0.2
Estonia	-	74.5%	94.8%	73.5%	14.3	85.5%	12.9%	46.2%	64%	95.7%	82.6%	64.0%	1.2
Finland	-	26.3%	96.4%	100.0%	4.1	86.5%	1.6%	0.0%	80%	100.0%	36.2%	-	0.6
France ^c	-	-	100.0%	-	7.0	93.5%	1.4%	6.8%	90%	100.0%	-	-	0.6
Germany	-	53.4%	84.5%	65.6%	7.0	86.9%	2.2%	14.3%	-	100.0%	64.9%	33.7%	0.4
Greece	-	36.8%	46.7%	-	3.8	83.1%	2.0%	27.3%	-	100.0%	-	-	0.5
Hungary	-	- 00.000	83.8%	-	7.5	85.7%	4.1%	16.2%	-	100.0%	70.5%	100.0%	0.7
Iceland Ireland	-	83.3% 35.2%	80.0%	300.0%	1.8 6.2	85.7% 86.2%	0.0% 3.1%	0.0% 18.2%	0% 59%	100.00/	100.0% 57.0%	E0 00/	0.6 0.5
Italy	_)).2 /0 -	97.7% 81.6%	62.7%	6.2	102.1%	3.1%	9.3%	J7 /0 -	100.0% 100.0%	57.0 /o -	50.0%	0.5
Latvia	_	0.0%	95.7%	85.5%	32.6	86.6%	7.6%	23.3%	98%	100.0%	84.1%	73.2%	2.0
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	100.0%	0.0%	100.0%	97.3%	46.6	89.8%	13.3%	43.0%	92%	100.0%	78.9%	12.5%	6.5
Luxembourg	-	0.0%	95.5%	-	5.0	87.9%	0.0%	0.0%	50%	100.0%	-	-	0.2
Malta	-	0.0%	100.0%	-	11.5	86.2%	0.0%	0.0%	-	-	-	-	0.2
Netherlands	-	0.0%	100.0%	66.7%	5.2	87.7%	1.8%	20.0%	31%	100.0%	86.4%	85.7%	0.2
Norway	92.3%	44.1%	96.9%	133.3%	5.3	86.9%	5.1%	0.0%	51%	100.0%	88.0%	81.8%	0.2
Poland	42 0º/	13.8%	90.5%	66.2%	16.2	86.5%	0.7%	4.0%	20%	100.0%	53.1%	18.4%	1.3
Portugal Romania	62.9%	15.5% <i>5.1%</i>	69.4% 89.0%	68.4% 73.6%	17.3 64.7	85.4% 85.3%	1.3% 2.0%	3.9% 15.6%	30% 86%	100.0% <i>99.4</i> %	71.7% 85.0%	53.6% 41.1%	2.0 5.1
Slovakia	100.0%	19.6%	81.0%	300.0%	5.2	87.8%	2.0%	5.6%	90%	100.0%	86.2%	50.0%	0.6
Slovenia	-	51.7%	100.0%	-	5.7	84.3%	0.0%	0.0%	-	-	81.4%	-	0.6
Spain	-	19.3%	100.0%	-	10.2	100.7%	4.0%	12.2%	-	100.0%	-	-	0.6
Sweden	-	63.8%	97.9%	65.2%	7.1	86.7%	3.0%	15.8%	51%	100.0%	87.4%	88.2%	0.3
United Kingdom	-	4.8%	96.2%	82.8%	8.9	89.1%	1.6%	4.7%		96.0%	79.2%	58.9%	0.5
Subtotal EU/EEA	85.6%	24.7%	88.1%	74.3%	10.9	89.0%	2.4%	15.0%	55.7%	99.5%	74.1%	39.4%	8.0
Non-EU/EEA	05 20/		64 30/	F7 40/	4/ 2	070/	0.00/	FA 00/	0.101	25.00/	07 707		0.30
Albania Andorra	85.2% 100.0%	100.0%	41.2% 50.0%	57.1%	14.2 5.2	87% 87%	0.0%	50.0%	84% 100%	25.0%	86.6%	-	0.29
Armenia	92.0%	5.6%	95.1%	71.1%	35.1	80%	15.4%	57.7%	81%	100.0%	79.2%	57.6%	2.1
Azerbaijan	92.070	39.3%	69.5%	61.7%	53.0	80%	15.4%	39.3%	-	86.3%	82.8%	59.2%	6.4
Belarus	100.0%	79.6%	97.5%	96.4%	33.9	65%	37.1%	71.6%	100%	87.2%	88.8%	59.2%	2.4
Bosnia and Herzegovina	-	0.0%	100.0%	-	25.8	80%	0.0%	0.0%	98%	-	64.7%	66.7%	3.9
former Yugoslav Republic of Macedonia, the	72.3%	35.7%	80.3%	66.7%	12.6	80%	1.5%	0.0%	60%	100.0%	86.2%	33.3%	0.98
Georgia	-	81.2%	77.4%	87.2%	76.0	82%	10.2%	38.0%	25%	87.5%	84.0%	48.9%	4.8
Israel	-	-	93.2%	84.6%	3.1	87%	7.4%	0.0%	-	100.0%	82.9%	75.0%	0.19

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. RR/MDR TB – rifampicin-resistant and multidrug-resistant tuberculosis. M/XDR-TB – Multidrug-resistant and extensively drug-resistant tuberculosis. Figures in red – target not met. Figures in green – target met.

Cases with missing information on previous history of TB treatment are included among new cases.
 These data are liable to change as the national TB registry was under review when this report was being produced.
 No data available for risk groups other than TB contacts.

								2. BOLD POLICI	ES AND SUPPOR	RTIVE SYSTEMS		3. INTENSIFIED RESEARCH AND INNOVATION	
		tuberculosis/HI ent of relevant c			Manageme tuberculosi and previoni of persons a and vaccinat tuberc	s infection ve treatment t high risk, ion against	Political commitment with adequate resources, including universal health coverage policy	Health systems strengthening in all functions, including well-aligned financing mechanisms for tuberculosis and human resources	Regulatory frameworks for case-based surveillance, strengthening vital registration, quality and rational use of medicines, and pharmacovigilance	Community systems and civil society engagement	Social protection, poverty alleviation and actions on other determinants of tuberculosis, such as migration and prisons	Discovery, development and rapid uptake of new tools, interventions and strategies	
1D.1 TB/HIV case-detection rate (%). Target = Close to 100 %	10.2 (%) (G6) (E6). Target = 100 %	10.3 Percentage of HIV among all TB. Target = Decrease	D.4 ART enrolment rate (%) among/B-HIV co-infected. Target = Close to 100%	D.4 ART enrolment rate (%) among/B HIV co-infected. Target = Close to 100 %	1E.1 Contact investigation coverage aged under 5 years(G3) [E7).Target = 90%	1E.2 LTBI treatment coverage of childhood TB contacts aged under 5 years (G5b) (E8). Target = 90%	2A.1 Number of Members States that have a regular TB control/elimination performance publication every five years (EB) Target - TB control/elimination	28.1 Percentage of TB patients and their households that experience catastrophic financial consequences due to TB (G8) (E9) Target: close to o	2C.1 Treatment coverage (%)with new TB drugs. Target = 20%	2D.1 Number of member states with functioning multi-stakeholder coalitions advocating for TB care and resource	2E.1 Treatment success rate (%) of new and relapsed TB cases among prisoners. Target = 85.0%	3A.1 European TB research init iative established by mid-2016 Target is not defined yet	Country
													EU/EEA
-	-	-	-	-	-	-	-	-	-	-	-	-	Austria
36.0%	45.4%	6.9%	-	-	-	-	-	-	-	-	60.0%	-	Belgium
-	79.0%	0.0%		-	-	-	-	-	-	-	85.0%	-	Bulgaria
-	-	-	-	-	-	-	-	-	-	-	-	-	Croatiab
0.0%	80.7%	0.0%		-	-	-	-	-	-	-	77.00/	-	Cyprus
55.6%	39.5%	2.4%	-	-	-	-	-	-	-	-	77.8%	-	Czech Republic
81.8%	45.9%	6.0%		_	-	-	-	-	_	_	00.00/	-	Denmark
91.3%	95.7%	12.0%	95.2%	_	_	_	_	_	_	_	88.9%	-	Estonia Finland
-	-	_	_	-	_	_	-	_	_	_	-	_	France
-	_	-	_	_	_	_	-	_	_	_	_	_	Germany
-	-	-	_	-	-	-	-	-	-	_	-	_	Greece
4.3%	2.4%	5.3%	-	-	-	-	-	-	-	-	50.0%	-	Hungary
-	100.0%	0.0%		-	-	-	-	-	-	-	-	-	Iceland
17.4%	41.3%	3.0%	75.0%	-	-	-	-	-	-	-	-	-	Ireland
-	-	-	-	-	-	-	-	-	-	-	-	-	Italy
60.4%	78.0%	11.2%	61.8%	-	-	-	-	-	-	-	75.8%	-	Latvia
-			-	-	-	-	-	-	-	-	-	-	Liechtenstein
68.0%	77.7%	3.6%	-	-	100%	-	-	-	-	-	61.1%	-	Lithuania
40.0% 53.3%	17.2% 92.0%	40.0% 17.4%	100%	_	_	_	-	-	_	_	_	_	Luxembourg Malta
61.8%	62.3%	3.8%	71.4%	_	_	_	_	_	_	_	50.0%	_	Netherlands
57.1%	86.0%	3.9%	100.0%	_	93.0%	15.4%	-	_	_	_	-	_	Norway
-	-	-	-	-	-	-	-	-	-	-	44.4%	-	Poland
56.6%	66.0%	13.9%	-	-	-	-	-	-	-	-	50.8%		Portugal
68.6%	77.9%	2.7%	100%	-	-	-	-	-	-	-	91.3%	-	Romania
-	44.1%	0.0%	-	-	100%	100%	-	-	-	-	100.0%	-	Slovakia
100.0%	80.5%	1.1%	100%	-	90%	75.0%	-	-	-	-	-	-	Slovenia
60.9%	59.6%	7.7%	-	-	-	-	-	-	-	-	-	-	Spain
-	-	-	-	-	-	-	-	-	-	-	- (0.40)	-	Sweden
	68.8%	4.4%	94.2%	-	OE 99/	47.9%	-	-	-	-	62.1%		United Kingdom Subtotal EU/EEA
59.3%	05.5%	4.4%	74.2%	_	95.8%	41.9%	_	_	_	_	68.4%	-	Non-EU/EEA
100.0%	53.7%	2.7%	100.0%	-	85.2%	_	-	-	_	_	_	_	Albania
0.0%	0.0%	0.0%	- 100.070	-	100%	0.0%	-	-	-	-	-	_	Andorra
77.0%	100.0%	5.6%	100.0%	23.2%	92.0%	-	-	-	-	-	92.9%	-	Armenia
76.2%	91.5%	2.1%	78.8%	60.3%	-	98.7%	-	-	-	-	91.3%	_	Azerbaijan
68.8%	98.0%	8.7%	83.3%	0.0%	100%	10.9%	-	-	-	-	83.6%	-	Belarus
50.0%	0.1%	100.0%	100.0%	100.0%	-	-	-	-	-	-	0.0%	-	Bosnia and Herzegovina
-	78.7%	0.0%	-	-	72.3%	67.0%	-	-	-	-	50.0%	-	former Yugoslav Republic of Macedonia, the
79.2%	96.1%	2.1%	91.8%	20.1%	-	29.3%	-	-	-	-	83.6%		Georgia
85.7%	100.0%	7.2%	88.9%	-	-	-	-	-	-	-	100.0%	_	Israel

								1.	. INTEGRATED,	PATIENT-CEN	TRED CARE AN	ND PREVENTIO	N
	Systematic screening of contacts and high-risk groups ¹		E: and ui	niversal acces	s of all forms o ss to drug-suso g the use of rap	ceptibility tes	s sting,			of care for all including dru	l people with t ug-resistant t	ment and conti tuberculosis, tuberculosis; treatment adhe	
Country	1A.1 Coverage of population at risk with systematic screening for active TB and LTB (TB contacts for 2016 assessment). Target = 80%	18.1 Percentage of TB patients diagnosed using WHO recommended rapid tests (Gg) Target = 40%	18.2 First-line DST coverage (%) among all bacteriologically confirmed TB cases (G1). Target = 100 %	18.3 RR/MDR-TB case detection rate (%) (G3) Target = 85%	18.4 TB notification rate per 100 000 population (E.1) Target = 24.6"	18.5 TB case detection rate (%) Target: Increase	18.6 Percentage of RR/MDR-TB among new TB patients Target = Decrease	18.7 Percentage of RR/MDR-TB among previously treated TB patients Target = Decrease	1C.1 Percentage of hospitalization of new TB patients (E3) Target = Decrease	1C.2 Percentage of detected RR/MDR-TB enrolled in treatment (G3) Target = 100%	1C.3 (%) among all new and relapsed TB patients (G4) Target = 85%	1C.4 (%) among the MDR-TBtreatment cohort (G4) (E4)	1C,5 TB mortality rate (ICD A15-19) (G10) (E6) Target = 2.7"
EU/EEA													
Kazakhstan ^a	-	85.3%	52.1%	166.2%	68.5	100%	25.5%	20.5%	85%	100.0%	90.6%	76.2%	2.4
Kyrgyzstan	-	36.1%	70.4%	49.4%	118.0	81%	21.9%		87%	97.1%	82.5%		
Moldova	96.2%	50.8%	64.1%	73.6%	88.0	87%	25.6%	57.4%	62%	95.0%	79.5%		
Monaco	-	-	-	-	-	-	-	-	-	-	-	-	0
Montenegro	-	28.7%	100.0%	-	13.8	87%	0.0%	0.0%	-	-	92.5%	-	0.19
Russia	100.0%	69.8%	91.0%	58.2%	64.2	98%	27.3%	65.2%	65%	94.0%	70.9%	50.6%	8.2
San Marino	-	-	-	-	-	-	0.0%	0.0%		-	-	-	0
Serbia	83.2%	48.7%	82.0%	42.1%	16.7	87%	0.5%	6.9%	70%	83.3%	89.3%	63.2%	0.96
Serbia excluding UN Administered Province of Kosovo ^b	-	-	73.6%	-	10.8	-	0.8%	7.5%	-	100.0%	83.1%	53.8%	
UN Administered Province of Kosovo ^b	-	100.0%	98.5%	-	38.6	-	0.0%	6.3%	-	50.0%	96.5%		
Switzerland	-	-	94.3%	81.8%	6.8	87%	4.3%	7.1%	80%	100.0%	0.0%		
Tajikistan	-	73.2%	89.7%	62.3%	68.3	80%	20.8%		56%	91.0%	89.4%		
Turkey	-	-	86.2%	73.1%	15.3	87%	2.2%	13.7%	50%	82.4%	86.8%	63.4%	
Turkmenistan	100.0%	76.8%	-	-	37.2	62%	-	_	-	100.0%	86.0%		
Ukraine	-	-	91.8%	86.5%	65.4	75%	22.0%	40.8%	86%	99.2%	75.1%		
Uzbekistan	-	76.4%	-	-	51.0	67%	-	-	_	100.0%	88.9%		
Subtotal non-EU/EEA	99.8%	53.5%	85.7%	69.0%	48.9	86.4%	22.6%	56.3%	69.80%	95.5%	78.0%		
Total European Region	99.3%	45.9%	87.0%	69.4%	27.6	87.3%	17.5%		71.10%	95.5%	77.2%		
Subtotal 18 HPC	99.8%	50.4%	86.1%	69.2%	52.3	86.6%	21.0%	54.3%	71.00%	95.5%	78.5%	54.7%	5.5

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. RR/MDR TB – rifampicin-resistant and multidrug-resistant tuberculosis. M/XDR-TB – Multidrug-resistant and extensively drug-resistant tuberculosis. Figures in red – target not met. Figures in green – target met.

Cases with missing information on previous history of TB treatment are included among new cases.
 These data are liable to change as the national TB registry was under review when this report was being produced.
 No data available for risk groups other than TB contacts.

							2.		S AND SUPPO	RTIVE SYSTEN	NS	3. INTENSIFIED RESEARCH AND INNOVATION	
		tuberculosis/h ent of relevant		S	Manageme tuberculosi and preventi of persons a and vaccinal tuberc	s infection ve treatment it high risk, ion against	Political commitment with adequate resources, including universal health coverage policy	Health systems strengthening in all functions, including well-aligned financing mechanisms for tuberculosis and human resources	Regulatory frameworks for case- based surveillance, strengthening vital registration, quality and rational use of medicines, and pharmacovigilance	Community systems and civil society engagement	Social protection, poverty alleviation and actions on other determinants of tuberculosis, such as migration and prisons	Discovery, development and rapid uptake of new tools, interventions and strategies	
1D.1 TB/HIV case-detection rate (%) Target = Close to 100 %	10.2 HIV testing coverage (%) (G6) (E6) Target = 100%	1D.3 Percentage of HIV among all TB Target = Decrease	D.4 ART enrolment rate (%) amongTB-HIV co-infected Target = Close to 100%	D.4 ART enrolment rate (%) amongTB-HIV co-infected Target = Close to 100%	1E.1 Contact investigation coverage aged under 5 years(G3) (Ey) Target = 90%	1E.2 LTBI treatment coverage of childhood TB contacts aged under 5 years (65b) (E8) Target = 90%	2A.1 Number of Members States that have a regular TB control/elimination performance publication every five years (EB) Target - TB control/elimination	2B.1 Percentage of TB patients and their households that experience catastrophic financial consequences due to TB (G8) Target: close to o	2C.1 Treatment coverage (%) with new TB drugs Target = 20%	2D.1 Number of member states with functioning multi-stakeholder coalitions advocating for TB care and resource	2E.1 Treatment success rate (%) of new and relapsed TB cases among prisoners Target = 85.0%	3A.1 European 1B research init iative established by mid-2016 Target is not defined yet	Country
													EU/EEA
99.3%	86.2%	5.4%	83.0%	42.9%	-	-	-	-	-	-	79.3%	-	Kazakhstan
75.0%	89.0%	3.4%	68.6%	40.0%	-	76.4%	-	-	-	-	77.1%	-	Kyrgyzstan
79.2%	94.3%	8.7%	65.9%	0.0%	96%	66.9%	-	-	-	-	86.5%	-	Moldova
-	-	-	-	-	-	-	-	-	-	-		-	Monaco
-	69.0%	0.0%	-	-	-	-	-	-	-	-	100.0%	-	Montenegro
92.1%	86.5%	20.7%	63.7%	92.7%	100%	81.6%	-	-	-	-	54.2%	-	Russia
-	-	-	-	-	-	-	-	-	-	-		-	San Marino
50.0%	32.7%	1.0%	100.0%	-	83.2%	-	-	-	-	-	100.0%	-	Serbia
-	11.1%	6.0%	100.0%	-	-	-	-	-	-	-	-	-	Serbia excluding UN Administered Province of Kosovo ^d
-	55.5%	0.0%	-	-	-	-	-	-	-	-	-	-	UN Administered Province of Kosovo ^d
-	-	-	-	-	-	-	-	-	-	-	-	-	Switzerland
80.4%	98.1%	3.4%	90.5%	57.1%	-		-	-	-	-	93.4%	-	Tajikistan
60.9%	70.2%	0.7%	91.1%	-	-	54.8%	-	-	-	-	79.0%	-	Turkey
0.0%	0.0%	0.0%	-		100.0%	-	-	-	-	-		-	Turkmenistan
72.0%	97.0%	20.7%	67.6%	51.6%	-	-	-	-	-	-	73.5%	-	Ukraine
63.2%	100.0%	4.1%	65.4%	100.0%	-	-	-	-	-	-	-	-	Uzbekistan
84.0%	88.5%	14.4%	65.9%	70.0%	99.8%	79.5%	-	-	-	-	59.5%		Subtotal non-EU/EEA
82.9%	86.1%	13.4%	65.1%	70.1%	99.3%	75.3%	-	-	-	-	55.9%		Total European Region
83.8%	88.6%	13.6%	66.1%	70.1%	99.8%	75.9%	-	-	-	-	59.8%	-	Subtotal 18 HPC



Table I: Estimated TB mortality per 100 000 population, European Region, 2007–2016

	20	07	20	8	20	09	20	10	20	11	20	12
Country	N	Rate per 100 000	N	Rate per								
EU/EEA												
Austria	47	0.6	49	(0.6)	48	(0.6)	39	(0.5)	55	(0.7)	42	(0.5)
Belgium	86	0.8	78	(0.7)	60	(0.6)	60	(0.6)	53	(0.5)	59	(0.5)
Bulgaria	280	3.7	240	(3.2)	200	(2.7)	200	(2.8)	170	(2.4)	170	(2.4)
Croatia	100	2.3	100	(2.4)	120	(2.8)	83	(1.9)	66	(1.5)	60	(1.4)
Cyprus	1	0.1	1	(0.1)	0	(0.0)	1	(0.1)	4	(0.3)	5	(0.4)
Czech Republic	71	0.7	54	(0.5)	52	(0.5)	40	(0.4)	56	(0.5)	30	(0.3)
Denmark	27	0.5	17	(0.3)	28	(0.5)	37	(0.7)	17	(0.3)	23	(0.4)
Estonia	66	4.9	56	(4.2)	50	(3.7)	42	(3.1)	46	(3.5)	36	(2.7)
Finland	56	1.1	60	(1.1)	54	(1.0)	48	(0.9)	61	(1.1)	49	(0.9)
France	730	1.2	700	(1.1)	690	(1.1)	660	(1.0)	650	(1.0)	550	(0.9)
Germany	460	0.6	370	(0.5)	350	(0.4)	360	(0.5)	350	(0.4)	370	(0.5)
,	100		86	(0.8)	94						110	
Greece		0.9				(0.8)	78	(0.7)	75	(0.7)		(1.0)
Hungary	220	2.2	190	(1.9)	170	(1.7)	150	(1.6)	130	(1.3)	130	(1.3)
Iceland	5	1.7	1	(0.3)	7	(2.2)	2	(0.6)	1	(0.3)	1	(0.3)
Ireland	53	1.2	32	(0.7)	36	(0.8)	35	(0.8)	29	(0.6)	27	(0.6)
Italy	400	0.7	400	(0.7)	410	(0.7)	380	(0.6)	390	(0.7)	340	(0.6)
Latvia	150	7.0	120	(5.7)	110	(5.2)	91	(4.3)	80	(3.8)	62	(3.0)
Liechtenstein	-	-	-	-	_	- ()	-	-	_	-	-	_
Lithuania	360	11.0	350	(11.0)	270	(8.5)	220	(7.2)	220	(7.1)	260	(8.5)
Luxembourg	2	0.4	0	(0.0)	0	(0.0)	1	(0.2)	2	(0.4)	0	(0.0)
Malta	6	1.5	1	(0.2)	1	(0.2)	1	(0.2)	3	(0.7)	1	(0.2)
Netherlands	57	0.4	53	(0.3)	66	(0.4)	56	(0.3)	37	(0.2)	35	(0.2)
Norway	36	0.8	26	(0.6)	28	(0.6)	29	(0.6)	29	(0.6)	22	(0.4)
Poland	830	2.2	880	(2.3)	810	(2.1)	630	(1.6)	690	(1.8)	680	(1.8)
Portugal	290	2.7	260	(2.5)	280	(2.6)	230	(2.1)	230	(2.2)	230	(2.2)
Romania	1600	7.7	1600	(7.9)	1500	(7.4)	1500	(7.3)	1300	(6.4)	1300	(6.3)
Slovakia	35	0.7	43	(0.8)	43	(0.8)	35	(0.7)	26	(0.5)	17	(0.3)
Slovenia	29	1.5	35	(1.7)	25	(1.2)	20	(1.0)	14	(0.7)	11	(0.5)
Spain	420	0.9	360	(0.8)	410	(0.9)	400	(0.9)	300	(0.6)	330	(0.7)
Sweden	63	0.7	64	(0.7)	61	(0.7)	36	(0.4)	47	(0.5)	39	(0.4)
United Kingdom	400	0.7	440	(0.7)	410	(0.7)	370	(0.6)	330	(0.5)	330	(0.5)
Subtotal EU/EEA	7000	(1.4)	6700	(1.3)	6400	(1.3)	5800	(1.1)	5500	(1.1)	5300	(1.0)
Non-EU/EEA												
Albania	10	(0.3)	21	(0.7)	6	(0.2)	9	(0.3)	8	(0.3)	8	(0.3)
Andorra	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Armenia	250	(8.6)	260	(8.8)	220	(7.5)	210	(7.3)	160	(5.5)	180	(6.2)
Azerbaijan	340	(3.9)	420	(4.7)	610	(6.8)	730	(8.1)	600	(6.5)	390	(4.2)
Belarus	1000	(11.0)	950	(10.0)	860	(9.1)	870	(9.2)	850	(9.0)	770	(8.1)
Bosnia and Herzegovina	200	(5.2)	200	(5.2)	200	(5.2)	190	(5.2)	190	(5.2)	170	(4.8)
former Yugoslav Republic of Macedonia, the	60	(2.9)	48	(2.3)	19	(0.9)	34	(1.7)	27	(1.3)	23	(1.1)
Georgia	220	(5.1)	220	(5.1)	230	(5.4)	230	(5.4)	230	(5.5)	220	(5.4)
Israel	40	(0.6)	28	(0.4)	24	(0.3)	28	(0.4)	22	(0.3)	22	(0.3)
Kazakhstan	3300	(21.0)	3100	(19.0)	2500	(15.0)	2100	(13.0)	1900	(11.0)	1800	(10.0)
	730	(14.0)	640	(12.0)	620	(12.0)	610	(11.0)	680	(12.0)	640	(11.0)
Kyrgyzstan Moldova	690	(17.0)	620	(12.0)	630	(12.0)	570	(14.0)	510	(12.0)	490	(12.0)
Monaco	0	(0.2)	0		030	(0.3)	0	(0.3)	0		490	(0.1)
	8	(1.3)	3	(0.3)	1		1		1	(0.2)	1	(0.1)
Montenegro				(0.6)		(0.2)		(0.2)		(0.2)		
Russia San Marina	27000	(19.0)	27000	(19.0)	25 000	(18.0)	23 000	(16.0)	21000	(15.0)	19 0 0 0	(13.0)
San Marino	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Serbia	270	(2.9)	200	(2.2)	190	(2.1)	180	(2.0)	150	(1.7)	160	(1.8)
Switzerland	29	(0.4)	34	(0.5)	27	(0.4)	28	(0.4)	25	(0.3)	23	(0.3)
Tajikistan	850	(12.0)	790	(11.0)	740	(9.9)	690	(9.0)	640	(8.2)	600	(7.5)
Turkey	760	(1.1)	820	(1.2)	850	(1.2)	740	(1.0)	960	(1.3)	830	(1.1)
Turkmenistan	700	(14.0)	630	(13.0)	640	(13.0)	700	(14.0)	600	(12.0)	490	(9.3)
Ukraine	11 000	(24.0)	11 000	(23.0)	8700	(19.0)	8000	(17.0)	7200	(16.0)	7100	(16.0)
Uzbekistan	2900	(11.0)	2600	(9.5)	2400	(8.4)	2200	(7.7)	2100	(7.1)	1800	(6.2)
Subtotal non-EU/EEA	50000	(13.1)	50000	(13.0)	44000	(11.4)	41000	(10.6)	38000	(9.7)	35 000	(8.9)
Total European Region	58 000	(6.5)	56 000	(6.3)	51000	(5.7)	47000	(5.2)	44000	(4.9)	40000	(4.4)
Subtotal 18 HPC	52000	(13.5)	51000	(13.2)	46000	(11.9)	43000	(11.1)	39 000	(10.0)	36 000	(9.2)

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics.

20:	13	20:	14	201	.5	20:	16	Mean annual	Mean annual	
N	Rate per	N	Rate per	N	Rate per	N	Rate per 100 000	% change in rate, 2012-2016	% change in rate, 2007-2016	Country
								2012-2010	200/-2010	EU/EEA
68	(0.8)	71	(0.8)	71	(0.8)	71	(0.8)	13.7%	4.1%	Austria
56	(0.5)	41	(0.4)	42	(0.4)	42	(0.4)	-8.6%		Belgium
150	(2.1)	140	(2.0)	130	(1.9)	120	(1.7)	-8.3%		Bulgaria
54	(1.3)	40	(1.0)	46	(1.1)	27	(0.6)	-18.1%		Croatia
1	(0.1)	5	(0.4)	5	(0.4)	5	(0.4)	-0.6%		Cyprus
67	(0.6)	39	(0.4)	57	(0.5)	57	(0.5)	16.8%		Czech Republic
17	(0.3)	13	(0.2)	13	(0.2)	13	(0.2)	-12.5%		Denmark
26	(1.9)	29	(2.2)	21	(1.6)	16	(1.2)	-18.4%		Estonia
31	(0.6)	41	(0.7)	34	(0.6)	31	(0.6)	-11.4%		Finland
570	(0.9)	490	(0.8)	450	(0.7)	410	(0.6)	-7.8%		France
380	(0.5)	320	(0.4)	320	(0.4)	320	(0.4)			Germany
	(0.5)		(0.4)				(0.4)	-3.5%		
78 98	(1.0)	55 87	(0.5)	55 98	(0.5)	55		-16.1%	-6.6%	
					(1.0)	72	(0.7)	-13.1%		Hungary
0	(0.0)	0	(0.0)	2	(0.6)	2	(0.6)	18.4%		Iceland
23	(0.5)	23	(0.5)	23	(0.5)	23	(0.5)	-4.1%		Ireland
340	(0.6)	340	(0.6)	330	(0.6)	330	(0.6)	0.0%	-2.1%	
100	(5.1)	67	(3.3)	51	(2.6)	39	(2.0)	-9.6%	-13.0%	
-	-	-	-	-	-	-	- (: :)	-	-	Liechtenstein
210	(7.1)	230	(7.8)	190	(6.5)	190	(6.4)	-6.8%		Lithuania
0	(0.0)	1	(0.2)	1	(0.2)	1	(0.2)	-		Luxembourg
3	(0.7)	1	(0.2)	1	(0.2)	1	(0.2)	0.0%	-18.4%	
40	(0.2)	35	(0.2)	37	(0.2)	38	(0.2)	1.2%	-5.0%	Netherlands
21	(0.4)	13	(0.3)	13	(0.3)	13	(0.3)	-13.2%	-11.5%	Norway
580	(1.5)	580	(1.5)	520	(1.4)	480	(1.3)	-7.8%	-5.7%	Poland
230	(2.2)	220	(2.1)	220	(2.1)	210	(2.0)	-2.4%	-3.3%	Portugal
1200	(5.8)	1100	(5.7)	1100	(5.4)	1000	(5.1)	-5.1%		Romania
20	(0.4)	35	(0.6)	35	(0.6)	35	(0.6)	18.9%		Slovakia
9	(0.4)	21	(1.0)	11	(0.5)	13	(0.6)	3.1%		Slovenia
300	(0.6)	290	(0.6)	280	(0.6)	280	(0.6)	-3.4%		Spain
43	(0.5)	30	(0.3)	25	(0.3)	25	(0.3)	-11.6%	-10.7%	
350	(0.5)	350	(0.5)	350	(0.5)	350	(0.5)	1.4%		United Kingdom
5100	(1.0)	4700	(0.9)	4500	(0.9)	4300	(0.8)	-5.2%		Subtotal EU/EEA
J.100	(110)	1,00	(01))	1000	(01))	1000	(515)	J	,,,,,	Non-EU/EEA
8	(0.3)	8	(0.3)	8	(0.3)	8	(0.3)	0.0%	-1.4%	Albania
0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	-		Andorra
140	(4.7)	100	(3.6)	88	(3.0)	62	(2.1)	-23.7%		Armenia
390	(4.2)	390	(4.1)	500	(5.2)	620	(6.4)	11.1%	5.7%	Azerbaijan
640	(6.8)	510	(5.3)	370	(3.9)	230	(2.4)	-26.2%		Belarus
160	(4.3)	140	(3.9)	140	(3.9)	140	(3.9)			Bosnia and Herzegovina
100		140	(3.9)	140	(3.9)	140		-5.1%	-3.1/0	
20	(1.0)	20	(1.0)	20	(1.0)	20	(1.0)	-2.8%	-11.4%	former Yugoslav Republic of Macedonia, the
210	(5.1)	200	(5.1)	200	(5.0)	190	(4.8)	-2.9%	-0.7%	Georgia
15	(0.2)	15	(0.2)	15	(0.2)	150	(0.2)	-10.0%	-11.7%	
1200	(6.7)	1000	(5.8)	800	(4.5)	440	(2.4)	-30.0%		Kazakhstan
650	(11.0)	540	(9.4)	480	(8.3)	430	(7.2)	-10.1%		Kyrgyzstan
	()		()		()					
360	(8.7)	350	(0.0)	300	(0.0)	260	(6.3)	-14.9%		Moldova Monaco
1		0						-100.0%		
	(0.2)	15,000	(0.2)	14,000	(0.2)	12,000	(0.2)	0.0%		Montenegro
17000	(12.0)	15 0 0 0	(11.0)	14 000	(9.5)	12 000	(8.2)	-10.9%	-8.9%	Russia
0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	-		San Marino
150	(1.6)	120	(1.3)	87	(1.0)	84	(1.0)	-14.5%		Serbia
20	(0.2)	20	(0.2)	20	(0.2)	20	(0.2)	-4.6%		Switzerland
570	(7.0)	530	(6.4)	520	(6.0)	520	(6.0)	-5.4%		Tajikistan
760	(1.0)	670	(0.9)	580	(0.7)	480	(0.6)	-13.7%		Turkey
450	(8.4)	560	(10.0)	460	(8.3)	430	(7.6)	-4.9%		Turkmenistan
6200	(14.0)	5400	(12.0)	4800	(11.0)	4200	(9.5)	-12.2%		Ukraine
1800	(6.0)	1900	(6.1)	1900	(6.0)	1900	(5.9)	-1.2%	-6.7%	Uzbekistan
31000	(7.8)	27000	(6.8)	25000	(6.2)	22000	(5.5)	-11.5%		Subtotal non-EU/EEA
24000	(4.0)	33000	(3.6)	20,000	(2.2)	26,000	(2.8)	-40 F%	-9 -0/	Total European Region
36000	(4.0)	22000	(3.0)	29000	(3.2)	26000	(2.0)	-10.5%	-0.9/	Total European Region

Table II: Estimated TB incidence per 100 000 population, European Region, 2007–2016

	20	07	20	08	20	09	20	10	20	11	20	12	
Country	N	Rate per 100 000	N	Rate per	N	Rate per	N	Rate per 100 000	N	Rate per 100 000	N	Rate per	
EU/EEA													
Austria	930	(11.0)	870	(10.0)	760	(9.1)	760	(9.1)	770	(9.1)	710	(8.4)	
Belgium	1100	(10.0)	1100	(10.0)	1100	(9.7)	1200	(11.0)	1100	(10.0)	1000	(9.4)	
Bulgaria	3600	(47.0)	3700	(49.0)	3300	(45.0)	3000	(41.0)	2700	(37.0)	2600	(36.0)	
Croatia	1100	(25.0)	1100	(26.0)	960	(22.0)	790	(18.0)	710	(17.0)	620	(14.0)	
Cyprus	47	(4.4)	55	(5.1)	59	(5.3)	70	(6.3)	59	(5.2)	72	(6.4)	
Czech Republic	910	(8.8)	930	(8.9)	730	(6.9)	710	(6.8)	650	(6.2)	650	(6.1)	
Denmark	410	(7.5)	380	(6.9)	340	(6.1)	380	(6.9)	410	(7.4)	390	(7.0)	
Estonia	480	(36.0)	440	(33.0)	400	(30.0)	370	(28.0)	340	(25.0)	310	(24.0)	
Finland	340	(6.5)	380	(7.2)	460	(8.7)	350	(6.6)	360	(6.7)	300	(5.5)	
France	6300	(10.0)	6300	(10.0)	5700	(9.1)	5600	(8.8)	5500	(8.7)	5500	(8.6)	
Germany	5400	(6.6)	4800	(5.9)	4800	(5.9)	4700	(5.8)	4700	(5.8)	4600	(5.7)	
Greece	710	(6.2)	670	(5.9)	620	(5.4)	510	(4.5)	520	(4.6)	600	(5.2)	
Hungary	1800	(18.0)	1600	(16.0)	1500	(15.0)	1800	(18.0)	1500	(15.0)	1300	(14.0)	
Iceland	14	(4.5)	7	(2.2)	10	(3.3)	25	(7.9)	9	(2.8)	12	(3.5)	
Ireland	500	(11.0)	490	(11.0)	490	(11.0)	450	(9.6)	450	(9.6)	390	(8.4)	
		(5.3)		(8.0)	4700	(7.9)		(8.7)		(6.6)		(6.0)	
Italy	3200		4700				5200		3900		3600		
Latvia Liechtenstein	1400	(62.0)	1200	(57.0)	1100	(53.0)	1100	(51.0)	1000	(50.0)	1000	(50.0)	
												((0,0)	
Lithuania	2600	(80.0)	2500	(78.0)	2400	(76.0)	2300	(73.0)	2200	(70.0)	2100	(68.0)	
Luxembourg	45	(9.4)	32	(6.6)	31	(6.3)	33	(6.6)	29	(5.5)	52	(9.7)	
Malta	44	(11.0)	55	(13.0)	48	(12.0)	33	(8.0)	34	(8.2)	48	(11.0)	
Netherlands	1100	(6.5)	1100	(6.7)	1300	(7.8)	1200	(7.1)	1100	(6.7)	1100	(6.3)	
Norway	330	(6.9)	340	(7.2)	380	(7.8)	340	(6.9)	370	(7.4)	390	(7.9)	
Poland	9200	(24.0)	8500	(22.0)	8800	(23.0)	8100	(21.0)	9100	(24.0)	8100	(21.0)	
Portugal	3400	(32.0)	3200	(30.0)	3100	(29.0)	3000	(28.0)	2900	(27.0)	2900	(27.0)	
Romania	26 000	(123.0)	25 000	(120.0)	24 000	(115.0)	21000	(105.0)	20000	(97.0)	19000	(92.0)	
Slovakia	720	(13.0)	670	(12.0)	520	(9.6)	470	(8.7)	430	(8.0)	370	(6.8)	
Slovenia	250	(12.0)	240	(12.0)	210	(11.0)	190	(9.5)	210	(10.0)	150	(7.5)	
Spain	8 4 0 0	(19.0)	8900	(19.0)	8300	(18.0)	7900	(17.0)	7400	(16.0)	6500	(14.0)	
Sweden	530	(5.8)	590	(6.4)	660	(7.1)	710	(7.5)	620	(6.5)	680	(7.1)	
United Kingdom	9000	(15.0)	9300	(15.0)	9100	(15.0)	8800	(14.0)	9500	(15.0)	9300	(14.0)	
Subtotal EU/EEA	90000	(17.9)	89000	(17.6)	86000	(16.9)	81000	(15.9)	79 000	(15.5)	74000	(14.5)	
Non-EU/EEA										()			
Albania	500	(17.0)	490	(16.0)	510	(17.0)	500	(17.0)	490	(17.0)	470	(16.0)	
Andorra	6	(7.0)	5	(5.5)	9	(11.0)	8	(9.5)	3	(4.1)	10	(13.0)	
Armenia	2100	(72.0)	2100	(71.0)	2000	(68.0)	1800	(61.0)	1600	(55.0)	1500	(53.0)	
Azerbaijan	6900	(79.0)	9500	(108.0)	12 000	(133.0)	9400	(104.0)	11 000	(125.0)	8000	(86.0)	
Belarus	6900	(73.0)	6800	(72.0)	6700	(70.0)	6500	(69.0)	6300	(67.0)	6100	(64.0)	
Bosnia and Herzegovina	3000	(79.0)	2100	(57.0)	2200	(58.0)	1700	(44.0)	1700	(46.0)	1800	(48.0)	
former Yugoslav Republic of Macedonia, the	660	(32.0)	560	(27.0)	560	(27.0)	480	(23.0)	420	(20.0)	430	(21.0)	
Georgia	6600	(149.0)	6100	(140.0)	5700	(133.0)	5400	(127.0)	5100	(122.0)	4900	(119.0)	
Israel	460	(6.6)	370	(5.2)	400	(5.5)	390	(5.3)	470	(6.3)	580	(7.6)	
Kazakhstan	26 000	(163.0)	25 000	(156.0)	24 000	(151.0)	24000	(145.0)	22 000	(134.0)	21000	(121.0)	
Kyrgyzstan	9300	(179.0)	8700	(165.0)	8200	(153.0)	7800	(145.0)	7700	(141.0)	7800	(140.0)	
Moldova	5 600	(135.0)	5100	(125.0)	5100	(126.0)	4800	(116.0)	4900	(119.0)	5100	(124.0)	
Monaco	1	(2.8)	1	(3.2)	1	(3.3)	1	(3.1)	1	(2.4)	1	(1.5)	
Montenegro	170	(27.0)	150	(24.0)	130	(21.0)	130	(20.0)	130	(20.0)	110	(18.0)	
Russia	128 000	(90.0)	130 000	(91.0)	127 000	(89.0)	123 000	(86.0)	116000	(81.0)	109000	(76.0)	
San Marino	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	
Serbia	3300	(36.0)	3100	(34.0)	2900	(32.0)	2700	(30.0)	2500	(28.0)	2200	(24.0)	
Switzerland	480	(6.4)	530	(7.0)	580	(7.5)	580	(7.5)	600	(7.6)	480	(6.0)	
Tajikistan	12 000	(169.0)	11 000	(155.0)	11000	(141.0)	9800	(128.0)	9100	(117.0)	8600	(108.0)	
Turkey	22 000	(31.0)	20000	(29.0)	19000	(27.0)	18000	(25.0)	17000	(24.0)	16000	(22.0)	
Turkmenistan	4300	(88.0)	4700	(95.0)	3900	(79.0)	4000	(79.0)	3400	(66.0)	3700	(70.0)	
Ukraine	57000	(123.0)	55 000	(119.0)	53 000	(115.0)	50000	(110.0)	48000	(105.0)	46000	(101.0)	
Uzbekistan	30 000	(110.0)	29000	(105.0)	29000	(101.0)	28000	(97.0)	27000	(93.0)	26000	(89.0)	
Subtotal non-EU/EEA	325000	(85.0)	320000	(83.3)	314 000	(81.4)	299000	(77.1)	285000	(73.0)	270 000	(68.8)	
			410 000			(44.7)	380000	(42.4)	365 000	(40.5)	343000	(38.0)	
Total European Region	415 000	(46.8)	410000	(46.1)	399000						54 4 0 0 0 0		

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics.

20	13	20	14	20:	15	20	16	Mean annual	Mean annual	
N	Rate per 100 000	N	Rate per 100 000	N	Rate per 100 000	N	Rate per 100 000	% change in rate, 2012–2016	% change in rate, 2007–2016	Country
										EU/EEA
720	(8.4)	650	(7.5)	650	(7.5)	710	(8.2)	-0.6%	-3.2%	Austria
1000	(9.3)	1000	(9.1)	1100	(9.5)	1100	(10.0)	1.6%	0.0%	Belgium
2400	(33.0)	2300	(32.0)	2000	(28.0)	1900	(27.0)	-6.9%	-6.0%	Bulgaria
590	(14.0)	570	(13.0)	560	(13.0)	520	(12.0)	-3.8%	-7.8%	Croatia
47	(4.1)	45	(3.9)	72	(6.2)	66	(5.6)	-3.3%	2.7%	Cyprus
540	(5.1)	550	(5.1)	580	(5.5)	530	(5.0)	-4.8%	-6.1%	Czech Republic
380	(6.7)	340	(5.9)	370	(6.5)	350	(6.1)	-3.4%		Denmark
290	(22.0)	270	(20.0)	240	(18.0)	220	(16.0)	-9.6%	-8.6%	Estonia
310	(5.6)	290	(5.3)	310	(5.6)	260	(4.7)	-3.9%		Finland
5500	(8.6)	5300	(8.2)	5 2 0 0	(8.1)	5000	(7.7)	-2.7%		France
4800	(5.9)	5000	(6.1)	6500	(8.0)	6600	(8.1)	9.2%		Germany
570	(5.0)	560	(4.9)	500	(4.5)	490	(4.4)	-4.1%		Greece
1200	(12.0)	920	(9.4)	990	(10.0)	860	(8.8)	-11.0%		Hungary
13	(3.9)	9	(2.8)	8	(2.4)	7	(2.1)	-12.0%		Iceland
410	(8.7)	340	(7.3)	340	(7.2)	340	(7.1)	-4.1%		Ireland
3500	(5.8)	3900	(6.5)	4000	(6.7)	3700	(6.1)	0.4%	1.6%	
1000	(50.0)	990	(49.0)	800	(40.0)	740	(37.0)	-7.3%	-	Latvia
-	- ()	-	-	-	-	-	-	-		Liechtenstein
1900	(65.0)	1800	(62.0)	1600	(55.0)	1500	(53.0)	-6.0%		Lithuania
44	(8.0)	28	(5.0)	34	(6.1)	33	(5.8)	-12.1%		Luxembourg
58	(14.0)	52	(12.0)	37	(8.6)	58	(13.0)	4.3%		Malta
960	(5.7)	940	(5.5)	980	(5.8)	1000	(5.9)	-1.6%		Netherlands
420	(8.2)	350	(6.8)	330	(6.3)	320	(6.1)	-6.3%		Norway
8100	(21.0)	7500	(20.0)	7200	(19.0)	7100	(18.0)	-3.8%		Poland
2700	(26.0)	2500	(24.0)	2400	(23.0)	2100	(20.0)	-7.2%	-	Portugal
18000	(89.0)	17000	(86.0)	16000	(82.0)	15000	(74.0)	-5.3%		Romania
460	(8.4)	370	(6.8)	350	(6.5)	320	(5.9)	-3.5%		Slovakia
160	(7.7)	160	(7.9)	150	(7.2)	140	(6.5)	-3.5%		Slovenia
6000	(13.0)	5500	(12.0)	4600	(10.0)	4700	(10.0)	-8.1%		Spain
700 8300	(7.3) (13.0)	730 7400	(7.5)	900 6600	(9.2) (10.0)	810	(8.2)	3.7%		Sweden
71000	(13.0)	67000	(11.0) (13.1)	65000	(12.7)	6500 63000	(12.3)	-8.3%		United Kingdom Subtotal EU/EEA
71000	(13.9)	07000	(13.1)	03000	(12.7)	03000	(12.3)	-4.1%	-4,170	Non-EU/EEA
550	(19.0)	470	(16.0)	480	(16.0)	480	(16.0)	0.0%	-0.7%	Albania
6	(7.1)	7	(8.7)	5	(5.9)	5	(6.0)	-17.6%		Andorra
1700	(60.0)	1700	(57.0)	1400	(47.0)	1300	(44.0)	-4.5%		Armenia
7300	(78.0)	7200	(76.0)	6800	(71.0)	6400	(66.0)	-6.4%		Azerbaijan
5800	(61.0)	5500	(58.0)	5200	(55.0)	4900	(52.0)	-5.1%		Belarus
1600	(44.0)	1500	(42.0)	1400	(39.0)	1100	(32.0)	-9.6%		Bosnia and Herzegovina
400	(19.0)	350	(17.0)	350	(17.0)	330	(16.0)	-6.6%	-7.4%	former Yugoslav Republic of Macedonia, the
4700	(116.0)	4200	(106.0)	3900	(99.0)	3600	(92.0)	-6.2%	-5.2%	Georgia
350	(4.5)	420	(5.2)	320	(4.0)	290	(3.5)	-17.6%	-6.8%	
18000	(107.0)	16000	(93.0)	14000	(79.0)	12000	(67.0)	-13.7%		Kazakhstan
8000	(141.0)	8200	(142.0)	8400	(144.0)	8700	(145.0)	0.9%		Kyrgyzstan
5200	(127.0)	4700	(115.0)	4100	(102.0)	4100	(101.0)	-5.0%		Moldova
0	(0.6)	0	(0.0)	0	(0.0)	0	(0.0)	_		Monaco
140	(22.0)	130	(21.0)	92	(15.0)	100	(16.0)	-2.9%		Montenegro
104000	(73.0)	101 000	(70.0)	97000	(68.0)	94000	(66.0)	-3.5%		Russia
0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	-	-	San Marino
2400	(27.0)	2100	(24.0)	1900	(21.0)	1700	(19.0)	-5.7%	-6.9%	Serbia
540	(6.6)	490	(5.9)	610	(7.3)	660	(7.8)	6.8%	2.2%	Switzerland
8100	(100.0)	7600	(91.0)	7400	(86.0)	7500	(85.0)	-5.8%		Tajikistan
15000	(20.0)	15 0 0 0	(20.0)	14000	(18.0)	14000	(18.0)	-4.9%		Turkey
3800	(71.0)	3200	(59.0)	3800	(68.0)	3400	(60.0)	-3.8%		Turkmenistan
44000	(96.0)	42000	(94.0)	41000	(91.0)	39000	(87.0)	-3.7%		Ukraine
26000	(86.0)	25000	(82.0)	25000	(79.0)	24000	(76.0)	-3.9%		Uzbekistan
258 000	(65.3)	247000	(62.1)	237000	(59.2)	228000	(56.6)	-4.7%		Subtotal non-EU/EEA
329000	(36.3)	315000	(34.6)	303000	(33.2)	290000	(31.6)	-4.4%		Total European Region
275 000	(69.7)	264000	(66.5)	253 000	(63.4)	242000	(60.4)	-4.9%	-4.5%	Subtotal 18 HPC

Table III: Tuberculosis cases in children under 15 years, European Region, 2012–2016a

		2012			2013			2014			2015			2016	
Country	N	% among all TB cases	Rate	N	% among all TB cases	Rate	N	% among all TB cases	Rate	N	% among all TB cases	Rate	N	% among all TB cases	Rate
EU/EEA															
Austria	27	(4.2)	2.2	23	(3.5)	1.9	14	(2.4)	1.1	20	(3.4)	1.6	31	(4.9)	2.5
Belgium	63	(6.5)	3.3	58	(6.0)	3.1	60	(6.3)	3.2	69	(7.1)	3.6	59	(5.6)	3.1
Bulgaria	178	(7.8)	18.2	146	(7.6)	14.7	145	(7.7)	14.6	118	(7.1)	11.8	126	(7.9)	12.6
Croatia ^b	12	(2.1)	1.9	4	(0.8)	0.6	2	(0.4)	0.3	13	(2.7)	2.1	6	(1.3)	1.0
Cyprus	3	(4.3)	2.1	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0
Czech Republic	5	(8.0)	0.3	5	(1.0)	0.3	6	(1.2)	0.4	5	(1.0)	0.3	10	(1.9)	0.6
Denmark	17	(4.4)	1.7	22	(6.2)	2.3	9	(2.8)	0.9	15	(4.2)	1.6	18	(5.5)	1.9
Estonia	2	(0.7)	1.0	1	(0.3)	0.5	1	(0.4)	0.5	2	(0.9)	1.0	4	(2.1)	1.9
Finland France ^c	5 232	(1.8)	0.6	2 257	(0.7)	0.2	10 257	(3.8)	1.1	11 246	(4.0) (5.2)	1.2	269	(2.5)	0.7 2.2
Germany	173	(4.0)	1.6	171	(3.9)	1.6	142	(3.1)	1.3	196	(3.3)	1.8	233	(3.9)	2.2
Greece	41	(7.3)	2.5	30	(5.6)	1.9	10	(1.9)	0.6	11	(2.3)	0.7	233	(5.0)	1.4
Hungary	9	(0.7)	0.6	8	(0.8)	0.6	4	(0.5)	0.3	9	(1.0)	0.6	6	(0.8)	0.4
Iceland	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0
Ireland	10	(2.8)	1.0	9	(2.4)	0.9	7	(2.3)	0.7	14	(4.9)	1.4	17	(5.3)	1.6
Italy	206	(4.8)	2.5	205	(5.2)	2.5	201	(5.1)	2.4	177	(4.7)	2.1	158	(3.9)	1.9
Latvia	57	(5.7)	19.5	45	(5.0)	15.4	41	(5.4)	13.9	25	(3.5)	8.4	23	(3.5)	7.7
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	56	(3.1)	12.6	37	(2.2)	8.5	22	(1.4)	5.1	36	(2.4)	8.5	47	(3.3)	11.1
Luxembourg	3	(6.7)	3.3	1	(2.6)	1.1	0	(0.0)	0.0	2	(6.7)	2.1	1	(3.4)	1.1
Malta	2	(4.8)	3.2	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0
Netherlands	50	(5.2)	1.7	33	(3.9)	1.1	48	(5.9)	1.7	42	(4.9)	1.5	49	(5.5)	1.8
Norway	19	(5.1)	2.1	16	(4.1)	1.7	14	(4.3)	1.5	20	(6.4)	2.1	14	(4.7)	1.5
Poland	95	(1.3)	1.6	116	(1.6)	2.0	70	(1.0)	1.2	81	(1.3)	1.4	103	(1.6)	1.8
Portugal	75	(2.9)	4.8	51	(2.1)	3.3	42	(1.8)	2.8	34	(1.6)	2.3	33	(1.8)	2.3
Romania	717	(3.9)	22.5	695	(4.2)	22.1	639	(4.0)	20.6	655	(4.3)	21.3	596	(4.4)	19.4
Slovakia	19	(5.5)	2.3	38	(9.5)	4.6	46	(13.7)	5.5	67	(21.1)	8.1	61	(20.6)	7.3
Slovenia	5	(3.6)	1.7	2	(1.4)	0.7	3	(2.1)	1.0	1	(0.8)	0.3	3	(2.5)	1.0
Spain	388	(6.4)	5.5	382	(6.8)	5.4	295	(6.0)	4.2	365	(7.3)	5.2	268	(5.5)	3.8
Sweden	25	(4.0)	1.6	49	(7.7)	3.0	54	(8.2)	3.3	47	(5.8)	2.8	58	(8.0)	3.4
United Kingdom Subtotal EU/EEA	412 2906	(4.7) (4.2)	3.7 3.7	315 2721	(4.0) (4.1)	2.8 3.4	280 2422	(4.0) (4.0)	2.5 3.0	226 2507	(3.6) (4.1)	2.0 3.0	226 2447	(3.7) (4.1)	2.0 3.0
Non-EU/EEA	2 700	(4.2)	3.1	2/21	(4.1)	J.7	2722	(4.0)	5.0	2301	(4.1)	5.0	2771	(7.1)	5.0
Albania	3	(0.7)	0.5	19	(4.0)	3.3	21	(5.1)	3.8	11	(2.7)	2.1	13	(3.1)	2.5
Andorra	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	1	(25.0)	9.5	0	(0.0)	0.0
Armenia	37	(3.1)	6.6	42	(3.0)	7.4	32	(2.4)	5.6	24	(2.2)	4.1	21	(2.0)	3.6
Azerbaijan	212	(3.3)	10.1	215	(3.7)	10.1	179	(3.1)	8.3	179	(3.3)	8.1	175	(3.4)	7.8
Belarus	21	(0.4)	1.5	14	(0.3)	1.0	24	(0.6)	1.6	18	(0.5)	1.2	13	(0.4)	0.8
Bosnia and Herzegovina	18	(1.3)	3.2	12	(1.0)	2.2	15	(1.3)	2.9	14	(1.3)	2.7	10	(1.1)	2.0
former Yugoslav Republic of Macedonia, the	29	(8.4)	8.1	23	(7.2)	6.5	19	(6.7)	5.4	14	(5.0)	4.0	25	(9.5)	7.2
Georgia	215	(5.5)	28.7	183	(5.3)	24.7	129	(4.0)	17.5	139	(4.4)	18.8	123	(4.1)	16.5
Israel	19	(3.8)	0.9	15	(4.9)	0.7	31	(8.6)	1.4	6	(2.1)	0.3	13	(5.2)	0.6
Kazakhstan	576	(3.2)	13.7	511	(2.7)	11.6	452	(3.0)	9.9	392	(2.8)	8.2	326	(2.6)	6.6
Kyrgyzstan	640	(10.3)	37.9	594	(8.4)	34.3	438	(6.9)	24.7	537	(7.6)	29.4	407	(5.8)	21.7
Moldova	145	(3.3)	22.2	134	(3.0)	20.7	114	(2.8)	17.7	114	(3.2)	17.8	103	(2.9)	16.1
							114	(210)				0.0	_	_	-
Monaco	-	-	-	-	-	-	0	(0.0)	0.0	0	(0.0)				
Montenegro	0	(0.0)	0.0	1	(0.8)	0.8	0	(0.0) (0.0)	0.0	1	(1.3)	0.9	0	(0.0)	0.0
Montenegro Russia	0 3688	(0.0) (3.5)	0.0 16.6	1 3298	(0.8) (3.1)	0.8 14.4	0 0 <i>3195</i>	(0.0)	0.0 13.5		(1.3) (3.1)	0.9 12.6	2876	(3.1)	11.6
Montenegro Russia San Marino	0 3688 -	(0.0) (3.5)	0.0 16.6	1 3298 -	(0.8) (3.1)	- 0.8 14.4 -	0 0 3195 -	(0.0) (0.0) (3.1)	0.0 13.5 -	1 3061 -	(1.3)	0.9 12.6 -	2876 0	(3.1)	11.6 0.0
Montenegro Russia San Marino Serbia	0 3688	(0.0) (3.5)	0.0 16.6	1 3298	(0.8) (3.1)	0.8 14.4	0 0 <i>3195</i>	(0.0) (0.0)	0.0 13.5	1	(1.3) (3.1)	0.9 12.6	2876	(3.1)	11.6
Montenegro Russia San Marino	0 3688 -	(0.0) (3.5)	0.0 16.6	1 3298 -	(0.8) (3.1)	- 0.8 14.4 -	0 0 3195 -	(0.0) (0.0) (3.1)	0.0 13.5 -	1 3061 -	(1.3)	0.9 12.6 -	2876 0	(3.1)	11.6 0.0
Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of	0 3688 - 20	(0.0) (3.5) - (1.1)	- 0.0 16.6 - 1.3	1 3298 - 14	(0.8) (3.1) - (0.7)	- 0.8 14.4 - 0.9	0 0 3195 - 41	(0.0) (0.0) (3.1) - (2.3)	0.0 13.5 - 2.7	1 3061 - 29	(1.3) (3.1) - (1.8)	0.9 12.6 - 2.0	2876 0 17	(3.1) (0.0) (1.2)	11.6 0.0 1.2 0.0
Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ⁴ UN Administered	0 3688 - 20 18	(0.0) (3.5) (1.1) (1.5) (2.8) (3.1)	0.0 16.6 - 1.3 4.7	1 3298 - 14	(0.8) (3.1) (0.7) (1.2)	0.8 14.4 - 0.9	0 3195 - 41 21	(0.0) (0.0) (3.1) - (2.3) (2.1)	0.0 13.5 - 2.7 2.0	1 3061 - 29 8	(1.3) (3.1) - (1.8) (0.9)	0.9 12.6 - 2.0	2876 0 17	(3.1) (0.0) (1.2) (0.0) (2.4) (5.2)	11.6 0.0 1.2 0.0
Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ⁴ UN Administered Province of Kosovo ⁴ Switzerland Tajikistan	0 3688 - 20 18	(0.0) (3.5) (1.1) (1.5) (2.8) (3.1) (5.5)	- 0.0 16.6 - 1.3 4.7	1 3298 - 14 14	(0.8) (3.1) (0.7) (1.2)	- 0.8 14.4 - 0.9 0.9	0 3195 - 41 21	(0.0) (0.0) (3.1) - (2.3) (2.1) (2.4) (2.6) (5.8)	0.0 13.5 - 2.7 2.0 4.1	1 3061 - 29 8	(1.3) (3.1) (1.8) (0.9)	0.9 12.6 - 2.0 0.8	2876 0 17 0	(3.1) (0.0) (1.2) (0.0) (2.4) (5.2) (6.5)	11.6 0.0 1.2 0.0 2.9 2.4
Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ^d UN Administered Province of Kosovo ^d Switzerland Tajikistan Turkey	0 3688 - 20 18 20	(0.0) (3.5) (1.1) (1.5) (2.8) (3.1) (5.5) (4.8)	- 0.0 16.6 - 1.3 4.7 1.7	1 3298 - 14 14 - 22	(0.8) (3.1) (0.7) (1.2)	- 0.8 14.4 - 0.9 0.9	0 0 3195 - 41 21 20	(0.0) (0.0) (3.1) - (2.3) (2.1) (2.4) (2.6)	0.0 13.5 - 2.7 2.0 4.1	1 3061 - 29 8 21 32	(1.3) (3.1) - (1.8) (0.9) (2.7) (6.0)	0.9 12.6 - 2.0 0.8 4.3 2.6	2876 0 17 0 17 30	(3.1) (0.0) (1.2) (0.0) (2.4) (5.2)	11.6 0.0 1.2 0.0 2.9 2.4 12.7
Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ^d UN Administered Province of Kosovo ^d Switzerland Tajikistan Turkey Turkmenistan	0 3688 - 20 18 20 13 360 672 44	(0.0) (3.5) (1.1) (1.5) (2.8) (3.1) (5.5) (4.8) (1.5)	- 0.0 16.6 - 1.3 4.7 1.7 1.1 12.7 3.4 2.8	1 3298 - 14 14 - 22 389 581	(0.8) (3.1) (0.7) (1.2) (4.7) (7.0) (4.4)	- 0.8 14.4 - 0.9 0.9 - 1.8 13.5 2.9	0 0 3195 - 41 21 20 11 334	(0.0) (0.0) (3.1) - (2.3) (2.1) (2.4) (2.6) (5.8) (4.2)	0.0 13.5 - 2.7 2.0 4.1 0.9 11.4 2.8	1 3061 - 29 8 21 32 328 633 -	(1.3) (3.1) - (1.8) (0.9) (2.7) (6.0) (5.6) (5.0)	0.9 12.6 - 2.0 0.8 4.3 2.6 10.9 3.2	2876 0 17 0 17 30 389 628 26	(3.1) (0.0) (1.2) (0.0) (2.4) (5.2) (6.5) (5.2) (1.2)	11.6 0.0 1.2 0.0 2.9 2.4 12.7 3.1 1.5
Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ⁴ UN Administered Province of Kosovo ⁴ Switzerland Tajikistan Turkey Turkmenistan Ukraine	0 3688 - 20 18 20 13 360 672 44 223	(0.0) (3.5) (1.1) (1.5) (2.8) (3.1) (5.5) (4.8) (1.5) (0.5)	- 0.0 16.6 - 1.3 4.7 1.7 1.1 12.7 3.4 2.8 3.4	1 3298 - 14 14 - 22 389 581 - 638	- (0.8) (3.1) - (0.7) (1.2) - (4.7) (7.0) (4.4) - (1.7)	- 0.8 14.4 - 0.9 0.9 - 1.8 13.5 2.9 - 9.7	0 0 3195 - 41 21 20 11 334 550 - 532	(0.0) (0.0) (3.1) - (2.3) (2.1) (2.4) (2.6) (5.8) (4.2) - (1.7)	0.0 13.5 - 2.7 2.0 4.1 0.9 11.4 2.8 - 8.0	1 3061 - 29 8 21 32 328 633 - 568	(1.3) (3.1) - (1.8) (0.9) (2.7) (6.0) (5.6) (5.0) - (1.9)	0.9 12.6 - 2.0 0.8 4.3 2.6 10.9 3.2 - 8.4	2876 0 17 0 17 30 389 628 26 571	(3.1) (0.0) (1.2) (0.0) (2.4) (5.2) (6.5) (5.2) (1.2) (2.0)	11.6 0.0 1.2 0.0 2.9 2.4 12.7 3.1 1.5 8.4
Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ⁴ UN Administered Province of Kosovo ⁴ Switzerland Tajikistan Turkey Turkmenistan Ukraine Uzbekistan	0 3688 - 20 18 20 13 360 672 44 223 1561	(0.0) (3.5) (1.1) (1.5) (2.8) (3.1) (5.5) (4.8) (1.5) (0.5) (10.5)	- 0.0 16.6 - 1.3 4.7 1.7 1.1 12.7 3.4 2.8 3.4 18.5	1 3298 - 14 14 - 22 389 581 - 638 1960	(0.8) (3.1) (0.7) (1.2) (4.7) (7.0) (4.4) (1.7) (9.4)	- 0.8 14.4 - 0.9 0.9 - 1.8 13.5 2.9 - 9.7 23.1	0 0 3195 - 41 21 20 11 334 550 - 532 1913	(0.0) (0.0) (3.1) - (2.3) (2.1) (2.4) (2.6) (5.8) (4.2) - (1.7) (10.4)	0.0 13.5 - 2.7 2.0 4.1 0.9 11.4 2.8 - 8.0 22.3	1 3061 - 29 8 21 32 328 633 - 568 1795	(1.3) (3.1) — (1.8) (0.9) (2.7) (6.0) (5.6) (5.0) — (1.9) (11.0)	0.9 12.6 - 2.0 0.8 4.3 2.6 10.9 3.2 - 8.4 20.7	2876 0 177 0 17 30 389 628 26 571 2010	(3.1) (0.0) (1.2) (0.0) (2.4) (5.2) (6.5) (5.2) (1.2) (2.0) (12.5)	11.6 0.0 1.2 0.0 2.9 2.4 12.7 3.1 1.5 8.4 22.8
Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ⁴ UN Administered Province of Kosovo ⁴ Switzerland Tajikistan Turkey Turkmenistan Ukraine	0 3688 - 20 18 20 13 360 672 44 223	(0.0) (3.5) (1.1) (1.5) (2.8) (3.1) (5.5) (4.8) (1.5) (0.5)	- 0.0 16.6 - 1.3 4.7 1.7 1.1 12.7 3.4 2.8 3.4	1 3298 - 14 14 - 22 389 581 - 638	- (0.8) (3.1) - (0.7) (1.2) - (4.7) (7.0) (4.4) - (1.7)	- 0.8 14.4 - 0.9 0.9 - 1.8 13.5 2.9 - 9.7	0 0 3195 - 41 21 20 11 334 550 - 532	(0.0) (0.0) (3.1) - (2.3) (2.1) (2.4) (2.6) (5.8) (4.2) - (1.7)	0.0 13.5 - 2.7 2.0 4.1 0.9 11.4 2.8 - 8.0	1 3061 - 29 8 21 32 328 633 - 568	(1.3) (3.1) - (1.8) (0.9) (2.7) (6.0) (5.6) (5.0) - (1.9)	0.9 12.6 - 2.0 0.8 4.3 2.6 10.9 3.2 - 8.4	2876 0 17 0 17 30 389 628 26 571	(3.1) (0.0) (1.2) (0.0) (2.4) (5.2) (6.5) (5.2) (1.2) (2.0)	11.6 0.0 1.2 0.0 2.9 2.4 12.7 3.1 1.5

^{&#}x27;European Region' comprises the 53 countries of the WHO European Region and Liechtenstein.

WHO European Region 18 TB high-priority countries presented in italics.

For non-EU countries new and relapse cases under 15 year of age are included, for EU/EEA countries all TB cases under 15 years of age are included.

These data are subject to change as the national TB registry was under review when this report was being produced.

Provisional data for 2016 including overseas territories reported to WHO Global TB database.

In accordance with the UN Security Council Resolution No. 1244 (1999).

Table IV: Tuberculosis cases by origin, European Region, 2012-2016

				2012							2013							2014			
Country	Fore	eign	Nati	ive	Unkn ori		All TB	Fore	ign	Nati	ve	Unkn oriş		All TB	Fore	ign	Nati	ve	Unkn orig		All TB
	N	% among all TB	N	% among all TB	N	% among all TB	cases (N)	N	% among all TB	N	% among all TB	N	% among all TB	cases (N)	N	% among all TB	N	% among all TB	N	% among all TB	cases (N)
EU/EEA																					
Austria ^a	315	(48.8)	327	(50.6)	4	(0.6)	646	335	(51.3)	318	(48.7)	0	(0.0)	653	336	(57.3)	250	(42.7)	0	(0.0)	586
Belgiuma	518	(53.1)	458	(46.9)	0	(0.0)	976	508	(52.8)	453	(47.0)	2	(0.2)	963	499	(52.6)	450	(47.4)	0	(0.0)	949
Bulgaria	4	(0.2)	2276	(99.8)	0	(0.0)	2280	10	(0.5)	1922	(99.5)	0	(0.0)	1932	12	(0.6)	1860	(99.4)	0	(0.0)	1872
Croatia ^b	49	(8.5)	239		287	(49.9)	575	66	(12.8)	296	(57.3)	155	(30.0)	517	63	(12.6)	272	(54.5)	164	(32.9)	499
Cyprus	52		17		0	(0.0)	69	35	(85.4)	6	(14.6)	0	(0.0)	41	34	(82.9)	7	(17.1)	0	(0.0)	41
Czech Republic	105	(17.6)	492		0	(0.0)	597	78	(15.7)	419	(84.3)	0	(0.0)	497	96	(18.8)	415	(81.2)	0	(0.0)	511
Denmark	236		153		0	(0.0)	389	215	(60.4)	141	(39.6)	0	(0.0)	356	223	(69.7)	97	(30.3)	0	(0.0)	320
Estonia	48		241		0	(0.0)	289	45	(15.5)	245	(84.5)	0	(0.0)	290	41	(16.5)	207	(83.5)	0	(0.0)	248
Finland	80	(29.2)	178		16	(5.8)	274	85	(31.1)	184	(67.4)	4	(1.5)	273	87	(33.1)	172	(65.4)	4	(1.5)	263
France	2581	(51.6)	2 017		405	(8.1)		2574	(52.0)	2 017	(40.8)	356	(7.2)	4947	2736	(56.0)	1845	(37.7)	307	(6.3)	4888
_	2025	(48.1)	2017		159	(3.8)	4 213	2350	(54.1)	1741	(40.8)	249	(5.7)	4340	2692	(59.5)	1610	(35.6)	224	(4.9)	4526
Germany								229				5				(38.0)					
Greecea	209	(37.5)	348		1	,	558		(42.4)	306	(56.7)		(0.9)	540	197		320	(61.7)	2	(0.4)	519
Hungarya	21	(1.7)	1202		0	(0.0)	1223	34	(3.3)	1011	(96.7)	0	(0.0)	1045	32	(3.8)	819	(96.2)	0	(0.0)	851
Iceland	9	(81.8)	2		0	(0.0)	11	5	(45.5)	6	(54.5)	0	(0.0)	11		(100.0)	0	(0.0)	0	(0.0)	9
Ireland	160	(44.6)	196		3	(0.8)	359	169	(45.2)	202	(54.0)	3	(0.8)	374	135	(43.4)	175	(56.3)	1	(0.3)	311
Italy	2403	(56.5)	1799		50	(1.2)	4 2 5 2	1731	(43.6)	1356	(34.1)	886	(22.3)	3973	1806	(46.1)	1352	(34.5)	758	(19.4)	3 9 1 6
Latvia	42	(4.2)	942	(94.9)	9	(0.9)	993	40	(4.4)	864	(95.6)	0	(0.0)	904	37	(4.9)	724	(95.1)	0	(0.0)	761
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
Lithuania	41	(2.3)	1740		0	(0.0)	1781	40	(2.3)	1665	(97.7)	0	(0.0)	1705	42	(2.6)	1565	(97.4)	0	(0.0)	1607
Luxembourg	32	(71.1)	13	(28.9)	0	(0.0)	45	36	(94.7)	2	(5.3)	0	(0.0)	38	20	(83.3)	4	(16.7)	0	(0.0)	24
Malta	36	(85.7)	6	(14.3)	0	(0.0)	42	44	(88.0)	6	(12.0)	0	(0.0)	50	42	(91.3)	4	(8.7)	0	(0.0)	46
Netherlands	700	(73.2)	256	(26.8)	0	(0.0)	956	623	(73.7)	222	(26.3)	0	(0.0)	845	601	(73.8)	213	(26.2)	0	(0.0)	814
Norway	320	(85.6)	54	(14.4)	0	(0.0)	374	345	(88.0)	47	(12.0)	0	(0.0)	392	303	(93.5)	21	(6.5)	0	(0.0)	324
Polanda	48	(0.6)	7494	(99.4)	0	(0.0)	7542	52	(0.7)	7198	(99.3)	0	(0.0)	7250	49	(0.7)	6649	(99.3)	0	(0.0)	6 6 9 8
Portugal	408	(15.7)	2176	(83.5)	22	(0.8)	2606	392	(16.3)	2001	(83.0)	17	(0.7)	2 410	359	(15.8)	1916	(84.1)	3	(0.1)	2278
Romania	42		18 148	(99.8)	0	(0.0)	18 19 0	48	(0.3)	16 6 4 1	(99.7)	0	(0.0)	16689	44	(0.3)	15 8 3 5	(99.7)	0	(0.0)	15 879
Slovakia	3	(0.9)	342		0	(0.0)	345	6	(1.5)	395	(98.5)	0	(0.0)	401	8	(2.4)	328	(97.6)	0	(0.0)	336
Slovenia	48		90		0	(0.0)	138	46	(32.9)	94	(67.1)	0	(0.0)	140	36	(25.0)	108	(75.0)	0	(0.0)	144
Spain	1897	(31.3)	4148		25	(0.4)	6 0 7 0	1550	(27.5)	3213	(57.0)	869	(15.4)	5632	1425	(29.0)	2852	(58.0)	637	(13.0)	4914
Sweden	529	(84.9)	94		0	(0.0)	623	569	(89.0)	70	(11.0)	0	(0.0)	639	604	(91.7)	55	(8.3)	0	(0.0)	659
United Kingdom	6170	(70.8)	2257	(25.9)	284	(3.3)	8711	5566	(70.7)	2121	(27.0)	181	(2.3)	7868	4902	(69.5)	2023	(28.7)	124	(1.8)	7049
Subtotal EU/EEA	19 131	(29.1)	49734		1265	(1.9)		19087	(29.0)	45 162	(68.7)	2727	(4.1)	65715	17 470	(28.2)	42148	(68.2)	2224	(3.6)	61842
Non-EU/EEA	17131	(27.1)	7/137	(10.7)	1203	(1.7)	70130	17007	(27.0)	73 102	(00.7)	2121	(4.1)	03713	17 47 0	(20.2)	72 170	(00.2)	2227	(3.0)	01042
Albania	1	(0.2)	419	(99.8)	_	_	420	0	(0.0)	474	(100.0)	_	_	474	0	(0.0)	408	(100.0)	_	_	408
Andorra	0	(100.0)	0		_	_	9	4	(80.0)	1	(20.0)	_	_	5	6	(100.0)	0	(0.0)	_	-	6
Armenia	0	(0.0)		(100.0)	_		1518	6	(0.4)	1411	(99.6)	_	_	1417	0	(0.0)		(100.0)	_		1342
	0			(100.0)			8140	9	(0.4)	8588	(99.9)			8597	11		7528	(99.9)			7539
Azerbaijan Polarus																(0.1)					
Belarus	0	(0.0)		(100.0)	_	-	5246	0	(0.0)		(100.0)	-	_	4859	0	(0.0)		(100.0)	-	_	4274
Bosnia and Herzegovina	0	(0.0)	1420	(100.0)	-	_	1420	0	(0.0)	1261	(100.0)	-	_	1261	0	(0.0)	1196	(100.0)	-	_	1196
former Yugoslav Republic	18	(5.1)	337	(94.9)	-	-	355	15	(4.6)	308	(95.4)	-	-	323	17	(6.0)	268	(94.0)	-	-	285
of Macedonia, the		(0.0)	0	(0,0)			0	0	(0.0)	0	(0,0)			0	0	(0.0)		(0,0)			^
Georgia	0		0			_	0	0	(0.0)	0	(0.0)	_	_	300	200	(0.0)	0	(0.0)	_	_	0
Israel	459		50		_	-	509	254	(82.5)	54	(17.5)	-	_	308	298	(82.5)		(17.5)	-	_	361
Kazakhstan	654		20869		_	_	21523	43	(0.2)	19 814	(99.8)	_	_	19 857	43	(0.3)		(99.7)	_	_	15718
Kyrgyzstan	0		0		-	-	0	0	(0.0)	0	(0.0)	-	-	0	0	(0.0)		(0.0)	-	-	0
Moldova	50	(0.9)	5 2 9 1	(99.1)	-	-	5341	39	(0.8)	5 012	(99.2)	-	-	5 051	0	(0.0)	0	(0.0)	-	-	0
Monaco		,		,	-	-			,			-	-		0	(0.0)		(0.0)	-	-	0
Montenegro	3		104		-	-	107	2	(1.7)	118	(98.3)	-	-	120	3	(2.7)		(97.3)	-	-	113
Russia	2689	(1.8)	147232	(98.2)	-	-	149921	2 4 3 2	(1.7)	140 101	(98.3)	-	-	142533	2690	(2.0)	133 478	(98.0)	-	-	136168
San Marino	-	-	_	-	-	-	-	-	-	_	-	-	-	_	-	-	-	-	-	-	-
Serbia	5	(0.3)	1912	(99.7)	-	-	1917	8	(0.4)	2 119	(99.6)	-	-	2127	4	(0.2)	1828	(99.8)	-	-	1832
Serbia excluding UN Administered Province of Kosovo ^d	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
UN Administered Province of Kosovo ^d	_	_	_	-	-	_	-	_	-	-	-	-	-	-	-	-	-	-	-	-	_
	345	(74.5)	118	(25.5)	-	-	463	396	(75.3)	130	(24.7)	-	-	526	359	(75.9)	114	(24.1)	-	-	473
Switzerland	0	(0.0)	6929	(100.0)	-	-	6929	0	(0.0)	6 495	(100.0)	-	-	6 4 9 5	6260	(100.0)	0	(0.0)	-	-	6260
		(1.8)		(98.2)	_	_	14691	491	(3.7)	12 9 18	(96.3)	_	_	13 4 0 9	809	(6.0)			_	_	13 378
Tajikistan	261	()	-	(70.2)	_	_	-		-			_	_	-	_	(-,0)			_	_	-
Tajikistan Turkey	261	_												10421	22	/- A		()			
Tajikistan Turkey Turkmenistan	261	-	_	_	_	_	_	_	_	_	_	_	_	48137		(0.1)	40780	(90 01	_	_	40303
Switzerland Tajikistan Turkey Turkmenistan Ukraine Uzbekistan	-	- (0 1)	16 702	(00 0)	-	-	16 910	- 20	(0 1)	25 120	(00 0)	-	-	48134	22	(0.1)			-	-	
Tajikistan Turkey Turkmenistan Ukraine Uzbekistan	- - 17		16793		-	- (0.0)	16 810 235 310	- 29	(0.1)	25 139	(99.9) (91.5)	-	(0.0)	25168	86	(0.4)	22718	(99.6)	-	- (0.0)	40302 22804
Tajikistan Turkey Turkmenistan Ukraine	-	(1.9)	16793 230808 280542	(98.1)	- 0 1265		235319	3728	(1.3)	25139 228802 273964	(99.9) (81.5) (79.1)	- - - 2727			86 10 608	(0.4) (4.2)		(99.6) (95.8)	0	(0.0)	22804 252459

^{&#}x27;European Region' comprises the 53 countries of the WHO European Region and Liechtenstein.
WHO European Region 18 TB high-priority countries presented in italics.

a Criterion for definition of origin is nationality (clitzenship) and if not reported birthplace.

b These data are subject to change as the national TB registry was under review when this report was being produced.

Provisional data for 2016 including overseas territories.

In accordance with the UN Security Council Resolution No. 1244 (1999).

			2015							2016				
Fore	eign	Nati	ive	Unkr ori		All TB	Fore	ign	Nat	ive	Unkn ori:		All TB	Country
N	% among all TB	N	% among all TB	N	% among all TB	cases (N)	N	% among all TB	N	% among all TB	N	% among all TB	cases (N)	
														EU/EEA
364	(62.4)	219	(37.6)	0	(0.0)	583	424	(66.9)	210	(33.1)	0	(0.0)	634	Austria ^a
512	(52.4)	465	(47.6)	0	(0.0)	977	547	(52.2)	500	(47.8)	0	(0.0)	1047	Belgium ^a
10	(0.6)	1650	(99.4)	0	(0.0)	1660	4	(0.2)	1599	(99.8)	0	(0.0)	1603	Bulgaria
74	(15.2)	239	(49.2)	173	(35.6)	486	3	(0.7)	161	(35.0)	296	(64.3)	460	Croatia ^b
52	(82.5)	11	(17.5)	0	(0.0)	63	56	(93.3)	4	(6.7)	0	(0.0)	60	Cyprus
110	(21.3)	407	(78.7)	0	(0.0)	517	151	(29.3)	365	(70.7)	0	(0.0)		Czech Republic
242	(67.8)	115	(32.2)	0	(0.0)	357	221	(67.0)	109	(33.0)	0	(0.0)	330	Denmark Estonia
38 115	(17.5) (42.3)	179 151	(82.5) (55.5)	0	(2.2)	217 272	42 111	(21.9) (47.0)	150 117	(78.1) (49.6)	0	(3.4)	192 236	Finland
2628	(55.4)	1843	(38.9)	270	(5.7)	4741	2758	(55.6)	2200	(44.4)	0	(0.0)		France ^c
4066	(69.5)	1560	(26.7)	226	(3.9)	5852	4125	(69.7)	1427	(24.1)	363	(6.1)		Germany
189	(39.2)	289	(60.0)	4	(0.8)	482	189	(42.7)	254	(57.3)	0	(0.0)	443	Greece ^a
27	(3.0)	879	(97.0)	0	(0.0)	906	30	(3.8)	756	(96.2)	0	(0.0)	786	Hungarya
6	(85.7)	1	(14.3)	0	(0.0)	7	4	(66.7)	2	(33.3)	0	(0.0)	6	Iceland
126	(44.5)	144	(50.9)	13	(4.6)	283	160	(50.3)	145	(45.6)	13	(4.1)	318	Ireland
1764	(46.8)	1227	(32.6)	778	(20.6)	3769	2509	(62.2)	1180	(29.3)	343	(8.5)	4032	
45	(6.2)	676	(93.8)	0	(0.0)	721	43	(6.5)	617	(93.5)	0	(0.0)	660	Latvia
-	(4.0)	4100	(00.0)	-	(0.0)	4507	- 40	(0.0)	4/00	(004)	-	(0.0)	4440	Liechtenstein
15	(1.0)	1492	(99.0)	0	(0.0)	1507	13	(0.9)	1429	(99.1)	0	(0.0)		Lithuania
20 24	(66.7) (75.0)	10	(33.3) (25.0)	0	(0.0)	30 32	22 48	(75.9) (96.0)	7	(24.1)	0	(0.0)	29 50	Luxembourg Malta
624	(72.4)	236	(27.4)	2	(0.0)	862	669	(75.3)	214	(24.1)	6	(0.0)		Netherlands
277	(88.5)	36	(11.5)	0	(0.0)	313	265	(88.6)	34	(11.4)	0	(0.0)		Norway
52	(0.8)	6378	(99.2)	0	(0.0)	6 430	92	(1.4)	6352	(98.6)	0	(0.0)		Polanda
363	(16.7)	1812	(83.2)	3	(0.1)	2178	336	(18.3)	1500	(81.7)	0	(0.0)	1836	Portugal
36	(0.2)	15 145	(99.7)	2	(0.0)	15 183	24	(0.2)	13 5 9 3	(99.8)	0	(0.0)	13 617	Romania
11	(3.5)	306	(96.5)	0	(0.0)	317	11	(3.7)	285	(96.3)	0	(0.0)	296	Slovakia
50	(38.5)	80	(61.5)	0	(0.0)	130	43	(36.4)	75	(63.6)	0	(0.0)	118	Slovenia
1546	(30.9)	3278	(65.6)	173	(3.5)	4997	1391	(28.5)	2886	(59.2)	600	(12.3)	4877	Spain
729	(89.4)	86	(10.6)	0	(0.0)	815	652	(89.8)	74	(10.2)	0	(0.0)	726	Sweden
4361 18476	(70.0) (30.3)	1750 40 672	(28.1) (66.8)	123 1773	(2.0) (2.9)	6234 60921	4369 19312	(70.8) (32.7)	1662 37909	(26.9) (64.3)	144 1773	(2.3) (3.0)		United Kingdom Subtotal EU/EEA
10-7/0	(30.3)	400/2	(00.0)	1773	(2.7)	00 921	17312	(32.1)	31707	(04.5)	1113	(3.0)	30774	Non-EU/EEA
4	(1.0)	411	(99.0)	-		415	0	(0.0)	415	(100.0)	-		415	Albania
0	(0.0)	4	(100.0)			4	0	(0.0)	4	(100.0)		-	4	Andorra
1	(0.1)	1103	(99.9)	-		1104	0	(0.0)	1080	(100.0)	-		1080	Armenia
15	(0.2)	7486	(99.8)			7501	12	(0.2)	6 6 9 5	(99.8)			6707	Azerbaijan
0	(0.0)	4177	(100.0)			4177	0	(0.0)	3598	(100.0)	-	-	3598	Belarus
0	(0.0)	1095	(100.0)			1095	0	(0.0)	907	(100.0)		-	907	Bosnia and Herzegovina
10	(3.5)	274	(96.5)	-	-	284	8	(3.0)	259	(97.0)	-	-	267	former Yugoslav Republic of Macedonia, the
0	(0.0)	0	(0.0)			0	0	(0.0)	0	(0.0)			0	Georgia
233	(83.2)	47	(16.8)	-		280	202	(80.8)	48	(19.2)		-		Israel
78	(0.5)	14553	(99.5)			14 631	153	(1.2)	12505	(98.8)				Kazakhstan
0	(0.0)	0	(0.0)			0	0	(0.0)	0	(0.0)				Kyrgyzstan
37	(0.9)	4 174	(99.1)			4 211	39	(0.9)	4095	(99.1)				Moldova
0	(0.0)	77	(0.0)			- 00	2	(2.3)	. 0.5	(07.7)				Monaco
0	(0.0)	77 130 904	(100.0)			130904	2797	(2.3)	85 118 249	(97.7) (97.7)			121046	Montenegro
-	(0.0)	130 904	(100.0)			130304	0	(0.0)	0	(0.0)				San Marino
7	(0.4)	1651	(99.6)			1658	5	(0.3)	1483	(99.7)				Serbia
4	(0.5)	884	(99.5)	-		888	1	(0.1)	766	(99.9)	-		767	Serbia excluding UN Administered Province of Kosovo ^d
3	(0.4)	767	(99.6)	-	-	770	4	(0.6)	717	(99.4)	-	-	721	UN Administered Province of Kosovo ^d
428	(75.9)	136	(24.1)	-	-	564	486	(79.8)	123	(20.2)				Switzerland
0	(0.0)	6 2 3 2	(100.0)			6232	0	(0.0)	6241	(100.0)				Tajikistan
872	(6.8)	11900	(93.2)			12772	904	(7.3)	11513	(92.7)			12 417	Turkey
10	(0.0)	25.007	(100.0)			25.20.6	20	(0.1)	24000	(00.0)			2/000	Turkmenistan
10	(0.0)	35 294	(100.0) (99.8)			35304	20	(0.1)	34068	(99.9)				Ukraine Uzbekistan
47 1745	(0.2) (0.7)	19 0 0 8 238 5 2 6	(99.8) (99.3)	0	(0.0)	19 055 240 271	0 4628	(0.0) (2.0)	18 441 219 809	(100.0) (94.6)	0	(0.0)		Subtotal non-EU/EEA
20 221	(6.7)	279 198	(92.7)	1773	(0.6)	301192		(8.2)	257718	(88.4)	1773	(0.6)		Total European Region
1204	(0.5)	253 973	(99.5)	2	(0.0)	255 179	4051	(1.6)	233 873	(95.1)	0			Subtotal 18 HPC

Table V: MDR TB notification among new bacteriologically-confirmed pulmonary TB cases with available DST results, European Region, 2012-2016

		2012			2013			2014			2015			2016	1	Mean
Country	N	%	Rate per 100 000	N	%	Rate per 100 000	N	%	Rate per 100 000	N	%	Rate per 100 000	N	%	Rate per 100 000	annual % change in rate, 2012– 2016 ^a
EU/EEA																
Austria	9	(4.0)	0.1	7	(2.5)	0.1	7	(2.6)	0.1	5	(1.9)	0.1	6	(2.2)	0.1	-10.4%
Belgium ^b	5	(1.3)	0.0	7	(1.8)	0.1	6	(1.5)	0.1	6	(1.4)	0.1	6	(1.4)	0.1	4.1%
Bulgaria	15	(2.2)	0.2	12	(1.9)	0.2	17	(2.7)	0.2	4	(0.7)	0.1	5	(0.9)	0.1	-23.6%
Croatia	1	(0.4)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	-100.0%
Cyprus	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	10.00/
Czech Republic Denmark ^b	2	(0.6)	0.0	0	(0.0)	0.0	3	(1.0)	0.0	7	(2.2)	0.1	4	(1.3)	0.0	18.8%
Estonia	38	(0.0)	2.9	29	(0.5)	0.0 2.2	30	(19.4)	0.0 2.3	18	(13.5)	0.1	3 17	(12.9)	1.3	-18.1%
Finland	3	(2.1)	0.1	2	(1.2)	0.0	5	(3.3)	0.1	7	(4.4)	0.1	2	(12.9)	0.0	-10.0%
Franced	_	(2.1)	-	_	(1.2)	-	25	(1.0)	0.0	_	(4.4)	-	33	(1.4)	0.0	10.0 %
Germany	12	(1.6)	0.0	10	(1.9)	0.0	9	(3.1)	0.0	4	(1.4)	0.0	4	(2.2)	0.0	-24.4%
Greece	1	(0.8)	0.0	7	(4.0)	0.1	3	(2.6)	0.0	3	(1.9)	0.0	2	(2.0)	0.0	19.7%
Hungary	9	(2.2)	0.1	6	(1.8)	0.1	1	(0.4)	0.0	6	(1.8)	0.1	12	(4.1)	0.1	7.7%
Iceland	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	-
Ireland ^b	2	(1.3)	0.0	2	(1.4)	0.0	2	(1.6)	0.0	1	(1.0)	0.0	4	(3.1)	0.1	18.0%
Italy	12	(2.6)	0.0	21	(3.2)	0.0	24	(2.0)	0.0	18	(2.3)	0.0	24	(3.1)	0.0	18.3%
Latvia	73	(11.4)	3.6	48	(8.8)	2.4	38	(8.2)	1.9	36	(7.9)	1.8	32	(7.6)	1.6	-17.9%
Liechtenstein	-	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-
Lithuania	116	(11.8)	3.9	116	(11.5)	3.9	128	(13.6)	4.3	104	(11.6)	3.6	117	(13.3)	4.1	1.2%
Luxembourg	-	-	-	-	-	-	-	-	-	-	-	-	0	(0.0)	0.0	-
Malta	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	-
Netherlands	5	(1.3)	0.0	7	(2.0)	0.0	4	(1.2)	0.0	6	(1.6)	0.0	6	(1.8)	0.0	4.3%
Norway ^b	2	(1.2)	0.0	4	(2.2)	0.1	5	(3.2)	0.1	4	(2.6)	0.1	7	(5.1)	0.1	35.3%
Poland	19	(0.5)	0.0	19	(0.5)	0.0	17	(0.4)	0.0	19	(0.5)	0.0	27	(0.7)	0.1	9.3%
Portugal	14	(1.1)	0.1	9	(0.8)	0.1	17	(1.6)	0.2	12	(1.2)	0.1	8	(1.3)	0.1	-12.6%
Romania	153	(3.1)	0.8	160	(3.2)	0.8	125	(2.1)	0.6	129	(2.0)	0.6	124	(2.0)	0.6	-4.7%
Slovakia	0	(0.0)	0.0	1	(0.7)	0.0	1	(0.8)	0.0	1	(0.7)	0.0	2	(2.2)	0.0	-
Slovenia	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	_
Spain	26	(3.2)	0.1	27	(1.9)	0.1	26	(1.7)	0.1	30	(3.9)	0.1	34	(4.0)	0.1	7.2%
Sweden	6	(2.1)	0.1	5	(1.8)	0.1	9	(3.0)	0.1	14	(3.3)	0.1	11	(3.0)	0.1	15.3%
United Kingdom ^b	43	(1.5)	0.1	35	(1.4)	0.1	28	(1.2)	0.0	28	(1.3)	0.0	34	(1.6)	0.1	-6.4%
Subtotal EU/EEA	566	(2.7)	0.1	535	(2.6)	0.1	531	(2.2)	0.1	432	(2.2)	0.1	524	(2.4)	0.1	-5.5%
Non-EU/EEA Albania	1	(0.6)	0.0	1	(3.7)	0.0	1	(4.8)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	-100.0%
Andorra	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	-100.076
Armenia	57	(13.6)	2.0	43	(11.6)	1.5	57	(16.6)	2.0	42	(14.6)	1.4	55	(32.7)	1.7	-3.1%
Azerbaijan	128	(13.5)	1.4	187	(15.2)	2.0	158	(12.8)	1.7	195	(15.9)	2.0	161	(15.4)	1.7	4.6%
Belarus	753	(34.8)	7.9	755	(35.2)	8.0	667	(34.1)	7.0	678	(35.8)	7.1	654	(37.1)	6.9	-3.5%
Bosnia and Herzegovina	4	(0.6)	0.1	0	(0.0)	0.0	2	(25.0)	0.1	2	(0.3)	0.1	0	(0.0)	0.0	-100.0%
former Yugoslav Republic of Macedonia, the	0	(0.0)	0.0	0	(0.0)	0.0	2	(1.4)	0.1	3	(1.8)	0.1	2	(1.5)	0.1	-
Georgia	177	(9.2)	4.3	183	(11.2)	4.5	172	(11.6)	4.3	168	(11.6)	4.3	142	(10.2)	3.6	-4.3%
Israel	15	(4.7)	0.2	6	(3.8)	0.1	13	(6.6)	0.2	10	(6.8)	0.1	9	(7.4)	0.1	-13.3%
Kazakhstan	1864	(22.9)	11.0	1997	(26.3)	11.6	1110	(23.8)	6.3	1310	(24.0)	7.4	832	(25.5)	4.6	-19.5%
Kyrgyzstan	433	(26.1)	7.7	613	(28.4)	10.8	-	_	-	426	(25.0)	7.3	398	(21.9)	6.7	-3.6%
Moldova	299	(23.7)	7.3	343	(24.5)	8.4	398	(27.1)	9.8	402	(31.1)	9.9	304	(25.6)	7.5	0.5%
Monaco	-	-	-	-	-	-	0	(0.0)	0.0	0	(0.0)	0.0	-	-	-	-
Montenegro	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	_
Russia	6537	(20.0)	4.6	6726	(21.2)	4.7	7634	(24.4)	5.3	8 6 0 3	(26.7)	6.0	8463	(27.3)	5.9	-
San Marino	-	-	-	-	-	-	-	-	-	-	_	-	0	(0.0)	0.0	-
Serbia excluding UN	6	(0.8)	0.1	6	(0.9)	0.1	10	(1.7)	0.1	4	(0.7)	0.0	3	(0.8)	0.0	-15.6%
Administered Province of Kosovo ^e UN Administered	-	-	-	-	-	-	9	(1.7)	0.1	2	(0.9)	0.0	3	(0.8)	0.0	_
Province of Kosovo ^e Switzerland	3	(1.2)	0.0	3	(1.5)	0.0	1 5	(0.6)	0.1	7	(1.0)	0.1	0	(0.0)	0.0	39.8%
Tajikistan	286	(31.1)	3.6	143	(34.5)	1.7	158	(8.1)	1.9	484	(24.2)	5.7	495	(20.8)	5.7	12.2%
Turkey	151	(3.2)	0.2	123	(2.5)	0.2	116	(2.5)	0.2	122	(2.6)	0.2	110	(2.2)	0.1	-9.1%
Turkmenistan	-	(3.2)	-	-	(2.5)	-	32	(10.3)	0.6	-	(2.0)	-	-	(2.2)	-	-
Ukraine	1 614	(14.4)	3.6	2479	(19.2)	5.5	2753	(21.0)	6.1	2856	(21.3)	6.4	2881	(22.0)	6.5	16.2%
Uzbekistan	703	(27.9)	2.4	1535	(36.3)	5.1	2112	(66.1)	6.9	211	(44.6)	0.7	292	38.6	0.9	-21.0
Subtotal non-EU/EEA	13 031	(18.4)	3.4	15143	(20.8)	3.9	15 400	(23.1)	3.9	15523	(22.9)	3.9	14813	(22.8)	3.7	2.6%
Total European Region	13597	(14.8)	1.6	15 678	(16.8)	1.9	15931	(17.6)	1.8	15 955	(18.3)	2.0	15337	(17.7)	1.7	0.8%
Subtotal 18 HPC	13397	(17.6)	3.5	15 492	(19.9)	4.0	15 705	(21.3)	4.0	15788	(21.2)	4.0	15 082	(21.2)	3.8	2.5%

^{*}European Region' comprises the 53 countries of the WHO European Region and Liechtenstein.

WHO European Region 18 TB high-priority countries presented in italics.

*Bacteriologically-confirmed cases – cases with positive identification for *Mycobacterium tuberculosis* complex confirmed by culture and/or line probe assay for non-EU countries, culture-positive and microscopy-positive/nucleic acid amplification test-positive cases for EU/EEA countries.

*Distribution by previous diagnosis.

*These data are subject to change as the national TB registry was under review when this report was being produced.

*Provisional data for 2016 including overseas territories.

*In accordance with the UN Security Council Resolution No. 1244 (1999).

*128

Table VI: MDR TB notification among previously treated bacteriologically-confirmed a pulmonary TB cases with available DST results, European Region, 2012-2016

		2012		2013			2014				2015	ı		2016	1	Mean annual
Country	N	%	Rate per 100 000	N	%	Rate per 100 000	N	%	Rate per 100 000	N	%	Rate per 100 000	N	%	Rate per 100000	change in rate, 2012– 2016 ^a
EU/EEA																2010
Austria	13	(43.3)	0.2	9	(37.5)	0.1	7	(36.8)	0.1	2	(16.7)	0.0	3	(17.6)	0.0	-31.3%
Belgium ^b	6	(12.8)	0.1	1	(2.4)	0.0	2	(4.2)	0.0	2	(5.9)	0.0	2	(5.7)	0.0	-24.4%
Bulgaria	33	(23.4)	0.5	14	(12.7)	0.2	19	(19.2)	0.3	19	(20.7)	0.3	14	(17.3)	0.2	-18.8%
Croatic	0	(0.0)	0.0	0	(0.0)	0.0	2	(6.9)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	-
Cyprus	0	(0.0)	0.0	1	(100.0)	0.1	0	(0.0)	0.0	-	-	-	0	(0.0)	0.0	-
Czech Republic	2	(9.1)	0.0	0	(0.0)	0.0	2	(13.3)	0.0	2	(8.0)	0.0	2	(16.7)	0.0	-0.1%
Denmark ^b	0	(0.0)	0.0	1	(5.0)	0.0	0	(0.0)	0.0	1	(4.5)	0.0	0	(0.0)	0.0	-
Estonia	23	(53.5)	1.7	25	(52.1)	1.9	19	(63.3)	1.4	18	(51.4)	1.4	6	(46.2)	0.5	-28.4%
Finland	0	(0.0)	0.0	0	(0.0)	0.0	1	(25.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	-
Franced	-	-	-	-	-	-	30	(10.4)	0.0	-	-	-	18	(6.8)	0.0	-
Germany	14	(9.9)	0.0	27	(16.3)	0.0	22	(15.9)	0.0	30	(19.1)	0.0	19	(14.3)	0.0	7.3%
Greece	0	(0.0)	0.0	2	(11.8)	0.0	0	(0.0)	0.0	5	(18.5)	0.0	3	(27.3)	0.0	-
Hungary	2	(6.5)	0.0	4	(19.0)	0.0	2	(8.7)	0.0	2	(5.0)	0.0	6	(16.2)	0.1	-
Iceland	-	- (2.2)	-	-	- (2.2)	-	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	-
Ireland ^b	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	2	(18.2)	0.0	-
Italy	12	(8.8)	0.0	7	(4.2)	0.0	16	(7.2)	0.0	14	(12.5)	0.0	9	(9.3)	0.0	-7.4%
Liachtanetain	32	(33.0)	1.6	27	(25.7)	1.3	32	(29.9)	1.6	26	(29.9)	1.3	21	(23.3)	1.1	-9.1%
Liechtenstein	152	(442)	- E 1	125	(6.6.1)	- 6.5	120	(400)	- 4.7	12.6	(46 5)	- 4.6	125	(42.0)	- 4.2	04
Lithuania	153	(44.3)	5.1	135	(44.1)	4.5	138	(48.9)	4.7	134	(46.5)	4.6	125	(43.0)	4.3	-4.0%
Luxembourg	0	(0.0)	0.0	-	_	-	_	(0.0)	-	-	-	-	0	(0.0)	0.0	-
Malta	0	(0.0)	0.0	-			0	(0.0)	0.0	-			0	(0.0)	0.0	40 =0/
Netherlands	1	(5.0)	0.0	6	(30.0)	0.0	1	(12.5)	0.0	2	(8.7)	0.0	2	(20.0)	0.0	18.5%
Norway ^b	1	(7.7)	0.0	1	(6.3)	0.0	4	(23.5)	0.1	0	(0.0)	0.0	0	(0.0)	0.0	
Poland Portugal	11	(2.1)	0.0	21	(4.3)	0.1	18	(4.3) (5.7)	0.0	13	(3.0)	0.0	18	(4.0)	0.0	13.2%
Romania	527	(20.8)	2.6	410	(17.6)	2.0	400	(17.9)	2.0	398	(17.2)	2.0	334	(15.6)	1.7	-23.6%
Slovakia	1	(3.8)	0.0	1	(2.9)	0.0	2	(7.7)	0.0	1	(6.3)	0.0	1	(5.6)	0.0	-10.4% -0.1%
Slovenia	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	-0.1/0
Spain	11	(15.9)	0.0	7	(6.8)	0.0	9	(8.2)	0.0	10	(16.4)	0.0	5	(12.2)	0.0	
Sweden	2	(13.3)	0.0	2	(12.5)	0.0	2	(10.5)	0.0	2	(11.8)	0.0	3	(15.8)	0.0	9.6%
United Kingdom ^b	12	(6.3)	0.0	9	(4.4)	0.0	5	(3.0)	0.0	5	(3.4)	0.0	7	(4.7)	0.0	-13.2%
Subtotal EU/EEA	862	(18.5)	0.2	715	(16.4)	0.2	738	(16.6)	0.1	692	(17.1)	0.2	602	(15.0)	0.1	-11.9%
Non-EU/EEA	002	(1015)	0.2	, 13	(1014)	0.2	750	(1010)	011	0,2	(1711)	0.2	002	(1310)	011	111770
Albania	0	(0.0)	0.0	0	(0.0)	0.0	1	(12.5)	0.0	4	(66.7)	0.1	1	(50.0)	0.0	-
Andorra	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	_
Armenia	35	(38.5)	1.2	23	(34.3)	0.8	43	(86.0)	1.5	47	(87.0)	1.6	60	(90.9)	2.0	13.0%
Azerbaijan	468	(30.0)	5.1	778	(48.8)	8.3	682	(35.0)	7.2	711	(29.7)	7.4	616	(39.3)	6.3	5.8%
Belarus	811	(68.6)	8.6	598	(54.5)	6.3	584	(69.1)	6.2	597	(68.4)	6.3	568	(71.6)	6.0	-8.5%
Bosnia and Herzegovina	3	(4.5)	0.1	1	(1.6)	0.0	1	(50.0)	0.0	0	(0.0)	0.0	0	(0.0)	0.0	-100.0%
former Yugoslav Republic of Macedonia, the	4	(15.4)	0.2	1	(6.3)	0.0	0	(0.0)	0.0	1	(6.7)	0.0	0	(0.0)	0.0	-100.0%
Georgia	169	(31.2)	4.1	201	(38.1)	5.0	197	(39.2)	4.9	186	(38.8)	4.7	154	(38.0)	3.9	-1.2%
Israel	2	(33.3)	0.0	1	(100.0)	0.0	2	(50.0)	0.0	1	(16.7)	0.0	0	(0.0)	0.0	-100.0%
Kazakhstan	5744	(55.0)	33.9	4035	(57.8)	23.4	1152	(39.9)	6.6	1411	(40.0)	7.9	399	(20.5)	2.2	-49.4%
Kyrgyzstan	453	(54.5)	8.1	547	(55.1)	9.6	-	-	-	450	(56.3)	7.7	466	(56.3)	7.8	-
Moldova	581	(62.3)	14.3	561	(62.1)	13.8	453	(65.9)	11.1	501	(71.9)	12.3	221	(57.4)	5.4	-21.4%
Monaco	-	-	-	-	-	-	0	(0.0)	0.0	0	(0.0)	0.0	-	-	-	-
Montenegro	0	(0.0)	0.0	0	(0.0)	0.0	2	(40.0)	0.3	0	(0.0)	0.0	0	(0.0)	0.0	-
Russia	7075	(57.4)	4.9	6795	(56.3)	4.7	7951	(57.1)	5.5	8529	(59.1)	5.9	17508	(65.2)	12.2	25.3%
San Marino	-	_	-	-	-	-	-	_	-	-	-	-	0	(0.0)	0.0	-
Serbia excluding UN	3	(3.6)	0.0	4	(4.7)	0.0	4	(7.5)	0.0	1	(2.8)	0.0	5	(12.5)	0.1	14.1%
Administered Province of Kosovo ^e UN Administered	-	-	-	-	-	-	-	_	_	-	-	-	3	(7.5)	0.0	
Province of Kosovo ^e	-	(40.5)	-	-	(22.5)	-	-	(44.5)	-	-	(24.4)	-	2	(6.3)	0.1	-
Switzerland	4	(12.9)	0.0	8	(23.5)	0.1	4	(14.3)	0.0	4	(21.1)	0.0	1	(7.1)	0.0	-30.1%
Tajikistan	278	(56.0)	3.5	16	(34.8)	0.2	213	(52.2)	2.5	97	(48.7)	1.1	151	(46.3)	1.7	-16.0%
Turkey	140	(21.8)	0.2	105	(17.8)	0.1	130	(21.1)	0.2	102	(17.9)	0.1	80	(13.7)	0.1	-14.4%
Turkmenistan	1000	(0.0)	0.0	2265	(0.0)	0.0	32	(72.7)	0.6	21/0	(41 5)	71	2.075	((() ()	-	4
Ukraine	1908	(32.2)	4.2	3365	(40.7)	7.5	3562	(41.5)	7.9	3169	(41.5)	7.1	2875	(40.8)	6.5	11.4%
Uzbekistan	479	(46.7)	1.6	1495	(56.1)	5.0	720	(79.8)	2.4	185	(56.2)	0.6	311	(25.3)	1.0	-11.6
Subtotal non-EU/EEA	18157	(50.1)	4.7	18 5 3 4	(51.5)	4.8	15733	(49.9)	4.0	15996	(49.8)	4.1	23 416 24 018	(55.4)	5.9 2.6	5.9%
Total European Region	19 019	(46.5)	2.3	19249	(47.7)	2.3	16 471	(45.8)	1.8	16 688	(46.3)	2.1	44010	(51.9)	2.0	3.7%

European Region' comprises the 53 countries of the WHO European Region and Liechtenstein.

WHO European Region 18 TB high-priority countries presented in italics.

Bacteriologically-confirmed cases – cases with positive identification for Mycobacterium tuberculosis complex confirmed by culture and/or line probe assay for non-EU countries, culture-positive and microscopy-positive/nucleic acid amplification test-positive cases for EU/EEA countries.

Distribution by previous diagnosis.

These data are subject to change as the national TB registry was under review when this report was being produced.

Provisional data for 2016 including overseas territories.

In accordance with the UN Security Council Resolution No. 1244 (1999).

Table VII: MDR TB notification among all bacteriologically confirmed a TB cases with available DST results, European Region, 2012-2016

		2012		2013			2014				2015			2016	ı	Mean annual
Country	N	%	Rate per 100 000	N	%	Rate per 100 000	N	%	Rate per 100000	N	%	Rate per 100 000	N	%	Rate per 100 000	change in rate, 2012- 2016
EU/EEA																2010
Austria	27	(6.7)	(0.3)	16	(3.5)	(0.2)	20	(4.8)	(0.2)	12	(2.8)	(0.1)	16	(3.4)	(0.2)	-13.0%
Belgium	20	(2.7)	(0.2)	13	(1.8)	(0.1)	11	(1.6)	(0.1)	15	(2.0)	(0.1)	10	(1.3)	(0.1)	-16.4%
Bulgaria	49	(5.9)	(0.7)	27	(3.6)	(0.4)	37	(5.0)	(0.5)	24	(3.6)	(0.3)	19	(2.8)	(0.3)	-20.6%
Croatia ^b	1	(0.3)	(0.0)	0	(0.0)	(0.0)	2	(0.5)	(0.0)	1	(0.3)	(0.0)	0	(0.0)	(0.0)	-100.0%
Cyprus	0	(0.0)	(0.0)	1	(3.3)	(0.1)	0	(0.0)	(0.0)	0	(0.0)	(0.0)	1	(2.4)	(0.1)	-
Czech Republic	4	(1.0)	(0.0)	0	(0.0)	(0.0)	5	(1.5)	(0.0)	9	(2.4)	(0.1)	6	(1.6)	(0.1)	10.5%
Denmark	1	(0.3)	(0.0)	2	(0.7)	(0.0)	2	(0.7)	(0.0)	6	(2.2)	(0.1)	4	(1.6)	(0.1)	40.6%
Estonia	62	(25.9)	(4.7)	54	(24.0)	(4.1)	50	(26.0)	(3.8)	38	(21.2)	(2.9)	24	(15.8)	(1.8)	-21.0%
Finland	3	(1.4)	(0.1)	2	(1.0)	(0.0)	8	(3.8)	(0.1)	8	(3.8)	(0.1)	6	(3.3)	(0.1)	18.5%
France ^{cd}	-	-	-	83	(1.9)	(0.1)	111	(2.6)	(0.2)	-	-	_	71	(1.7)	(0.1)	_
Germany	62	(2.1)	(0.1)	97	(3.2)	(0.1)	92	(3.0)	(0.1)	117	(3.0)	(0.1)	101	(2.7)	(0.1)	12.3%
Greece	3	(1.7)	(0.0)	10	(4.3)	(0.1)	4	(2.4)	(0.0)	9	(4.3)	(0.1)	5	(4.0)	(0.0)	14.4%
Hungary	11	(2.4)	(0.1)	10	(2.8)	(0.1)	3	(1.0)	(0.0)	8	(2.1)	(0.1)	18	(5.3)	(0.2)	13.4%
Iceland	1	(20.0)	(0.3)	0	(0.0)	(0.0)	0	(0.0)	(0.0)	0	(0.0)	(0.0)	0	(0.0)	(0.0)	-100.0%
Ireland	5	(1.8)	(0.1)	4	(1.5)	(0.1)	2	(0.9)	(0.0)	1	(0.5)	(0.0)	6	(2.6)	(0.1)	3.9%
Italy ^d	74	(3.0)	(0.1)	78	(3.3)	(0.1)	78	(3.1)	(0.1)	70	(2.7)	(0.1)	70	(2.6)	(0.1)	-1.9%
Latvia	107	(14.0)	(5.2)	79	(11.6)	(3.9)	70	(11.9)	(3.5)	63	(11.1)	(3.2)	56	(10.4)	(2.8)	-14.1%
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
Lithuania	271	(19.8)	(9.0)	256	(18.9)	(8.6)	271	(21.5)	(9.2)	241	(19.7)	(8.2)	244	(20.3)	(8.4)	-1.6%
Luxembourg	0	(0.0)	(0.0)	0	(0.0)	(0.0)	1	(6.3)	(0.2)	0	(0.0)	(0.0)	1	(4.0)	(0.2)	_
Malta	0	(0.0)	(0.0)	1	(3.7)	(0.2)	0	(0.0)	(0.0)	1	(4.5)	(0.2)	0	(0.0)	(0.0)	-
Netherlands	11	(1.7)	(0.1)	16	(2.6)	(0.1)	7	(1.3)	(0.0)	9	(1.6)	(0.1)	12	(2.1)	(0.1)	1.8%
Norway	6	(2.1)	(0.1)	6	(1.9)	(0.1)	11	(4.1)	(0.2)	5	(2.0)	(0.1)	11	(4.8)	(0.2)	15.1%
Poland	31	(0.7)	(0.1)	40	(0.9)	(0.1)	35	(0.8)	(0.1)	35	(0.8)	(0.1)	46	(1.1)	(0.1)	10.4%
Portugal	23	(1.5)	(0.2)	15	(1.1)	(0.1)	25	(2.0)	(0.2)	22	(1.8)	(0.2)	12	(1.5)	(0.1)	-14.6%
Romania	684	(9.0)	(3.4)	579	(7.8)	(2.9)	532	(6.4)	(2.7)	535	(6.0)	(2.7)	463	(5.5)	(2.3)	-8.9%
Slovakia	1	(0.6)	(0.0)	3	(1.4)	(0.1)	3	(1.9)	(0.1)	2	(1.3)	(0.0)	3	(2.7)	(0.1)	31.5%
Slovenia	0	(0.0)	(0.0)	0	(0.0)	(0.0)	0	(0.0)	(0.0)	0	(0.0)	(0.0)	0	(0.0)	(0.0)	_
Spain ^d	37	(4.2)	(0.1)	34	(2.2)	(0.1)	35	(2.2)	(0.1)	40	(4.8)	(0.1)	39	(4.4)	(0.1)	1.5%
Sweden	14	(2.8)	(0.1)	8	(1.5)	(0.1)	15	(2.9)	(0.2)	22	(3.2)	(0.2)	22	(3.7)	(0.2)	10.9%
United Kingdom	80	(1.5)	(0.1)	74	(1.6)	(0.1)	56	(1.3)	(0.1)	48	(1.3)	(0.1)	56	(1.5)	(0.1)	-9.2%
Subtotal EU/EEA	1588	(4.7)	0.4	1508	(4.1)	0.3	1486	(4.0)	0.3	1343	(4.0)	0.3	1322	(3.7)	0.3	-8.0%
Non-EU/EEA																
Albania	1	(0.5)	0.0	1	(3.2)	0.0	3	(10.3)	0.1	4	(30.8)	0.1	4	(10.0)	0.1	41.3%
Andorra	0	(0.0)	0.0	1	(25.0)	1.2	2	(40.0)	2.5	0	(0.0)	0.0	0	(0.0)	0.0	-
Armenia	92	(18.0)	3.2	112	(25.6)	3.9	111	(18.2)	3.8	101	(23.2)	3.5	128	(27.8)	4.4	8.2%
Azerbaijan	599	(23.9)	6.5	970	(25.4)	10.3	495	(8.3)	5.2	1171	(31.8)	12.2	925	(31.3)	9.5	10.1%
Belarus	1604	(47.9)	16.9	1353	(41.7)	14.3	1251	(44.6)	13.2	1340	(47.4)	14.1	1543	(57.1)	16.3	-1.0%
Bosnia and Herzegovina	7	(0.9)	0.2	1	(50.0)	0.0	4	(0.6)	0.1	3	(0.4)	0.1	0	(0.0)	0.0	-100.0%
former Yugoslav Republic of Macedonia, the	4	(2.2)	0.2	1	(0.6)	0.0	3	(1.7)	0.1	5	(2.7)	0.2	2	(1.2)	0.1	-16.0%
Georgia	346	(14.0)	8.4	400	(17.5)	9.9	441	(18.9)	11.0	418	(17.9)	10.6	401	(17.1)	10.2	4.9%
Israel	17	(5.2)	0.2	8	(3.8)	0.1	17	(6.5)	0.2	15	(7.7)	0.2	11	(7.1)	0.1	-11.7%
Kazakhstan	7608	(40.9)	45.0	6032	(40.5)	35.1	5877	(36.8)	33.6	6 497	(60.4)	36.6	5 8 1 7	(55.4)	32.3	-7.9%
Kyrgyzstan	1755	(70.5)	31.4	1160	(36.8)	20.4	1267		21.9	1116	(37.9)	19.0	1236	(35.4)	20.8	-9.8%
Moldova	894	(40.7)	21.9	1042	(39.8)	25.6	925	(35.6)	22.7	1042	(43.6)	25.6	1031	(41.4)	25.4	3.7%
Monaco							0	(0.0)	0.0	0	(0.0)	0.0	-	-	-	_
Montenegro	0	(0.0)	0.0	0	(0.0)	0.0	2	(2.9)	0.3	1	(1.8)	0.2	0	(0.0)	0.0	_
Russia	13 612	(30.3)	9.5	12 0 6 9	(27.7)	8.4	15 5 8 5	(34.5)	10.8	17132	(36.7)	11.9	27363	(47.3)	19.0	19.0%
San Marino	-	-	_	-	-	-	-	-	-	-	-	-	0	(0.0)	0	_
Serbia Serbia excluding UN	9	(1.1)	0.1	10	(1.3)	0.1	14	(2.0)	0.2	5	(1.1)	0.1	8	(1.2)	0.1	-2.5%
Administered Province of Kosovo ^d	-	-	-	-	-	-	-	-	-	-	-	-	6	(1.3)	0.1	-
UN Administered Province of Kosovo ^d	-	-	-	-	-	-	-	-	-	-	- (2.4)	-	2	(0.9)	0.1	-
Switzerland	8	(2.9)	0.1	13	(3.1)	0.2	17	(4.2)	0.2	16	(3.6)	0.2	18	(3.8)	0.2	21.1%
Tajikistan	954	(67.4)	11.9	872	(30.7)	10.7	902	(27.9)	10.8	675	(20.9)	7.9	748	(23.5)	8.6	-8.0%
Turkey	291	(5.4)	0.4	228	(4.1)	0.3	349	(6.4)	0.5	304	(5.4)	0.4	256	(4.2)	0.3	-4.7%
Turkmenistan	-	-	-	81	-	1.5	210	- ()	3.8	270	- (22.2)	4.9	557	-	9.8	_
	6934	(40.5)	15.3	9929	(46.9)	22.0	7735	(32.9)	17.2	9397	(39.8)	21.0	8 651	(40.0)	19.5	6.2%
Ukraine			7/	1211	((2 2)	1 / F	2011	(24 4)	12 (2149	(28.4)	6.9	1956	(13.4)	6.2	-4.8%
Uzbekistan	2233	(62.9)	7.6	4366	(63.3)	14.5	3844	(21.4)	12.6							
	2233 36968 38556	(62.9) (34.5) (27.4)	9.5	38649 40157	(34.4) (26.9)	9.8 4.4	39054 40540	(30.5) (24.5)	9.8	41661 43004	(36.5)	10.4	50 655 51 977	(38.3)	12.6	7.2% 5.3%

EU/EEA countries designated as high-priority countries by WHO are presented in italics.

* Bacteriologically-confirmed cases — culture-positive and microscopy-positive/nucleic acid amplification test-positive cases for EU/EEA countries.

b These data are subject to change as the national TB registry was under review when this report was being produced.

c Provisional data for 2016 reported to WHO Global TB database.

d Data from France, Italy and Spain reported from NRL may differ from data shown elsewhere in this report.

Table VIII: XDR TB notification among pulmonary MDR TB cases with second-line drug sensitivity test results, European Region, 2012-2016a

<u>'</u>		2012			2013			2014			2015			2016	
Country	MDR TB tested for SLD (N)	XDR TB (N)	% among tested	MDR TB tested for SLD (N)	XDR TB (N)	% among tested	MDR TB tested for SLD (N)	XDR TB (N)	% among tested	MDR TB tested for SLD (N)	XDR TB (N)	% among tested	MDR TB tested for SLD (N)	XDR TB (N)	% among tested
EU/EEA															
Austria	26	7	(26.9)	16	3	(18.8)	18	2	(11.1)	9	1	(11.1)	14	2	(14.3)
Belgium	16	2	(12.5)	10	0	(0.0)	10	1	(10.0)	11	2	(18.2)	9	0	(0.0)
Bulgaria	48	5	(10.4)	26	4	(15.4)	36	3	(8.3)	21	4	(19.0)	19	0	(0.0)
Croatia ^b	-	-	-	-	-	-	2	0	(0.0)	1	0	(0.0)	0	0	-
Cyprus	0	0	-	1	1	(100.0)	0	0	-	0	0	-	0	0	-
Czech Republic	2	1	(50.0)	0	0	-	5	0	(0.0)	8	1	(12.5)	0	0	-
Denmark	0	0	-	2	1	(50.0)	1	0	(0.0)	5	1	(20.0)	0	0	-
Estonia	55	4	(7.3)	53	10	(18.9)	48	8	(16.7)	35	8	(22.9)	23	7	(30.4)
Finland	3	1	(33.3)	2	0	(0.0)	6	1	(16.7)	8	1	(12.5)	3	1	(33.3)
France	-	-	- (- 4)	81	21	(25.9)	70	30	(42.9)	76	8	(10.5)	69	6	(8.7)
Germany	18	1	(5.6)	41	3	(7.3)	58	11	(19.0)	72	11	(15.3)	58	5	(8.6)
Greece	2	0	(0.0)	10	0	(0.0)	2	1	(50.0)	0	0	(4/2)	0	0	-
Hungary	10	2	(20.0)	9	1	(11.1)	2	0	(0.0)	7	1	(14.3)	0	0	-
Iceland	0	0	(0,0)	0	0	(22.2)	0	0	(0,0)	0	0		0	0	(0.0)
Ireland	50	0	(0.0)	3	7	(33.3)	2	0	(0.0)	0	0	(19.4)	5	0	
Italy		5		55		(12.7)	64		(14.1)		6		43 53		(11.6)
Latvia Liechtenstein	104	17	(16.3)	69	15	(21.7)	70	13	(18.6)	62	16	(25.8)	55	20	(37.7)
Lithuania	210	52	(24.8)	186	46	(24.7)	232	60	(25.9)	238	58	(24.4)	242	58	(24.0)
Luxembourg	210	52 -	(24.0)	100	40	(24./)	232	-	(23.7)	230	-	(24.4)	242	-	(24.0)
Malta	0	0	_	1	1	(100.0)	0	0	_	0	0	_	0	0	_
Netherlands	_	_	_	0	0	(100.0)	5	0	(0.0)	8	0	(0.0)	8	0	(0.0)
Norway	4	0	(0.0)	5	1	(20.0)	9	1	(11.1)	4	0	(0.0)	7	0	(0.0)
Poland	4	0	(0.0)	4	1	(25.0)	25	5	(20.0)	23	4	(17.4)	38	8	(21.1)
Portugal	15	3	(20.0)	11	4	(36.4)	13	2	(15.4)	13	5	(38.5)	4	1	(25.0)
Romania	369	41	(11.1)	309	56	(18.1)	301	58	(19.3)	315	66	(21.0)	207	62	(30.0)
Slovakia	1	0	(0.0)	2	0	(0.0)	3	0	(0.0)	2	0	(0.0)	3	0	(0.0)
Slovenia	_	-	_	_	-	_	-	-	_	-	-	_	0	0	-
Spain	37	1	(2.7)	34	2	(5.9)	35	2	(5.7)	42	1	(2.4)	39	0	(0.0)
Sweden	9	1	(11.1)	7	2	(28.6)	11	1	(9.1)	16	1	(6.3)	14	4	(28.6)
United Kingdom	59	2	(3.4)	43	2	(4.7)	34	2	(5.9)	34	10	(29.4)	39	6	(15.4)
Subtotal EU/EEA	1043	145	(13.9)	980	182	(18.6)	1062	210	(19.8)	1041	205	(19.7)	897	185	(20.6)
Non-EU/EEA															
Albania	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
Andorra	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
Armenia	92	2	(2.2)	66	7	(10.6)	100	8	(8.0)	89	8	(9.0)	53	6	(11.3)
Azerbaijan	319	38	(11.9)	-	-	- ()	840	100	(11.9)	670	125	(18.7)	535	71	(13.3)
Belarus	-	-	(0.0)	1353	80	(5.9)	1251	366	(29.3)	1275	453	(35.5)	1246	572	(45.9)
Bosnia and Herzegovina	5	0	(0.0)	0	0	-	3	0	(0.0)	0	0	-	0	0	-
former Yugoslav Republic of Macedonia, the	1	1	(100.0)	0	0	(10.2)	0	0	(15.4)	0	0	(17.0)	0	0	(47.6)
Georgia	341 17	30	(8.8)	369	<i>71</i>	(19.2)	<i>357</i> 15	54	(15.1)	<i>347</i> 11	62	(17.9) (9.1)	296 9	52 2	(17.6) (22.2)
Israel Kazakhstan	- 1/	4	(23.5)	7	_	(14.3)	- 15	0	(0.0)	- 11	-	(9.1)	9	_	(22.2)
Kyrgyzstan	511	18	(3.5)	_	_	_	_	_	_	235	44	(18.7)	407		(17.7)
Moldova	761	33	(4.3)	782	35	(4.5)	277	11	(4.0)	233	-	(10.7)	514	72 42	(8.2)
Monaco	701	-	(4.3)	702	-	(4.5)	0	0	(4.0)	0	0	_	- 514 -	42	(0.2)
Montenegro	0	0	-	0	0	_	2	0	(0.0)	0	0	_	0	0	_
Russia	-	-	_	-	_	_	_	_	(0.0)	_	_	_	25258	3402	(13.5)
San Marino	_	_	-	_	-	_	_	_	_	_	_	_	0	0	(0.0)
Serbia	9	0	(0.0)	6	0	(0.0)	7	0	(0.0)	0	0	_	14	1	(7.1)
Serbia excluding UN Administered Province of	-	-	-	_	-	-	7	0	(0.0)	-	-	-	14	1	(7.1)
UN Administered	_	_	_	_	_	_	1	0	(0.0)	_	_	_	0	0	_
Province of Kosovo ^d Switzerland	8	0	(0.0)	12	1	(8.3)	11	1	(9.1)	11	2	(18.2)	13	0	(0.0)
Tajikistan	345	49	(14.2)	159	28	(17.6)	371	54	(14.6)	561	54	(9.6)	697	59	(8.5)
Turkey	104	6	(5.8)	114	3	(2.6)	169	2	(14.6)	133	3	(2.3)	130	9	(6.9)
Turkmenistan	104	-	(5.8)	114	3	(2.0)	169	_	(1.2)	133	3	(2.3)	130	-	(0.9)
Ukraine	_	_	_	_	_	_	_	_	_	_	_	_	5756	247	(3.3)
Uzbekistan	356	31	(8.7)	528	167	(31.6)	927	181	(19.5)	_	_	_	1802	184	(10.2)
Subtotal non-EU/EEA	2869	212	(7.4)	3396	393	(11.6)	4330	777	(17.9)		752	(22.6)	36679	4719	(12.9)
Total European Region	3912	357	(9.1)	4376	575	(13.1)	5392	987	(18.3)		957	(21.9)	37576	4904	(13.1)
Subtotal 18 HPC	3121	312	(10.0)	4014	522	(13.0)	4979	918	(18.4)	3981	901	(22.6)	37187	4863	(13.1)

^{*}European Region' comprises the 53 countries of the WHO European Region and Liechtenstein.

WHO European Region 18 TB high-priority countries presented in italics.

XDR TB — Extensively drug-resistant tuberculosis.

MDR TB — Multidrug-resistant tuberculosis.

SLD — Drug susceptibility testing for second-line TB drugs.

* Includes only countries reporting second-line anti-TB drug susceptibility testing for at least one fluoroquinolone (ofloxacin, moxifloxacin and ciprofloxacin) and one injectable drug (amikacin, kanamycin and capreomycin).

* These data are subject to change as the national TB registry was under review when this report was being produced.

* Provisional data for 2016 including overseas territories.

d In accordance with the UN Security Council Resolution No. 1244 (1999).

Table IX: Tuberculosis cases with HIV infection, European Region, 2012–2016a

			2012					2013					2014		
Country	All TB	Cases wit		HIV po	sitive	All TB	Cases wit		HIV po	sitive	All TB	Cases wit		HIV pos	sitive
	cases (N)	niv s	tatus %	N I	% ^b	cases (N)	niv s	tatus %	N	<u>%</u> ь	cases (N)	HIV st	atus %	N I	<u>%</u> ь
U/EEA	. ,		,0		,,		.,	,,,	·	,,		.,	,,,		,,,
Nustria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belgium	976	550	(56.4)	40	(7.3)	963	482	(50.1)	36	(7.5)	949	494	(52.1)	38	(7.7)
Bulgaria	2280	1513	(66.4)	3	(0.2)	1932	1874	(97.0)	4	(0.2)	1872	1377	(73.6)	3	(0.2)
Croatia	2200	- 1010	(00.4)	_	(0.2)	1/32	10/4	()/.0/	-	(0.2)	10/2	13//	(/).0/	_	(0.2)
	_	_	_	_	_	_	_	_	_	_	41	28	(68.3)	1	(3.6)
Cyprus															
Czech Republic	597	135	(22.6)	5	(3.7)	497	122	(24.5)	0	(0.0)	511	146	(28.6)	3	(2.1)
Denmark	-	-	-	-	-	-	-	-	-	-	-	-	- ()	-	-
Estonia	289	274	(94.8)	45	(16.4)	290	280	(96.6)	37	(13.2)	248	239	(96.4)	24	(10.0)
Finland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
rance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Greece	_	-	-	-	-	540	363	(67.2)	35	(9.6)	519	336	(64.7)	18	(5.4)
Hungary	-	-	-	-	-	-	-	-	-	-	851	30	(3.5)	2	(6.7)
celand	11	11	(100.0)	0	(0.0)	11	8	(72.7)	0	(0.0)	9	7	(77.8)	0	(0.0)
reland	359	102	(28.4)	15	(14.7)	374	124	(33.2)	9	(7.3)	311	119	(38.3)	17	(14.3)
taly	-	-		-	(14.7)	-	-	_	_	-	-	-	-	-	(17.5)
.atvia	993	844	(85.0)	114	(13.5)	904	420	(46.5)	95	(22.6)	761	488	(64.1)	95	(19.5)
iechtenstein	777	- 044	(05.0)	- 114	(1).)	704	420	(40.3)	-	(22.0)	/01	400	(07.1)	-	(17.3)
ithuania		1213	(68.1)	29	(2.4)	1705	1144	(67.1)	39	(3.4)	1607	1135	(70.6)		(3.2)
	1781													36	
.uxembourg	45	44	(97.8)	1	(2.3)	38	36	(94.7)	1	(2.8)	24	13	(54.2)	1	(7.7)
Malta	42	42	(100.0)	4	(9.5)	50	44	(88.0)	0	(0.0)	46	35	(76.1)	6	(17.1)
letherlands	956	458	(47.9)	30	(6.6)	845	477	(56.4)	17	(3.6)	814	495	(60.8)	22	(4.4)
Vorway	-	-	-	-	-	392	31	(7.9)	8	(25.8)	324	260	(80.2)	17	(6.5)
Poland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Portugal	2606	2 277	(87.4)	301	(13.2)	2 4 1 0	2091	(86.8)	252	(12.1)	2278	1959	(86.0)	226	(11.5)
Romania	18190	10 4 0 2	(57.2)	237	(2.3)	16 689	10403	(62.3)	271	(2.6)	15 879	11178	(70.4)	314	(2.8)
Slovakia	345	322	(93.3)	0	(0.0)	401	368	(91.8)	0	(0.0)	336	282	(83.9)	0	(0.0)
Slovenia	138	103	(74.6)	0	(0.0)	140	105	(75.0)	1	(1.0)	144	110	(76.4)	0	(0.0)
Spain	6070	4 4 2 5	(72.9)	387	(8.7)	5 6 3 2	3609	(64.1)	285	(7.9)	4914	3 2 0 1	(65.1)	228	(7.1)
Sweden	_	-	-	_	-	_	_	-	_	-	-	_	-	-	_
Jnited Kingdom	8711	5239	(60.1)	268	(5.1)	7868	5918	(75.2)	225	(3.8)	_	_	_	_	_
Subtotal EU/EEA	44389	27954	(63.0)	1479	(5.3)	41681	27899	(66.9)	1315	(4.7)	32438	21932	(67.6)	1051	(4.8)
ion-EU/EEA	77 307	21734	(03.0)	1417	(3.3)	71001	21077	(00.9)	1313	(7.1)	J2 7 J0	21732	(07.0)	1031	(4.0)
Albania	420	233	(55.5)	7	(3.0)	474	109	(23.0)	2	(1.8)	408	41	(10.0)	2	(4.9)
Andorra	420	1	(11.1)	0	(0.0)	5	109	(23.0)	1	(100.0)	400	0	(0.0)	_	(4.9)
Armenia								(100.0)							((2)
	1518	1518	(100.0)	79	(5.2)	1417	1417	(100.0)	67	(4.7)	1342	1342	(100.0)	84	(6.3)
Azerbaijan	8140	7849	(96.4)	129	(1.6)	8597	8329	(96.9)	131	(1.6)	7539	7004	(92.9)	148	(2.1)
Belarus	5246	5246	(100.0)	229	(4.4)	4859	4859	(100.0)	250	(5.1)	4274	4274	(100.0)	271	(6.3)
Bosnia and Herzegovina	1420	56	(3.9)	0	(0.0)	1261	74	(5.9)	0	(0.0)	-	-	-	-	-
ormer Yugoslav Republic	355	145	(40.8)	0	(0.0)	323	207	(64.1)	0	(0.0)	285	171	(60.0)	1	(0.6)
of Macedonia, the													, ,		
Georgia	4974	1881	(37.8)	45	(2.4)	4319	2739	(63.4)	55	(2.0)	3850	2591	(67.3)	57	(2.2)
srael	509	503	(98.8)	16	(3.2)	308	299	(97.1)	14	(4.7)	368	367	(99.7)	25	(6.8)
Kazakhstan	21 523	21184	(98.4)	441	(2.1)	19857	18104	(91.2)	466	(2.6)	15718	15435	(98.2)	625	(4.0)
(yrgyzstan	6916	6916	(100.0)	151	(2.2)	-	-	-	-	-	-	-	-	-	_
Moldova	5348	5348	(100.0)	264	(4.9)	5 0 5 1	4085	(80.9)	250	(6.1)	4636	4426	(95.5)	338	(7.6)
Monaco	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-
Montenegro	107	82	(76.6)	0	(0.0)	120	98	(81.7)	2	(2.0)	113	94	(83.2)	0	(0.0)
Russia	97542	75995	(77.9)	4880	(6.4)	73361	69724	(95.0)	4990	(7.2)	70854	67425	(95.2)	5 2 5 1	(7.8)
San Marino	77 342	73333	(11.7)	7000	(0.4)	, , , , , , ,	09724	(23.0)	7/70	(/-2/	, 000,4	J/ 72J	(23.4)	7271	(7.0)
	1215		(2.2)		(15 4)	1104		(11.2)	10	(14.4)	000	127	(12.7)		((2)
Serbia Serbia Allah	1215	39	(3.2)	6	(15.4)	1181	132	(11.2)	19	(14.4)	998	127	(12.7)	8	(6.3)
Serbia excluding UN Administered Province of Kosovo ^c	1215	39	(3.2)	6	(15.4)	1181	132	(11.2)	19	(14.4)	998	127	(12.7)	8	(6.3)
UN Administered Province of Kosovo ^c	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
witzerland	-	-	-	-	_	-	-	-	-	-	-	_	-	-	-
Tajikistan	6929	6375	(92.0)	88	(1.4)	6495	6367	(98.0)	135	(2.1)	6260	5 6 5 6	(90.4)	161	(2.8)
Turkey	14 691	8646	(58.9)	45	(0.5)	13 409	8787	(65.5)	32	(0.4)	13 378	9344	(69.8)	45	(0.5)
Turkmenistan	14091	- 0040	(50.7)	-	(0.5)	15407	5/0/	(0).)	-	(0.4)	-	7,744	(0).0)	47	(0.5)
Jkraine			(75.0)		(13.8)	//012/	(12212			(19.6)			(96.9)		(19.6)
	45569	34181	(75.0)	4726		48134	42213	(87.7)	8290		40 302	39 057		7640	
Jzbekistan	16810	16810	(100.0)	820	(4.9)	25168	24 670	(98.0)	1097	(4.4)	22804	22347	(98.0)	780	(3.5)
Subtotal non-EU/EEA	239 241	193 008	(80.7)	11926	(6.2)	214339	192 214	(89.7)	15801	(8.2)	193135	179 701	(93.0)	15 436	(8.6)
Total European Region Subtotal 18 HPC	283 630 252 332		(77.9) (79.2)	13 405 12 190	(6.1)	256 020 232 495	220113 205714	(86.0) (88.5)	17 116 16 223	(7.8) (7.9)	225573	201633 193685	(89.4) (91.5)	16 487 15 897	(8.2)

^{*}European Region' comprises the 53 countries of the WHO European Region and Liechtenstein.
WHO European Region 18 TB high-priority countries presented in italics.
HIV – Human immunodeficiency virus.

* HIV prevalence may be underestimated due to incomplete HIV testing and/or reporting of HIV serostatus. Countries were only included in this analysis if total number of cases tested for HIV and test results were provided.

* Percentages calculated from TB cases with known HIV test results.

* In accordance with the UN Security Council Resolution No. 1244 (1999).

		2015			2016					
All TB	Cases wit		HIV po:	sitive	All TB	Cases wit		HIV po	sitive	Country
cases (N)	HIV st				cases	HIV st				Country
(N)	N	%	N	%⁵	(N)	N	%	N	% ^b	FILEPA
-	-	-	-	-	-	-	-	-	-	EU/EEA Austria
977	432	(44.2)	31	(7.2)	1047	479	(45.7)	33	(6.9)	Belgium
1660	1311	(79.0)	1	(0.1)	1603	1260	(78.6)	0	(0.0)	Bulgaria
7000	-	(/ 2.0)	-	(0.1)	1005	1200	(/0.0)	-	(0.0)	Croatia
63	48	(76.2)	2	(4.2)	60	48	(80.0)	0	(0.0)	Cyprus
517	182	(35.2)	2	(1.1)	516	205	(39.7)	5	(2.4)	Czech Republic
-	-	(55.2)	-	-	330	150	(45.5)	9	(6.0)	Denmark
217	210	(96.8)	26	(12.4)	192	184	(95.8)	22	(12.0)	Estonia
_	-	-	-	(12.4)	-	-	(75.0)	-	-	Finland
_	-	_	-	-	-	-	-	-	-	France
-	-	-	_	_	-	-	-	_	-	Germany
482	343	(71.2)	22	(6.4)	-	-	-	-	-	Greece
906	20	(2.2)	1	(5.0)	786	19	(2.4)	1	(5.3)	Hungary
7	7	(100.0)	0	(0.0)	6	6	(100.0)	0	(0.0)	Iceland
283	122	(43.1)	8	(6.6)	318	132	(41.5)	4	(3.0)	Ireland
-	-	-	-	-	-	-	-	_	-	Italy
721	449	(62.3)	78	(17.4)	660	507	(76.8)	57	(11.2)	Latvia
-	-	-	-	-	-	-	-	-	-	Liechtenstein
1507	1082	(71.8)	39	(3.6)	1442	1138	(78.9)	41	(3.6)	Lithuania
-	-	-	-	-	29	5	(17.2)	2	(40.0)	Luxembourg
32	26	(81.3)	4	(15.4)	50	46	(92.0)	8	(17.4)	Malta
862	636	(73.8)	35	(5.5)	889	554	(62.3)	21	(3.8)	Netherlands
313	260	(83.1)	8	(3.1)	299	257	(86.0)	10	(3.9)	Norway
_	-	-	-	-	_	-	-	-	_	Poland
2178	1941	(89.1)	232	(12.0)	1836	1212	(66.0)	168	(13.9)	Portugal
15183	11 533	(76.0)	308	(2.7)	13 617	10 634	(78.1)	287	(2.7)	Romania
317	201	(63.4)	0	(0.0)	296	132	(44.6)	0	(0.0)	Slovakia
130	108	(83.1)	0	(0.0)	118	95	(80.5)	1	(1.1)	Slovenia
4997	3129	(62.6)	223	(7.1)	4877	2925	(60.0)	226	(7.7)	Spain
-	-	-	-	-	-	-	-	-	-	Sweden
-	-	-	-	_	_	-	-	_	-	United Kingdom
31352	22 040	(70.3)	1020	(4.6)	28 971	19988	(69.0)	895	(4.5)	Subtotal EU/EEA
				, ,					, ,	Non-EU/EEA
415	183	(44.1)	6	(3.3)	415	223	(53.7)	6	(2.7)	Albania
4	0	(0.0)	0	-	4	0	(0.0)	-	-	Andorra
1090	1090	(100.0)	99	(9.1)	1027	1027	(100.0)	57	(5.6)	Armenia
6964	6964	(100.0)	112	(1.6)	5159	4722	(91.5)	99	(2.1)	Azerbaijan
3765	3740	(99.3)	206	(5.5)	3211	3148	(98.0)	275	(8.7)	Belarus
1092	209	(19.1)	0	(0.0)	907	1	(0.1)	1	(100.0)	Bosnia and Herzegovina
282	185	(65.6)	0	(0.0)	263	207	(78.7)	0	(0.0)	former Yugoslav Republic of
										Macedonia, the
3152	2809	(89.1)	79	(2.8)	2983	2866	(96.1)	61	(2.1)	Georgia
280	280	(100.0)	14	(5.0)	250	250	(100.0)	18	(7.2)	Israel
14 006	13 838	(98.8)	376	(2.7)	12322	10 616	(86.2)	576	(5.4)	Kazakhstan
7027	6745	(96.0)	206	(3.1)	7026	6254	(89.0)	210		Kyrgyzstan
3608	3439	(95.3)	300	(8.7)	3 571	3366	(94.3)	293	(8.7)	Moldova
0	0	(0.0)	-	-	-	-	- (4:2-2)	-	- ()	Monaco
80	73	(91.3)	1	(1.4)	87	60	(69.0)	0	(0.0)	Montenegro
68 815	65 585	(95.3)	6407	(9.8)	92407	79935	(86.5)	16 570	(20.7)	Russia
-	-	-	-	-	0	0	-	-	-	San Marino
1649	91	(5.5)	4	(4.4)	1472	84	(5.7)	5	(6.0)	Serbia
879	91	(10.4)	4	(4.4)	755	84	(11.1)	5	(6.0)	Serbia excluding UN Administered Province of Kosovo ^c
770	0	(0.0)	-	-	717	398	(55.5)	0	(0.0)	UN Administered Province of Kosovo ^c
_	-	_	-	_	_	-	_	_	_	Switzerland
5894	5 6 2 7	(95.5)	152	(2.7)	5965	5850	(98.1)	201	(3.4)	
12 550	8759	(69.8)	59	(0.7)	12186	8549	(70.2)	56	(0.7)	Turkey
12 330	0/39	(09.0)	-	(0.7)	12 100	0) 4 9	(/0.2)	-	(0./)	Turkmenistan
30151	29749	(98.7)	6637	(22.3)	29 052	28194	(97.0)	5832	(20.7)	Ukraine
16315	13 058	(80.0)	841	(6.4)	18441	18441	(100.0)	758		Uzbekistan
177139	162424	(91.7)	15 499	(9.5)		173793	(88.3)	25018		Subtotal non-EU/EEA
208 491	184464	(88.5)	16519	(9.0)	225719	193781	(85.9)	25 913		Total European Region
185 878	169 523	(91.2)	15734	(9.3)	210864	186 691	(88.5)	25395		Subtotal 18 HPC
.0,0,0		(>112)	.0707	(2.0)	2.0007		(0010)		(.510)	

Table X: Treatment success after 12 months of new TB cases and relapses, European Region, 2011–2015

		2011			2012			2013			2014			2015	
Country	Cases	Succ		Cases	Succ		Cases	Succ		Cases	Succ		Cases	Succ	
	reported⁵	N	(%)	reported	N	(%)	reported	N	(%)	reported	N	(%)	reported	N	(%)
EU/EEA															, ,
Austria	654	472	(72.2)	608	427	(70.2)	621	452	(72.8)	553	410	(74.1)	553	402	(72.7)
Belgium	950	752	(79.2)	880	681	(77.4)	876	690	(78.8)	867	700	(80.7)	905	719	(79.4)
Bulgaria	2263	1943	(85.9)	2172	1886	(86.8)	1893	1620	(85.6)	1789	1530	(85.5)	1598	1350	(84.5)
Croatiab	-	-	-	538	51	(9.5)	511	225	(44.0)	496	354	(71.4)	483	50	(10.4)
Cyprus	51	32	(62.7)	65	28	(43.1)	40	20	(50.0)	39	23	(59.0)	63	35	(55.6)
Czech Republic	557	393	(70.6)	554	414	(74.7)	468	321	(68.6)	467	355	(76.0)	499	343	(68.7)
Denmark	356	260	(73.0)	341	230	(67.4)	329	239	(72.6)	291	156	(53.6)	314	157	(50.0
Estonia	254	186	(73.2)	217	163	(75.1)	222	193	(86.9)	194	162	(83.5)	172	142	(82.6,
Finland	313	131	(41.9)	261	116	(44.4)	265	140	(52.8)	250	112	(44.8)	260	94	(36.2)
France	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Germany	4125	2673	(64.8)	3981	2937	(73.8)	4003	2681	(67.0)	4268	2713	(63.6)	5543	3600	(64.9)
Greece	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-
Hungary	1437	1056	(73.5)	1169	821	(70.2)	1029	759	(73.8)	795	577	(72.6)	851	600	(70.5
Iceland	9	8	(88.9)	10	9	(90.0)	11	10	(90.9)	9	8	(88.9)	7	7	(100.0)
Ireland	385	236	(61.3)	328	203	(61.9)	346	213	(61.6)	288	162	(56.3)	265	151	(57.0)
Italy	-	-	-	-	-	-	-	-	_	_	-	-	-	-	(5,112)
Latvia	775	645	(83.2)	872	758	(86.9)	804	669	(83.2)	675	561	(83.1)	642	540	(84.1)
Liechtenstein	- ///	-	(05.2)	-	750	(00.7)	-	-	(05.2)	-	-	(05.1)	-	J40 -	(07.1)
Lithuania	1546	1290	(83.4)	1447	1186	(82.0)	1374	1111	(80.9)	1282	1034	(80.7)	1219	962	(78.9)
Luxembourg	1340	1290	(05.4)	144/	1100	(02.0)	13/4	- 1111	(00.3)	1202	1034	(00./)	1217	702	(/0.9)
Malta	32	22	(68.8)	41	10	(24.4)	48	36	(75.0)	_	_	_	_	_	
Netherlands	971	841	(86.6)	921	783	(85.0)	814	728	(89.4)	797	708	(88.8)	837	723	(86.4)
Norway	316	280	(88.6)	335	293	(87.5)	348	316	(90.8)	293	251	(85.7)	276	243	(88.0)
Poland	8137	5047	(62.0)	7253	4383	(60.4)	7005	4161	(59.4)	6500	3783	(58.2)	6196	3293	(53.1)
Portugal	2 5 1 7	1986	(78.9)	2535	1981	(78.1)	2341	1748	(74.7)	2197	1592	(72.5)	2114	1516	(71.7)
Romania	17353	14 691	(84.7)	16351	13 844	(84.7)	15115	12 814	(84.8)	14525	12304	(84.7)	13 908	11 828	(85.0)
Slovakia	393	363	(92.4)	343	302	(88.0)	395	370	(93.7)	318	280	(88.1)	305	263	(86.2)
Slovenia	190	155	(81.6)	138	112	(81.2)	139	107	(77.0)	142	110	(77.5)	129	105	(81.4)
Spain	6 410	4541	(70.8)	5738	4087	(71.2)	5328	4 355	(81.7)	4686	2708	(57.8)	-	-	-
Sweden	526	461	(87.6)	578	481	(83.2)	595	537	(90.3)	610	535	(87.7)	754	659	(87.4)
United Kingdom	8300	6508	(78.4)	8099	6 5 1 1	(80.4)	7 2 7 0	6 019	(82.8)	6534	5344	(81.8)	5802	4594	(79.2)
Subtotal EU/EEA	58820	44972	(76.5)	55775	42697	(76.6)	52190	40534	(77.7)	48865	36472	(74.6)	43 695	32376	(74.1)
Non-EU/EEA ^c															
Albania	413	382	(92.5)	407	373	(91.6)	472	416	(88.1)	406	358	(88.2)	409	354	(86.6)
Andorra	3	3	(100.0)	9	9	(100.0)	5	3	(60.0)	6	5	(83.3)	4	4	(100.0)
Armenia	1200	934	(77.8)	1350	1093	(81.0)	1251	1008	(80.6)	1228	959	(78.1)	910	721	(79.2)
Azerbaijan	2208	1717	(77.8)	4 616	3831	(83.0)	4294	3504	(81.6)	1623	1349	(83.1)	1475	1221	(82.8)
Belarus	4926	3480	(70.6)	3425	2902	(84.7)	3 0 3 4	2 6 2 6	(86.6)	2706	2381	(88.0)	2 5 2 5	2243	(88.8)
Bosnia and Herzegovina	1321	945	(71.5)	1301	1096				(82.5)	1196	923	(77.2)			(64.7)
former Yugoslav Republic						(84.2)	1261	1040					1092	707	
of Macedonia, the			(1)			(84.2)	1261	1040					1092	707	
0 1	307	272	(88.6)	346	298	(84.2)	1261 317	1040	(90.5)	281	244	(86.8)	1092	707 243	
Georgia	4237	272 3 <i>4</i> 14	(88.6) (80.6)												(86.2)
<i>Georgia</i> Israel				346	298	(86.1)	317	287	(90.5)	281	244	(86.8)	282	243	(84.0)
Israel	4 <i>237</i> 514	<i>3414</i> 403	(80.6) (78.4)	346 3638 509	298 3103 412	(86.1) (85.3) (80.9)	317 3098 305	287 2465 257	(90.5) (79.6) (84.3)	281 2862 322	244 2377 285	(86.8) (83.1) (88.5)	282 2841 263	243 2386 218	(84.0) (82.9)
Israel Kazakhstan	4237 514 12400	3414 403 9430	(80.6) (78.4) (76.0)	346 3 <i>638</i>	298 3103	(86.1) (85.3)	317 3098 305 14456	287 2465 257 12841	(90.5) (79.6) (84.3) (88.8)	281 2862 322 12473	244 2377 285 11186	(86.8) (83.1) (88.5) (89.7)	282 2841 263 14006	243 2386 218 12691	(86.2) (84.0) (82.9) (90.6)
Israel Kazakhstan Kyrgyzstan	4237 514 12400 3662	3414 403 9430 3091	(80.6) (78.4) (76.0) (84.4)	346 3638 509 16275	298 3103 412 14068	(86.1) (85.3) (80.9) (86.4)	317 3098 305 14456 5658	287 2465 257 12841 4797	(90.5) (79.6) (84.3) (88.8) (84.8)	281 2862 322 12473 5731	244 2377 285 11186 4837	(86.8) (83.1) (88.5) (89.7) (84.4)	282 2841 263 14006 6139	243 2386 218 12691 5063	(86.2) (84.0) (82.9) (90.6) (82.5)
Israel Kazakhstan Kyrgyzstan Moldova	4237 514 12400 3662 3836	3414 403 9430 3091 2815	(80.6) (78.4) (76.0)	346 3638 509 16275 - 4203	298 3103 412 14068 - 3205	(86.1) (85.3) (80.9)	317 3098 305 14456 5658 3889	287 2465 257 12841 4797 3095	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6)	281 2862 322 12473 5731 3459	244 2377 285 11186 4837 2724	(86.8) (83.1) (88.5) (89.7)	282 2841 263 14006	243 2386 218 12691	(86.2) (84.0) (82.9) (90.6) (82.5)
Israel Kazakhstan Kyrgyzstan Moldova Monaco	4237 514 12400 3662 3836	3414 403 9430 3091 2815	(80.6) (78.4) (76.0) (84.4) (73.4)	346 3638 509 16275 - 4203 0	298 3103 412 14068 - 3205	(86.1) (85.3) (80.9) (86.4) - (76.3)	317 3098 305 14456 5658 3889 3	287 2465 257 12841 4797 3095 3	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0)	281 2862 322 12473 5731 3459 0	244 2377 285 11186 4837 2724	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8)	282 2841 263 14006 6139 2992	243 2386 218 12691 5063 2379	(86.2) (84.0) (82.9) (90.6) (82.5) (79.5)
Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro	4237 514 12400 3662 3836 - 100	3414 403 9430 3091 2815 - 86	(80.6) (78.4) (76.0) (84.4) (73.4) - (86.0)	346 3638 509 16275 - 4203 0	298 3103 412 14068 - 3205 - 90	(86.1) (85.3) (80.9) (86.4) - (76.3) - (84.1)	317 3098 305 14456 5658 3889 3	287 2465 257 12841 4797 3095 3	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0) (87.4)	281 2862 322 12473 5731 3459 0 113	244 2377 285 11186 4837 2724 –	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) –	282 2841 263 14006 6139 2992 - 80	243 2386 218 12691 5063 2379 - 74	(86.2) (84.0) (82.9) (90.6) (82.5) (79.5)
Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia	4237 514 12400 3662 3836	3414 403 9430 3091 2815	(80.6) (78.4) (76.0) (84.4) (73.4)	346 3638 509 16275 - 4203 0	298 3103 412 14068 - 3205 - 90 61765	(86.1) (85.3) (80.9) (86.4) - (76.3)	317 3098 305 14456 5658 3889 3 119 83301	287 2465 257 12841 4797 3095 3	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0)	281 2862 322 12473 5731 3459 0 113 77136	244 2377 285 11186 4837 2724	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) - (89.4) (69.1)	282 2841 263 14006 6139 2992 - 80 80424	243 2386 218 12691 5063 2379	(86.2) (84.0) (82.9) (90.6) (82.5) (79.5) (92.5) (70.9)
Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino	4237 514 12400 3662 3836 - 100 88554	3414 403 9430 3091 2815 - 86 57801	(80.6) (78.4) (76.0) (84.4) (73.4) - (86.0) (65.3)	346 3638 509 16275 - 4203 0 107 89666	298 3103 412 14068 - 3205 - 90 61765	(86.1) (85.3) (80.9) (86.4) - (76.3) - (84.1) (68.9)	317 3098 305 14456 5658 3889 3 119 83301	287 2465 257 12841 4797 3095 3 104 56980	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0) (87.4) (68.4)	281 2862 322 12473 5731 3459 0 113 77136	244 2377 285 11186 4837 2724 - 101 53266	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) - (89.4) (69.1)	282 2841 263 14006 6139 2992 - 80 80424 0	243 2386 218 12691 5063 2379 - 74 57060	(86.2) (84.0) (82.9) (90.6) (82.5) (79.5) (92.5) (70.9)
Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia	4237 514 12400 3662 3836 - 100	3414 403 9430 3091 2815 - 86	(80.6) (78.4) (76.0) (84.4) (73.4) - (86.0)	346 3638 509 16275 - 4203 0	298 3103 412 14068 - 3205 - 90 61765	(86.1) (85.3) (80.9) (86.4) - (76.3) - (84.1)	317 3098 305 14456 5658 3889 3 119 83301	287 2465 257 12841 4797 3095 3	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0) (87.4)	281 2862 322 12473 5731 3459 0 113 77136	244 2377 285 11186 4837 2724 –	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) - (89.4) (69.1)	282 2841 263 14006 6139 2992 - 80 80424	243 2386 218 12691 5063 2379 - 74	(86.2) (84.0) (82.9) (90.6) (82.5) (79.5) (92.5) (70.9)
Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino	4237 514 12400 3662 3836 - 100 88554	3414 403 9430 3091 2815 - 86 57801	(80.6) (78.4) (76.0) (84.4) (73.4) - (86.0) (65.3)	346 3638 509 16275 - 4203 0 107 89666	298 3103 412 14068 - 3205 - 90 61765	(86.1) (85.3) (80.9) (86.4) - (76.3) - (84.1) (68.9)	317 3098 305 14456 5658 3889 3 119 83301	287 2465 257 12841 4797 3095 3 104 56980	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0) (87.4) (68.4)	281 2862 322 12473 5731 3459 0 113 77136	244 2377 285 11186 4837 2724 - 101 53266	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) - (89.4) (69.1)	282 2841 263 14006 6139 2992 - 80 80424 0	243 2386 218 12691 5063 2379 - 74 57060	(86.2) (84.0) (82.9) (90.6) (82.5) (79.5) (92.5) (70.9)
Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ^d UN Administered Province of Kosovo ^d	4237 514 12400 3662 3836 - 100 88554	3414 403 9430 3091 2815 - 86 57801	(80.6) (78.4) (76.0) (84.4) (73.4) - (86.0) (65.3)	346 3638 509 16275 - 4203 0 107 89666 - 1851	298 3103 412 14068 - 3205 - 90 61765 - 1546	(86.1) (85.3) (80.9) (86.4) - (76.3) - (84.1) (68.9) - (83.5)	317 3098 305 14456 5658 3889 3 119 83301 - 1427	287 2465 257 12841 4797 3095 3 104 56980 -	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0) (87.4) (68.4) – (78.3)	281 2862 322 12473 5731 3459 0 113 77136 -	244 2377 285 11186 4837 2724 - 101 53266 - 1042	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) - (89.4) (69.1) - (81.3)	282 2841 263 14006 6139 2992 - 80 80424 0	243 2386 218 12691 5063 2379 - 74 57060 - 1471	(86.2) (84.0, (82.9) (90.6, (82.5, (79.5, (92.5, (70.9, - (89.3)
Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo'd UN Administered	4237 514 12400 3662 3836 - 100 88554	3414 403 9430 3091 2815 - 86 57801	(80.6) (78.4) (76.0) (84.4) (73.4) - (86.0) (65.3) - (85.7)	346 3638 509 16275 - 4203 0 107 89666 - 1851	298 3103 412 14068 - 3205 - 90 61765 - 1546	(86.1) (85.3) (80.9) (86.4) - (76.3) - (84.1) (68.9) - (83.5) (80.9)	317 3098 305 14456 5658 3889 3 119 83301 - 1427	287 2465 257 12841 4797 3095 3 104 56980 - 1118	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0) (87.4) - (78.3) (78.4)	281 2862 322 12473 5731 3459 0 133 77136 - 1281 1045	244 2377 285 11186 4837 2724 - 101 53266 - 1042 828	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) (89.4) (69.1) (81.3)	282 2841 263 14006 6139 2992 - 80 80424 0 1647	243 2386 218 12691 5063 2379 	(86.2 (84.0) (82.9) (90.6) (82.5) (79.5) (92.5) (70.9) (89.3) (83.1)
Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ^d UN Administered Province of Kosovo ^d	4237 514 12400 3662 3836 - 100 88554 - 1794	3414 403 9430 3091 2815 - 86 57801 - 1537	(80.6) (78.4) (76.0) (84.4) (73.4) - (86.0) (65.3) - (85.7)	346 3638 509 16275 - 4203 0 107 89666 - 1851	298 3103 412 14068 - 3205 - 90 61765 - 1546	(86.1) (85.3) (80.9) (86.4) - (76.3) - (84.1) (68.9) - (83.5)	317 3098 305 14456 5658 3889 3 119 83301 - 1427 1184	287 2465 257 12841 4797 3095 3 104 56980 - 1118 928	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0) (87.4) (68.4) - (78.3) (78.4)	281 2862 322 12473 5731 3459 0 113 77136 - 1281 1045	244 2377 285 11186 4837 2724 - 101 53266 - 1042 828	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) - (89.4) (69.1) - (81.3) (79.2)	282 2841 263 14006 6139 2992 - 80 80424 0 1647	243 2386 218 12691 5063 2379 	(86.2 (84.0) (82.9) (90.6) (82.5) (79.5) (92.5) (70.9) (89.3) (83.1)
Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ^d Switzerland	4237 514 12400 3662 3836 - 100 88554 - 1794	3414 403 9430 3091 2815 - 86 57801 - 1537	(80.6) (78.4) (76.0) (84.4) (73.4) - (86.0) (65.3) - (85.7)	346 3638 509 16275 - 4203 0 107 89666 - 1851 1197	298 3103 412 14068 - 3205 - 90 61765 - 1546 968 578	(86.1) (85.3) (80.9) (86.4) - (76.3) - (84.1) (68.9) - (83.5) (80.9)	317 3098 305 14456 5658 3889 3 119 83301 - 1427 1184 243	287 2465 257 12841 4797 3095 3 104 56980 - 1118 928	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0) (87.4) - (78.3) (78.4)	281 2862 322 12473 3459 0 113 77136 - 1281 1045	244 2377 285 11186 4837 2724 - 101 53266 - 1042 828 214	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) (99.1) (69.1) (81.3) (79.2)	282 2841 263 14006 6139 2992 - 80 80424 0 1647 882	243 2386 218 12691 5063 2379 - 74 57060 - 1471 733	(86.2 (84.0) (82.9) (90.6) (82.5) (79.5) (92.5) (70.9) - (89.3) (96.5)
Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ^d UN Administered Province of Kosovo ^d Switzerland Tajikistan	4237 514 12400 3662 3836 - 100 88554 - 1794 - - 5935	3414 403 9430 3091 2815 - 86 57801 - 1537 -	(80.6) (78.4) (76.0) (84.4) (73.4) - (86.0) (65.3) - (85.7)	346 3638 509 16275 - 4203 0 107 89666 - 1851 1197 654 - 5811	298 3103 412 14068 - 3205 - 90 61765 - 1546 968 578 - 4845	(86.1) (85.3) (80.9) (86.4) - (76.3) - (84.1) (68.9) - (83.5) (80.9)	317 3098 305 14456 5658 3889 3 119 83301 - 1427 1184 243 - 5263	287 2465 257 12841 4797 3095 3 104 56980 - 1118 928 190 - 4619	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0) (87.4) (68.4) (78.3) (78.4) (78.2)	281 2862 322 12473 3459 0 113 77136 - 1281 1045 236 - 5149	244 2377 285 11186 4837 2724 - 101 53266 - 1042 828 214	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) (69.1) (81.3) (79.2) (90.7)	282 2841 263 14006 6139 2992 - 80 80424 0 1647 882 765 - 5298	243 2386 218 12691 5063 2379 - 74 57060 - 1471 733 738 - 4734	(86.2 (84.0) (82.9) (90.6, (82.5, (79.5) (92.5) (70.9) - (89.3) (96.5)
Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ^d UN Administered Province of Kosovo ^d Switzerland Tajikistan Turkey	4237 514 12400 3662 3836 - 100 88554 - 1794 - - 5935 14417 2140	3414 403 9430 3091 2815 - 86 57801 - 1537 - - 5145 12915	(80.6) (78.4) (76.0) (84.4) (73.4) (86.0) (65.3) (85.7) - (85.7)	346 3638 509 16275 - 4203 0 107 89666 - 1851 1197 654 - 5811 13535 2804	298 3103 412 14068 - 3205 - 90 61765 - 1546 968 578 - 4845 11946 2369	(86.1) (85.3) (80.9) (86.4) - (76.3) - (84.1) (68.9) - (83.5) (80.9) (88.4) - (83.4) (88.3) (84.5)	317 3098 305 14456 5658 3889 3 119 83301 - 1427 1184 243 - 5263 13170 3046	287 2465 257 12841 4797 3095 3 104 56980 - 1118 928 190 - 4619 11373 2199	(90.5) (79.6) (84.3) (88.8) (79.6) (100.0) (87.4) (68.4) (78.3) (78.4) (78.2) (87.8) (86.4) (72.2)	281 2862 322 12473 5731 3459 0 113 77136 - 1281 1045 236 - 5149 12933 2122	244 2377 285 11186 4837 2724 - 101 53266 - 1042 828 214 - 4606 11245	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) (69.1) (81.3) (79.2) (90.7) (89.5) (86.9) (84.7)	282 2841 263 14006 6139 2992 - 80 80424 0 1647 882 765 - 5298 12362	243 2386 218 12691 5063 2379 - 74 57060 - 1471 733 738 - 4734 10735 2126	(86.2 (84.0, (82.9)) (90.6, (82.5, (79.5)) (92.5, (70.9)) - (89.3) (83.1) (96.5) - (89.4, (86.8, (86.0, (86.0))
Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ^d UN Administered Province of Kosovo ^d Switzerland Tarjkkistan Turkey Turkmenistan Ukraine	4237 514 12400 3662 3836 - 100 88554 - 1794 - - 5935 14417 2140 27793	3414 403 9430 3091 2815 - 86 57801 - 1537 - 5145 12915 1852 18620	(80.6) (78.4) (76.0) (84.4) (73.4) - (86.0) (65.3) - (85.7) - (85.7) - (86.7) (89.6) (89.6) (86.5) (67.0)	346 3638 509 16275 - 4203 0 107 89666 - 1851 1197 654 - 5811 13535 2804 30928	298 3103 412 14068 - 3205 - 90 61765 - 1546 968 578 - 4845 11946 2369 21922	(86.1) (85.3) (80.9) (86.4) - (76.3) - (84.1) (68.9) - (83.5) (80.9) (88.4) - (83.4) (88.3) (84.5) (70.9)	317 3098 305 14456 5658 3889 3 119 83301 - 1427 1184 243 - 5263 13170 3046 29726	287 2465 257 12841 4797 3095 3 104 56980 - 1118 928 190 - 4619 11373 2199 20959	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0) (87.4) (68.4) (78.3) (78.4) (78.2) (87.8) (86.4) (72.2) (70.5)	281 2862 322 12473 5731 3459 0 113 77136 - 1281 1045 236 - 5149 12933 2122 22294	244 2377 285 11186 4837 2724 - 101 53266 - 1042 828 214 - 4606 11245 1797 16109	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) (69.1) (81.3) (79.2) (90.7) (89.5) (86.9) (84.7) (72.3)	282 2841 263 14006 6139 2992 - 80 80424 0 1647 882 765 - 5298 12362 2472 23892	243 2386 218 12691 5063 2379 - 74 57060 - 1471 733 738 - 4734 10735 2126 17939	(86.2 (84.0.) (82.9) (90.6. (82.5) (79.5) (79.5) (70.9. (89.3.1) (96.5 - (89.4.6.8) (86.6.8) (86.6.0. (75.1) (75.1)
Israel Kazakhstan Kyrgyzstan Moldova Monaco Monaco Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ^d UN Administered Province of Kosovo ^d Switzerland Tajikistan Turkey Turkmenistan Ukraine	4237 514 12400 3662 3836 - 100 88554 - 1794 - - 5935 14417 2140 27793 13995	3414 403 9430 3091 2815 - 86 57801 - 1537 - - 5145 12915 1852 18620 11836	(80.6) (78.4) (76.0) (84.4) (73.4) - (86.0) (65.3) - (85.7) - - (86.7) (89.6) (86.5) (67.0) (84.6)	346 3638 509 16275 - 4203 0 107 89666 - 1851 1197 654 - 5811 13535 2804 30928 14132	298 3103 412 14068 - 3205 - 90 61765 - 1546 968 578 - 4845 11946 2369 21922	(86.1) (85.3) (80.9) (86.4) (- (76.3) (84.1) (68.9) (83.5) (80.9) (88.4) (88.3) (84.5) (70.9) (84.2)	317 3098 305 14456 5658 3889 3 119 83301 - 1427 1184 243 - 5263 13170 3046 29726 17373	287 2465 257 12841 4797 3095 3 104 56980 - 1118 928 190 - 4619 11373 2199 20959 14457	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0) (87.4) (68.4) (78.3) (78.4) (78.2) (87.8) (86.4) (72.2) (70.5) (83.2)	281 2862 322 12473 5731 3459 0 113 77136 - 1281 1045 236 - 5149 12933 2122 22294 16328	244 2377 285 11186 4837 2724 - 101 53266 - 1042 828 214 - 4606 11245 1797 16109 14215	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) - (89.4) (69.1) - (81.3) (79.2) (90.7) - (89.5) (86.9) (84.7) (72.3) (87.1)	282 2841 263 14006 6139 2992 - 80 80424 0 1647 882 765 - 5298 12362 2472 23892 15220	243 2386 218 12691 5063 2379 - 74 57060 - 1471 733 738 - 4734 10735 2126 17939 13536	(86.2) (84.0) (82.9) (90.6) (82.5) (79.5) (70.9) - (89.3) (83.1) (96.5) - (89.4) (86.8) (86.0) (75.1) (88.9)
Israel Kazakhstan Kyrgyzstan Moldova Monaco Montenegro Russia San Marino Serbia Serbia excluding UN Administered Province of Kosovo ^d UN Administered Province of Kosovo ^d Switzerland Tajikistan Turkey Turkmenistan Ukraine	4237 514 12400 3662 3836 - 100 88554 - 1794 - - 5935 14417 2140 27793	3414 403 9430 3091 2815 - 86 57801 - 1537 - 5145 12915 1852 18620	(80.6) (78.4) (76.0) (84.4) (73.4) - (86.0) (65.3) - (85.7) - (85.7) - (86.7) (89.6) (89.6) (86.5) (67.0)	346 3638 509 16275 - 4203 0 107 89666 - 1851 1197 654 - 5811 13535 2804 30928 14132	298 3103 412 14068 - 3205 - 90 61765 - 1546 968 578 - 4845 11946 2369 21922	(86.1) (85.3) (80.9) (86.4) - (76.3) - (84.1) (68.9) - (83.5) (80.9) (88.4) - (83.4) (88.3) (84.5) (70.9)	317 3098 305 14456 5658 3889 3 119 83301 - 1427 1184 243 - 5263 313170 3046 29726 17373 191468	287 2465 257 12841 4797 3095 3 104 56980 - 1118 928 190 - 4619 11373 2199 20959	(90.5) (79.6) (84.3) (88.8) (84.8) (79.6) (100.0) (87.4) (68.4) (78.3) (78.4) (78.2) (87.8) (86.4) (72.2) (70.5)	281 2862 322 12473 5731 3459 0 113 77136 - 1281 1045 236 - 5149 12933 2122 22294	244 2377 285 11186 4837 2724 - 101 53266 - 1042 828 214 - 4606 11245 1797 16109	(86.8) (83.1) (88.5) (89.7) (84.4) (78.8) (69.1) (81.3) (79.2) (90.7) (89.5) (86.9) (84.7) (72.3)	282 2841 263 14006 6139 2992 - 80 80424 0 1647 882 765 - 5298 12362 2472 23892	243 2386 218 12691 5063 2379 - 74 57060 - 1471 733 738 - 4734 10735 2126 17939	(86.2) (84.0) (82.9) (90.6) (82.5) (79.5)

^{&#}x27;European Region' comprises the 53 countries of the WHO European Region and Liechtenstein.
WHO European Region 18 TB high-priority countries presented in italics.

Excluding rifampicin-resistant cases.

These data are subject to change as the national TB registry was under review when this report was being produced.

For non-EU countries data are related to all new and relapse cases except for 2011.

In accordance with the UN Security Council Resolution No. 1244 (1999).

Table XI: Treatment success after 12 months of all TB cases, European Region, 2011–2015

		2011			2012			2013			2014			2015	
Country	Cases	Succ		Cases	Succ		Cases	Succ		Cases	Suc	cess	Cases	Succ	
EU/EEA	reported	N	(%)	reported	N	(%)	reported	N	(%)	reported	N	(%)	reported	N	(%)
Austria	684	476	(69.6)	646	432	(66.9)	653	464	(71.1)	586	423	(72.2)	583	417	(71.5)
Belgium	1019	788	(77.3)	976	736	(75.4)	963	743	(77.2)	949	752	(79.2)	977	764	(78.2)
Bulgaria	2406	1991	(82.8)	2280	1917	(84.1)	1932	1626	(84.2)	1872	1565	(83.6)	1660	1385	(83.4)
Croatia ^a	-	-	_	575	59	(10.3)	517	226	(43.7)	499	354	(70.9)	486	50	(10.3)
Cyprus	54	34	(63.0)	69	30	(43.5)	41	20	(48.8)	41	24	(58.5)	63	35	(55.6)
Czech Republic	600	422	(70.3)	597	444	(74.4)	497	345	(69.4)	511	379	(74.2)	517	350	(67.7)
Denmark	381	276	(72.4)	389	265	(68.1)	356	252	(70.8)	320	174	(54.4)	357	171	(47.9)
Estonia	339	189	(55.8)	289	168	(58.1)	290	203	(70.0)	248	167	(67.3)	217	149	(68.7)
Finland	324	131	(40.4)	274	122	(44.5)	273	141	(51.6)	263	114	(43.3)	272	95	(34.9)
France ^b	5000	2372	(47.4)	5003	2 2 7 7	(45.5)	4947	2 474	(50.0)	4888	2592	(53.0)	-	-	-
Germany	4309	2752	(63.9)	4 213	3 073	(72.9)	4340	2838	(65.4)	4526	2826	(62.4)	5852	3728	(63.7)
Greece	-	-	-	_	-	-	_	-	-	_	_	_	-	-	-
Hungary	1445	1059	(73.3)	1223	847	(69.3)	1045	765	(73.2)	851	607	(71.3)	906	631	(69.6)
Iceland	9	8	(88.9)	11	9	(81.8)	11	10	(90.9)	9	8	(88.9)	7	7	(100.0)
Ireland	412	250	(60.7)	359	218	(60.7)	374	232	(62.0)	311	173	(55.6)	283	157	(55.5)
Italy	-	-	-	_	-	-	_	-	-	_	_	-	-	-	-
Latvia	885	655	(74.0)	993	765	(77.0)	904	688	(76.1)	761	593	(77.9)	721	551	(76.4)
Liechtenstein	-	-	-	-	_	_	_	-	_	-	-	-	_	-	-
Lithuania	1904	1326	(69.6)	1781	1222	(68.6)	1705	1132	(66.4)	1607	1058	(65.8)	1507	987	(65.5)
Luxembourg	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-
Malta	33	23	(69.7)	42	10	(23.8)	50	37	(74.0)	-	-	-	-	-	-
Netherlands	1004	856	(85.3)	956	801	(83.8)	845	737	(87.2)	814	717	(88.1)	862	733	(85.0)
Norway	354	308	(87.0)	374	319	(85.3)	392	346	(88.3)	324	268	(82.7)	313	268	(85.6)
Poland	8 478	5191	(61.2)	7542	4501	(59.7)	7250	4252	(58.6)	6 6 9 8	3865	(57.7)	6430	3387	(52.7)
Portugal	2609	2024	(77.6)	2606	2 0 1 5	(77.3)	2 410	1779	(73.8)	2278	1625	(71.3)	2178	1539	(70.7)
Romania	19202	15242	(79.4)	18190	14388	79	16 689	13 272	(79.5)	15 879	12 679	(79.8)	15183	12185	(80.3)
Slovakia	399	366	(91.7)	345	303	(87.8)	401	372	(92.8)	336	291	(86.6)	317	271	(85.5)
Slovenia	192	157	(81.8)	138	112	(81.2)	140	108	(77.1)	144	111	(77.1)	130	106	(81.5)
Spain	6798	4760	(70.0)	6 0 7 0	4286	(70.6)	5 6 3 2	4582	(81.4)	4914	2827	(57.5)	-	-	-
Sweden	580	494	(85.2)	623	504	(80.9)	639	566	(88.6)	659	570	(86.5)	815	688	(84.4)
United Kingdom	8 9 1 9	6913	(77.5)	8 7 1 1	6892	(79.1)	7868	6 411	(81.5)	7049	5 676	(80.5)	6234	4865	(78.0)
Subtotal EU/EEA	68339	49063	(71.8)	65 275	46715	(71.6)	61164	44 621	(73.0)	57337	40438	(70.5)	46870	33519	(71.5)
Non-EU/EEA															
Albania	413	382	(92.5)	413	377	(91.3)	472	416	(88.1)	406	358	(88.2)	409	354	(86.6)
Andorra	3	3	(100.0)	9	9	(100.0)	5	3	(60.0)	6	5	(83.3)	4	4	(100.0)
Armenia	1200	934	(77.8)	1365	1100	(80.6)	1269	1022	(80.5)	1242	966	(77.8)	923	731	(79.2)
Azerbaijan	2208	1717	(77.8)	7495	5 9 5 1	(79.4)	6946	5436	(78.3)	3997	3109	(77.8)	4213	3230	(76.7)
Belarus	4926	3480	(70.6)	3 613	3 0 3 1	(83.9)	3256	2784	(85.5)	2955	2562	(86.7)	2788	2444	(87.7)
Bosnia and Herzegovina	1321	945	(71.5)	1420	1188	(83.7)	1261	1040	(82.5)	1196	923	(77.2)	1095	707	(64.6)
former Yugoslav Republic	307	272	(88.6)	355	305	(85.9)	322	292	(90.7)	282	245	(86.9)	284	245	(86.3)
of Macedonia, the															
Georgia	4237	3 414	(80.6)	4524	3757	(83.0)	3877	3006	(77.5)	3371	2727	(80.9)	3144	2582	(82.1)
Israel	514	403	(78.4)	509	412	(80.9)	305	257	(84.3)	322	285	(88.5)	263	218	(82.9)
Kazakhstan	12400	9430	(76.0)	19446	16556	(85.1)	14920	13133	(88.0)	12803	11441	(89.4)	14 631	13172	(90.0)
Kyrgyzstan	3662	3091	(84.4)	4.650	2202	(72.6)	6788	5656	(83.3) (76.2)	6646	5563	(83.7)	6686	5423	(81.1)
Moldova	3 836	2815	(73.4)	4 658	3382		4246	3234		3751	2861	(76.3)	3209	2480	(77.3)
Monaco	400	-	(0(0)	407	-	(0/4)	3	3	(100.0)	0	- 404	(00.4)	-	-	(02.5)
Montenegro	100	86 57901	(86.0)	107	90	(84.1)	120	104	(86.7)	113	101	(89.4)	80	74	(92.5)
Russia	88554	57801	(65.3)	97627	64731	(66.3)	90235	59 691	(66.2)	82926	55 673	(67.1)	88718	61238	(69.0)
San Marino	4707	4507	(05.7)	-	4570	(00.0)	- 4/76	-	(70.0)	- 4005	-	(04.0)	0	-	(00.0)
Serbia	1794	1537	(85.7)	1888	1573	(83.3)	1476	1152	(78.0)	1295	1049	(81.0)	1669	1484	(88.9)
Serbia excluding UN Administered Province of Kosovo ^c	-	-	-	-	-	-	-	-	-	-	-	-	897	739	(82.4)
UN Administered Province of Kosovo ^c	-	-	-	-	-	-	-	-	-	-	-	-	772	745	(96.5)
Switzerland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tajikistan	5935	5145	(86.7)	6929	5682	(82.0)	6 0 7 5	5282	(86.9)	5504	4896	(89.0)	5 5 8 4	4964	(88.9)
Turkey	14417	12 915	(89.6)	14 691	12714	(86.5)	13 409	11465	(85.5)	13125	11341	(86.4)	12 520	10807	(86.3)
Turkmenistan	2140	1852	(86.5)	3422	2758	(80.6)	3 675	2364	(64.3)	2265	1890	(83.4)	2753	2352	(85.4)
Ukraine	27793	18 620	(67.0)	36514	24790	(67.9)	38875	26014	(66.9)	27563	19586	(71.1)	27548	20 034	(72.7)
Uzbekistan	13 9 9 5	11836	(84.6)	16765	13799	(82.3)	21713	17843	(82.2)	20275	17402	(85.8)	17837	15 694	(88.0)
Subtotal non-EU/EEA	189755	136 678	(72.0)	221750	162205	(73.1)	219 248	160197	(73.1)	190043	142 983	(75.2)	194358	148 237	(76.3)
Total European Region	258094	185741	(72.0)	287025	208920	(72.8)	280 412	204818	(73.0)	247380	183421	(74.1)	241228	181756	(75.3)
Subtotal 18 HPC	210 039	152453	(72.6)		176711		236804	173 851	(73.4)		156079	(75.5)	209842	160408	(76.4)

^{&#}x27;European Region' comprises the 53 countries of the WHO European Region and Liechtenstein.
WHO European Region 18 TB high-priority countries presented in italics.

These data are subject to change as the national TB registry was under review when this report was being produced.

Data are including overseas territories.

In accordance with the UN Security Council Resolution No. 1244 (1999).

Table XII: Treatment success after 24 months of RR/MDR TB cases started on treatment, European Region, 2010–2014

		2010			2011			2012			2013			2014	
Country	Cases	Succ		Cases	Succ		Cases	Succ		Cases	Suc	cess	Cases	Succ	
EU/EEA	reported	N	(%)	reported	N	(%)	reported	N	(%)	reported	N	(%)	reported	N	(%)
Austria	16	9	(56.3)	22	15	(68.2)	27	14	(51.9)	16	12	(75.0)	21	13	(61.9)
Belgium	25	14	(56.0)	17	13	(76.5)	25	17	(68.0)	14	11	(78.6)	13	7	(53.8)
Bulgaria	70	17	(24.3)	65	37	(56.9)	58	38	(65.5)	37	17	(45.9)	44	22	(50.0)
Croatia	-	-	(2 /13)	-	_	-	1	0	(0.0)	_	-	-	2	0	(0.0)
Cyprus	_	_	-	_	_	-	-	_	-	_	_	-	_	-	(515)
Czech Republic	21	0	(0.0)	13	7	(53.8)	5	2	(40.0)	0	-	_	7	3	(42.9)
Denmark	2	1	(50.0)	3	0	(0.0)	1	0	(0.0)	2	1	(50.0)	2	1	(50.0)
Estonia	64	34	(53.1)	70	40	(57.1)	57	42	(73.7)	54	34	(63.0)	50	32	(64.0)
Finland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
France	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Germany	62	30	(48.4)	65	34	(52.3)	71	35	(49.3)	114	41	(36.0)	104	35	(33.7)
Greece	-	-	_	-	-	-	-	-	_	-	-	_	-	-	-
Hungary	21	9	(42.9)	8	4	(50.0)	13	6	(46.2)	11	4	(36.4)	4	4	(100.0)
Iceland	-	-	_	-	-	-	-	-	_	-	-	_	-	-	_
Ireland	4	4	(100.0)	3	1	(33.3)	4	4	(100.0)	4	3	(75.0)	2	1	(50.0)
Italy	-	-	_	_	-	-	-	-	_	-	-	_	-	-	-
Latvia	88	58	(65.9)	96	52	(54.2)	107	66	(61.7)	79	54	(68.4)	71	52	(73.2)
Liechtenstein	-	-	-	-	_	-	-	-	_	-	-	_	-	-	-
Lithuania	315	94	(29.8)	306	111	(36.3)	285	101	(35.4)	274	90	(32.8)	279	35	(12.5)
Luxembourg	-	-	_	-	-	-	-	-	_	-	-	_	-	-	-
Malta	1	0	(0.0)	0	-	-	0	-	-	2	1	(0.0)	0	-	-
Netherlands	12	8	(66.7)	17	11	(64.7)	14	10	(71.4)	17	17	(100.0)	7	6	(85.7)
Norway	9	5	(55.6)	4	3	(75.0)	7	3	(42.9)	7	5	(71.4)	11	9	(81.8)
Poland	38	18	(47.4)	49	16	(32.7)	41	7	(17.1)	47	10	(21.3)	49	9	(18.4)
Portugal	30	11	(36.7)	40	22	(55.0)	27	13	(48.1)	18	10	(55.6)	28	15	(53.6)
Romania	639	149	(23.3)	618	184	(29.8)	777	290	(37.3)	657	258	(39.3)	596	245	(41.1)
Slovakia	1	0	(0.0)	4	2	(50.0)	1	0	(0.0)	2	0	(0.0)	4	2	(50.0)
Slovenia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
Sweden	20	19	(95.0)	18	14	(77.8)	15	13	(86.7)	10	7	(70.0)	17	15	(88.2)
United Kingdom	77	38	(49.4)	92	49	(53.3)	85	55	(64.7)	79	51	(64.6)	56	33	(58.9)
Subtotal EU/EEA	1515	518	(34.2)	1510	615	(40.7)	1621	716	(44.2)	1444	626	(43.4)	1367	539	(39.4)
Non-EU/EEA															
Albania	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
Andorra	0			0	-		0	-		0	-		0	-	(== c)
Armenia	132	59	(44.7)	121	61	(50.4)	115	51	(44.3)	104	45	(43.3)	118	68	(57.6)
Azerbaijan	286	156	(54.5)	565	339	(60.0)	373	225	(60.3)	647	382	(59.0)	745	441	(59.2)
Belarus	1442	452	(31.3)	1600	807 1	(50.4)	2509 7	1366	(54.4)	2136	1152	(53.9)	1472	872	(59.2)
Bosnia and Herzegovina	/	4	(57.1)	5	- 1	(20.0)	/	3	(42.9)	1	I	(100.0)	3	2	(66.7)
former Yugoslav Republic of Macedonia, the	7	1	(14.3)	1	1	(100.0)	3	2	(66.7)	2	1	(50.0)	3	1	(33.3)
Georgia	504	271	(53.8)	611	305	(49.9)	623	296	(47.5)	411	176	(42.8)	411	201	(48.9)
Israel	12	4	(33.3)	11	7	(63.6)	13	12	(92.3)	7	4	(57.1)	16	12	(75.0)
Kazakhstan	5777	4197	(72.7)	5261	3 9 1 0	(74.3)	7213	5265	(73.0)	6527	4730	(72.5)	6320	4813	(76.2)
Kyrgyzstan	556	236	(42.4)	492	280	(56.9)	775	486	(62.7)	1064	611	(57.4)	1157	650	(56.2)
Moldova	791	390	(49.3)	761	413	(54.3)	856	504	(58.9)	943	538	(57.1)	919	457	(49.7)
Monaco	_	-	_	-	_	_	0	_	_	0	-	_	-	-	_
Montenegro	0	-	-	1	0	(0.0)	1	1	(100.0)	0	-	-	2	-	_
Russia	4681	2 0 3 5	(43.5)	15896	5895	(37.1)	16 021	6 4 2 7	(40.1)	18213	8802	(48.3)	20089	10170	(50.6)
San Marino	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-
Serbia	10	8	(80.0)	14	9	(64.3)	7	4	(57.1)	19	15	(78.9)	19	12	(63.2)
Serbia excluding UN Administered Province of	-	-	-	-	-	-	6	3	(50.0)	13	10	(76.9)	13	7	(53.8)
Kosovo ^b UN Administered Province of Kosovo ^b	_	-	-	-	-	-	1	1	(100.0)	6	5	(83.3)	6	5	(83.3)
Switzerland	-	-	-	-	-	-	-	-	-	-	-	_	12	9	(75.0)
Tajikistan	245	151	(61.6)	380	242	(63.7)	535	351	(65.6)	625	375	(60.0)	804	398	(49.5)
Turkey	250	168	(67.2)	275	181	(65.8)	291	193	(66.3)	228	149	(65.4)	257	163	(63.4)
Turkmenistan	-	-	-	-	-	-	-	-	_	-	-	_	213	143	(67.1)
Ukraine	3902	1144	(29.3)	3810	1298	(34.1)	5 5 5 6	1909	(34.4)	7633	2948	(38.6)	7174	3297	(46.0)
Uzbekistan	628	366	(58.3)	855	455	(53.2)	1491	737	(49.4)	2647	1390	(52.5)	3 602	2216	(61.5)
Subtotal non-EU/EEA	19 230	9642	(50.1)	30659	14 204	(46.3)	36389	17832	(49.0)	41207	21319	(51.7)	43336	23925	(55.2)
Total European Region	20745	10160	(49.0)	32169	14819	(46.1)	38 010	18548	(48.8)	42651	21945	(51.5)	44703	24464	(54.7)
Subtotal 18 HPC	20370	9 977	(49.0)	31782	14 610	(46.0)	37584	18347	(48.8)	42279	21751	(51.4)	44321	24275	(54.8)

^{&#}x27;European Region' comprises the 53 countries of the WHO European Region and Liechtenstein.
WHO European Region 18 TB high-priority countries presented in italics.
RR/MDR TB – Rifampicin-resistant and multidrug-resistant tuberculosis.
³ These data are subject to change as the national TB registry was under review when this report was being produced.
¹ In accordance with the UN Security Council Resolution No. 1244 (1999).

Table XIII: Treatment success after 24 months of XDR TB cases started on treatment, European Region, 2010–2014

		2010			2011			2012			2013			2014	
Country	MDR TB	Succ		MDR TB		cess	MDR TB	Succ		MDR TB	Suc		MDR TB	Succ	
	cases	N	(%)	cases	N	(%)	cases	N	(%)	cases	N	(%)	cases	N	(%)
EU/EEA															
Austria	1	1	(100.0)	7	4	(57.1)	7	2	(28.6)	3	2	(66.7)	2	1	(50.0)
Belgium	2	2	(100.0)	3	2	(66.7)	2	2	(100.0)	0	-	-	1	1	(100.0)
Bulgaria	1	1	(100.0)	-	-	-	5	1	(20.0)	4	0	(0.0)	3	0	(0.0)
Croatia	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-
Cyprus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Czech Republic	1	1	(100.0)	2	0	(0.0)	1	0	(0.0)	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	0	-	-	1	1	(100.0)	-	-	-
Estonia	11	3	(27.3)	15	4	(26.7)	3	1	(33.3)	10	3	(30.0)	8	1	(12.5)
Finland	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-
France	-	-	_	-	_	-	0	-	-	-	-	-	-	-	-
Germany	-	-	-	1	1	(100.0)	1	0	(0.0)	3	0	(0.0)	11	2	(18.2)
Greece	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-
Hungary	2	0	(0.0)	-	-	-	2	1	(50.0)	1	0	(0.0)	-	-	-
Iceland	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	0	-	-	1	1	(100.0)	-	-	-
Italy	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-
Latvia	13	8	(61.5)	12	5	(41.7)	17	9	(52.9)	15	11	(73.3)	13	10	(76.9)
Liechtenstein	-	-	_	_	-	_	0	_	-	-	-	-	-	-	_
Lithuania	50	0	(0.0)	52	0	(0.0)	52	5	(9.6)	47	0	(0.0)	61	0	(0.0)
Luxembourg	-	-	(0.0)	-	_	-	0	-	-	-	-	-	-	-	(0.0)
Malta	-	_	_	-	_	_	0	_	_	_	_	_	_	_	_
Netherlands	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_
Norway	_	_	_	_	_	_	0	_	_	_	_	-	_	-	(0.0)
Poland	1	1	(100.0)	1	0	(0.0)	0	_	_	1	0	(0.0)	5	1	(20.0)
Portugal	4	2	(50.0)	9	5	(55.6)	4	2	(50.0)	4	2	(50.0)	3	2	(66.7)
Romania	26	2	(7.7)	34	6	(17.6)	41	3	(7.3)	56	9	(16.1)	57	9	(15.8)
Slovakia	20	_	(/./)	- 54	-	(17.0)	0	_	(7.5)	-	_	(10.1)	-	-	(13.6)
	_	_	_	_	_	_	0	_	_	_	_	_	_	_	
Slovenia	_	_	_	_	_	_	-	_	_	_	_	_	_	-	_
Spain	_	_	_	_	_	_			(400.0)						(0, 0)
Sweden		1	(33.3)		1	(1(7)	2	2	(100.0)	2	1	(50.0)	1	0	(0.0)
United Kingdom	3 115	22		6	28	(16.7)	2 139	0		3 151	1	(33.3) (20.5)	3 168		(33.3)
Subtotal EU/EEA Non-EU/EEA	115	22	(19.1)	142	28	(19.7)	159	28	(20.1)	151	31	(20.5)	108	28	(16.7)
Albania	0	-	_	_	_	_	_	_	_	_	_	_	-	_	
Andorra	0	-	_		_	_	0	_	_		-	_	0	-	_
	0		(33.3)	0		(50.0)			(0,0)	0					(60.0)
Armenia	3	1	(33.3)	2	1	(50.0)	2	0	(0.0)	10	2	(20.0)	10	4	(40.0)
Azerbaijan	_		_	_	_	-	33	12	(36.4)	95	25	(26.3)	69	16	(23.2)
Belarus		-				_	0	-	_	60	23	(38.3)	431	157	(36.4)
Bosnia and Herzegovina	0	_	-	0	-	-	-	-	-	0	-	-	0	-	-
former Yugoslav Republic of Macedonia, the	1	0	(0.0)	0	-	-	1	1	(100.0)	0	-	-	0	-	-
Georgia	35	8	(22.9)	19	2	(10.5)	43	12	(27.9)	70	15	(21.4)	56	18	(32.1)
Israel	1	0	(0.0)	0	_	(10.5)	43	4	(100.0)	1	0	(0.0)	2	10	(50.0)
Kazakhstan	-	-	(0.0)	0	_	_	4	4	(100.0)	360	109	(30.3)	318	98	(30.8)
Kyrgyzstan	7	1	(14.3)	14	3	(21.4)	_	_	_	43	109	(27.9)	318	98	(30.8)
, 0,	/	1	(14.3)	14	3	(21.4)	_	_	_	43	12	(2/.9)		3	
Moldova	_	_	_	_	_	_	_	_	_	2	2	(100.0)	9	3	(33.3)
Monaco		_	_			(0.0)		-	_	3	3	(100.0)	-	-	_
Montenegro	0	_		2	0	(0.0)	1210			1005		(2(=)	0		(24 4)
Russia			-			_	1318	344	(26.1)	1965	520	(26.5)	2209	687	(31.1)
San Marino	-	-	-	-	-	- (40.5.5)	-	_	(40 = =)	-	-	-	0	-	_
Serbia	0	-	-	3	3	(100.0)	1	1	(100.0)	0	-	-	0	-	_
Serbia excluding UN Administered Province of Kosovo ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UN Administered Province of Kosovo ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	_	-	-	-	-	-	-	1	0	(0.0)
			_	0	-	-	1	1	(100.0)	4	3	(75.0)	0	-	_
Tajikistan	-	-							(66.7)	3	1	(22.2)			(0.0)
Tajikistan Turkey	3	2	(66.7)	1	1	(100.0)	6	4	(00./)		I	(33.3)	2	0	(0.0)
Tajikistan Turkey Turkmenistan	3 -	2 -	(66.7)	1 -	-	(100.0)	-	-	-	-	-	-	-	-	-
Tajikistan Turkey Turkmenistan Ukraine	3 - -	2 - -	(66.7) - -	1 - -	-	-	-	-	-	-	-	-		278	-
Tajikistan Turkey Turkmenistan Ukraine Uzbekistan	3 - - 16	2 - - 0	(66.7) - - (0.0)	1 - - 8	- - 1	(12.5)	- - 21	- - 3	- (14.3)	- - -	- - -	- - -	- 1097 -	- 278 -	(25.3) -
Tajikistan Turkey Turkmenistan Ukraine Uzbekistan Subtotal non-EU/EEA	3 - - 16 66	2 - 0 12	(66.7) - - (0.0) (18.2)	1 - - 8 49	- 1 11	(12.5) (22.4)	- 21 1430	- 3 382	- (14.3) (26.7)	- - - 2614	- - - 713	- - (27.3)	1097 - 4236	278 - 1267	(25.3) - (29.9)
Tajikistan Turkey Turkmenistan Ukraine Uzbekistan	3 - - 16	2 - - 0	(66.7) - - (0.0)	1 - - 8	- - 1	(12.5)	- - 21	- - 3	- (14.3)	- - -	- - -	- - -	- 1097 -	- 278 -	(25.3) -

'European Region' comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries presented in italics. XDR TB – Extensively drug-resistant tuberculosis.

a In accordance with the UN Security Council Resolution No. 1244 (1999).

Table XIV: Treatment success after 36 months of XDR TB cases notified in European Region, 2009–2013

Country		2009		2010		2011		2012				2013			
	XDR TB	Success		XDR TB	Success	XDR TB Suc	Succ	ess	XDR TB	Success		XDR TB Suc	Succ	ess	
	cases	N	(%)	cases	N	(%)	cases	N	(%)	cases	N	(%)	cases	N	(%)
EU/EEA															
Austria	2	1	(50.0)	1	1	(100.0)	7	4	(57.1)	7	2	(28.6)	3	2	(66.7)
Belgium	3	2	(66.7)	2	2	(100.0)	3	3	(100.0)	2	2	(100.0)	-	-	-
Bulgaria	1	0	(0.0)	1	1	(100.0)	-	-	(100.0)	5	1	(20.0)	4	0	(0.0)
Croatia	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyprus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
Czech Republic	1	0	(0.0)	1	1	(100.0)	2	0	(100.0)	1	0	(0.0)	-	-	-
Denmark	-	-	_	-	-	_	-	-	_	-	-	_	1	1	(100.0)
Estonia	8	1	(12.5)	11	5	(45.5)	15	6	(45.5)	3	1	(25.0)	10	5	(50.0)
Finland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
France	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Germany	_	-	-	_	-	-	1	1	-	1	0	(0.0)	3	0	(0.0)
Greece	_	-	-	-	-	-	-	-	-	-	-	_	-	-	_
Hungary	-	-	-	2	0	(0.0)	0	0	(0.0)	2	1	(50.0)	1	0	(0.0)
Iceland	_	-	-	-	-	_	-	-	-	-	-	_	-	-	_
Ireland	-	-	-	_	_	-	-	-	-	-	-	-	1	1	(100.0)
Italy	_	-	-	-	-	-	-	-	-	-	-	-	-	-	_
Latvia	16	9	(56.3)	13	9	(69.2)	12	7	(69.2)	17	9	(52.9)	15	11	(73.3)
Liechtenstein	_	-	_	-	-	_	-	-	-	-	-	_	-	-	_
Lithuania	4	1	(25.0)	50	3	(6.0)	52	11	(6.0)	52	6	(11.5)	47	11	(23.4)
Luxembourg	_	-	-	-	-	-	-	-	-	-	-	-	-	-	_
Malta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
Netherlands	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
Poland	1	0	(0.0)	1	1	(100.0)	1	0	(100.0)	-	-	-	1	0	(0.0)
Portugal	-	-	-	4	3	-	9	7	(75.0)	4	4	(100.0)	4	4	(100.0)
Romania	26	1	(3.8)	26	2	(7.7)	34	6	(7.4)	41	5	(12.2)	56	11	(19.6)
Slovakia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Slovenia	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
Sweden	0	-	-	-	-	-	0	-	-	2	2	(100.0)	2	2	(100.0)
United Kingdom	2	1	(50.0)	3	2	(66.7)	6	3	(66.7)	2	1	(50.0)	3	3	(100.0)
Total EU/EEA	64	16	(25.0)	115	30	(26.1)	142	48	(33.8)	139	34	(24.5)	151	51	(33.8)

WHO European Region 5 TB high-priority countries presented in italics. XDR TB – Extensively drug-resistant tuberculosis.





AD	Andorra	GE	Georgia	PL	Poland
AL	Albania	HR	Croatia	PT	Portugal
AM	Armenia	HU	Hungary	RO	Romania
AT	Austria	IE	Ireland	RS	Serbia
AZ	Azerbaijan	IL	Israel	RU	Russia
BA	Bosnia and Herzegovina	IS	Iceland	SE	Sweden
BE	Belgium	IT	Italy	SI	Slovenia
BG	Bulgaria	KG	Kyrgyzstan	SK	Slovakia
BY	Belarus	KZ	Kazakhstan	TJ	Tajikistan
CH	Switzerland	LT	Lithuania	TM	Turkmenistan
CY	Cyprus	LU	Luxembourg	TR	Turkey
CZ	Czech Republic	LV	Latvia	UA	Ukraine
DE	Germany	MD	Moldova	UK	United Kingdom
DK	Denmark	ME	Montenegro	UZ	Uzbekistan
EE	Estonia	MK	former Yugoslav Republic		
EL	Greece		of Macedonia, the		
ES	Spain	MT	Malta		
FI	Finland	NL	Netherlands		
FR	France	NO	Norway		

Population estimate 2016 by UN Statistical Database: 2926348

Tuberculosis case notifications, 2016

Total number of cases	L	115
Notification rate per 100 000	1	4.2
New* & relapses	L	15
New* & relapses notification rate per 100 000	1	4.2
Pulmonary	301	(72.5%)
of which smear positive	-	-
of which laboratory confirmed	207	(68.8%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	41.6	years
Mean age of new foreign TB cases	-	years
Foreign origin of all TB cases	0	(0.0%)
New (not previously treated)	405	(97.6%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	N	0
Completeness of HIV data**	N	0
Case-linked data reporting	Y	es
Cases with DST results	40	(19.3%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	7-1	-14
Pulmonary MDR TB cases notified	1	(2.5%)
of which XDR TB cases	0	(0.0%)
Notified MDR	4	-
of which XDR TB cases	0	-
TB cases tested for HIV	223	(53.7%)
HIV-positive TB cases	6	(3.3%)
of these on antiretroviral therapy	6	(100.0%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+75%, EQA 95%.

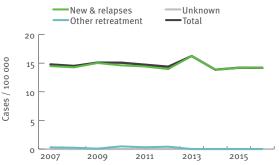
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Na	tional		
Outcome cohort	New and relapsed TB cases notified in 2015*		All MDR 1 enrolled i treatment	nto MDR
Case-linked data reporting	Yes			
Cases notified	409		0	
Success	354	(86.6%)	-	-
Died	11	(2.7%)	-	-
Failed	3	(0.7%)	-	-
Lost to follow-up	21	(5.1%)	-	-
Not evaluated	20	(4.9%)	-	-

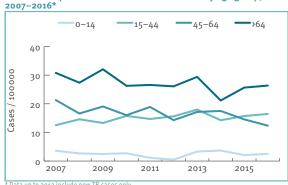
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016*

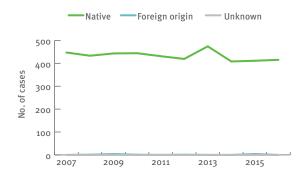


* Starting from 2013 onward cases with unknown history are included in new and relapses.

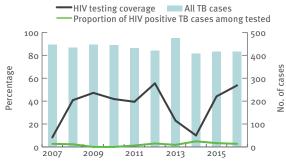
New and relapsed TB cases - notification rates by age group,



Tuberculosis cases by geographical origin, 2007-2016

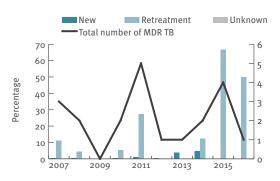


TB-HIV co-infection, 2007-2016

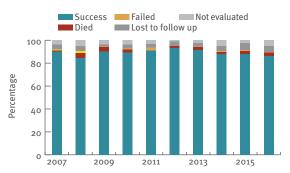


* Since 2015 data on HIV detection are collected for new TB cases and relapses.

MDR TB cases by previous treatment history, 2007-2016



Treatment outcome, new and relapsed TB cases, 2007-2016*



* 2007-2011 cohorts include new cases only.

No. of cases

^{**} Treatment outcome as presented is treatment outcome after 24 months.

Population estimate 2016 by UN Statistical Database: 77 281

Tuberculosis case notifications, 2016

Total number of cases		4
Notification rate per 100 000		5.2
New* & relapses		4
New* & relapses notification rate per 100 000		5.2
Pulmonary	3	(75.0%)
of which smear positive	-	-
of which laboratory confirmed	2	(66.7%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	42.	5 years
Mean age of new foreign TB cases		- years
Foreign origin of all TB cases	0	(0.0%)
New (not previously treated)	4	(100.0%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*		No
Completeness of HIV data**		No
Case-linked data reporting		Yes
Cases with DST results	1	(50.0%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	0-	-0-3
Pulmonary MDR TB cases notified	0	(0.0%)
of which XDR TB cases	0	(0.0%)
Notified MDR	0	-
of which XDR TB cases	-	-
TB cases tested for HIV	0	(0.0%)
HIV-positive TB cases	-	-
of these on antiretroviral therapy	-	_

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

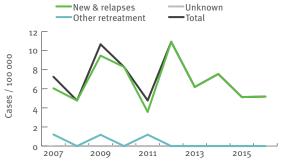
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Na	tional		
Outcome cohort	New and relapsed TB cases notified in 2015*		All MDR TB cas enrolled into M treatment in 201	
Case-linked data reporting	Yes			
Cases notified		4)
Success	4	(100%)	-	-
Died	0	(0.0%)	-	-
Failed	0	(0.0%)	-	-
Lost to follow-up	0	(0.0%)	-	-
Not evaluated	0	(0.0%)	-	-

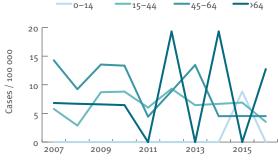
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016*



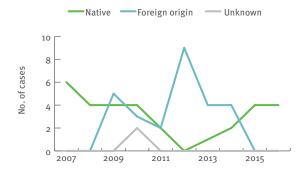
* Starting from 2013 onward cases with unknown history are included in new and relapses.

New and relapsed TB cases - notification rates by age group, 2007-2016*



* Data up to 2012 includes new TB cases only.

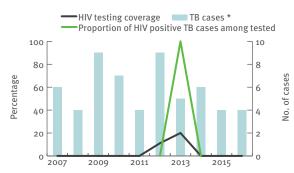
Tuberculosis cases by geographical origin, 2007-2016



MDR TB cases by previous treatment history, 2007–2016

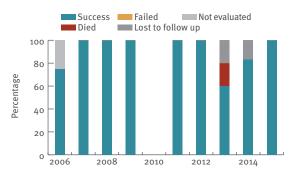
No MDR cases reported

TB-HIV co-infection, 2007-2016



* Since 2015 data on HIV detection are collected for new TB cases and relapses.

Treatment outcome, new and relapsed TB cases, 2006-2015*



 * 2005–2011 cohorts include new cases only.

 $^{^{\}star\star}$ Treatment outcome as presented is treatment outcome after 24 months.

Treatment outcome monitoring

Population estimate 2016 by UN Statistical Database: 2924816

Tuberculosis case notifications, 2016

Total number of cases	1	080
Notification rate per 100 000	3	6.9
New* & relapses	1	027
New* & relapses notification rate per 100 000	3	35.1
Pulmonary	829	(80.7%)
of which smear positive	-	-
of which laboratory confirmed	438	(52.8%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	44.1	years
Mean age of new foreign TB cases	-	years
Foreign origin of all TB cases	0	(0.0%)
New (not previously treated)	818	(75.7%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	١	res .
Completeness of HIV data**	١	/es
Case-linked data reporting	١	res .
Cases with DST results	457	(100.0%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	180-1	160-210
Pulmonary MDR TB cases notified	115	(25.2%)
of which XDR TB cases	6	(5.2%)
Notified MDR	128	
of which XDR TB cases	29	-
TB cases tested for HIV	1027	(100.0%)
HIV-positive TB cases	57	(5.6%)
of these on antiretroviral therapy	57	(100.0%)

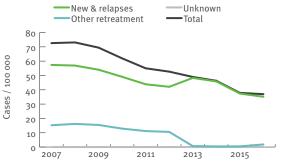
^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

Geographical coverage	Nat	tional		
Outcome cohort	TB case	w and relapsed All MDR TB cases notified enrolled into N treatment in 20		
Case-linked data reporting	Yes			
Cases notified	910		118	
Success	721	(79.2%)	68	(57.6%)
Died	47	(5.2%)	8	(6.8%)
Failed	11	(1.2%)	19	(16.1%)
Lost to follow-up	131	(14.4%)	23	(19.5%)
Not evaluated	0	(0.0%)	0	(0.0%)

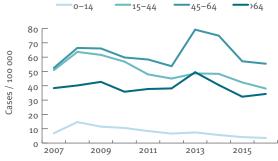
^{*} Treatment outcome as presented is treatment outcome after 12 months. ** Treatment outcome as presented is treatment outcome after 24 months.

Tuberculosis notification rates by treatment history, 2007-2016*



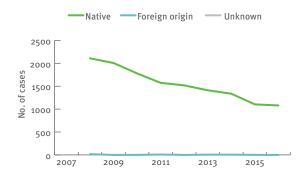
* Starting from 2013 onward cases with unknown history are included in new and relapses.

New and relapsed TB cases - notification rates by age group, 2007-2016

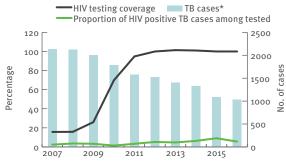


* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016

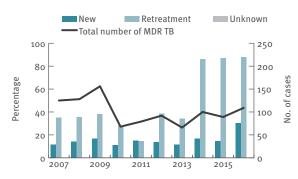


TB-HIV co-infection, 2007-2016

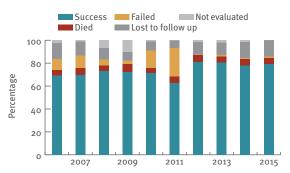


* Since 2015 data on HIV detection are collected for new TB cases and relapses.

MDR TB cases by previous treatment history, 2007–2016



Treatment outcome, new and relapsed TB cases, 2006-2015*



* 2006-2011 cohorts include new cases only.

Tuberculosis case notifications, 2016

Total number of cases	6	34
Notification rate per 100 000	7	7.3
New* & relapses	619	
New* & relapses notification rate per 100 000	;	7.1
Pulmonary	483	(76.1%)
of which microscopy-positive	178	(36.9%)
of which laboratory confirmed	384	(79.5%)
Laboratory-confirmed TB cases	489	(77.0%)
Mean age of new native TB cases	57.3	years
Mean age of new foreign TB cases	33.5	years
Foreign origin of all TB cases	424	(66.8%)
New (not previously treated)	449	(70.7%)

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	,	Yes
Completeness of HIV data**		-
Case-linked data reporting	,	Yes
Cases with DST results	473	(96.7%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	16-	-6-26
Pulmonary MDR TB cases notified	14	(3.7%)
of which XDR TB cases	2	(14.3%)
Notified MDR TB	16	(3.4%)
of which XDR TB cases	2	(12.5%)
TB cases tested for HIV	-	-
HIV-positive TB cases	-	-
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

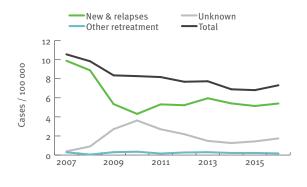
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

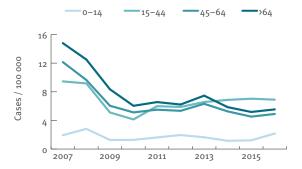
Geographical coverage	Na	tional		
Outcome cohort	pulmona	ure positive ry TB cases d in 2015*		R TB cases d in 2014**
Case-linked data reporting	,	/es		
Cases notified		267 20		20
Success	187	(70.0%)	13	(65.0%)
Died	17	(6.4%)	0	(0.0%)
Failed	0	(0.0%)	0	(0.0%)
Lost to follow-up	2	(0.7%)	1	(5.0%)
Still on treatment	27	(10.1%)	1	(5.0%)
Not evaluated	34	(12.7%)	5	(25.0%)

^{*} Treatment outcome as presented is treatment outcome after 12 months.

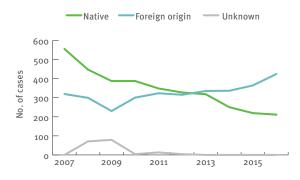
Tuberculosis notification rates by treatment history, 2007-2016



New and relapsed TB cases - notification rates by age group, 2007-2016



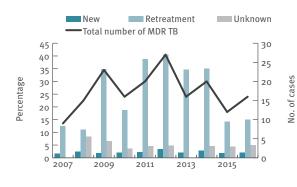
Tuberculosis cases by geographical origin, 2007-2016

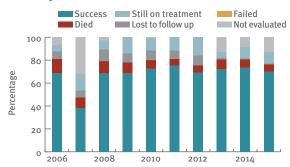


TB-HIV co-infection, 2007-2016

Data not available

MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Azerbaijan

Tuberculosis case notifications, 2016

Total number of cases	6	707
Notification rate per 100 000	6	9.0
New* & relapses	5 159	
New* & relapses notification rate per 100 000	53.0	
Pulmonary	4122	(79.9%)
of which smear positive	-	-
of which laboratory confirmed	2529	(61.4%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	28.2	years
Mean age of new foreign TB cases	-	years
Foreign origin of all TB cases	12	(0.2%)
New (not previously treated)	3793	(56.6%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Υ	'es
Completeness of HIV data**	Υ	'es
Case-linked data reporting	Υ	'es
Cases with DST results	2614 (103.4	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	1500-14	400-1600
Pulmonary MDR TB cases notified	777	(29.7%)
of which XDR TB cases	71	(13.3%)
Notified MDR	925	-
of which XDR TB cases	77	-
TB cases tested for HIV	4722	(91.5%)
HIV-positive TB cases	99	(2.1%)
of these on antiretroviral therapy	78	(78.8%)

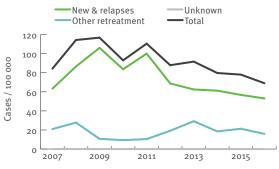
^{*} National coverage 100% or culturing 90%. C+/All TB cases 50%. DST done for C+ 75%. EQA 95%.
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Nat	ional			
Outcome cohort	confirm	ologically ed new TB in 2015*	enrolled	TB cases into MDR in 2014**	
Case-linked data reporting	١	'es			
Cases notified	1475		7	745	
Success	1221	(82.8%)	441	(59.2%)	
Died	49	(3.3%)	127	(17.0%)	
Failed	34	(2.3%)	135	(18.1%)	
Lost to follow-up	132	(8.9%)	42	(5.6%)	
Not evaluated	39	(2.6%)	0	(0.0%)	

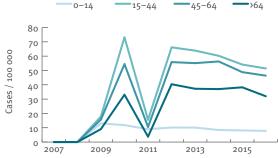
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016*



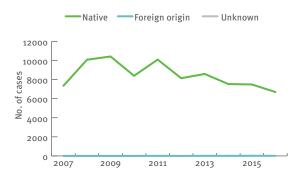
* Starting from 2013 onward cases with unknown history are included in new and relapses.

New and relapsed TB cases - notification rates by age group, 2007-2016

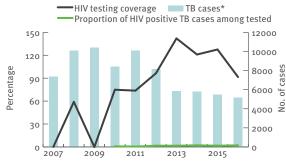


* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016

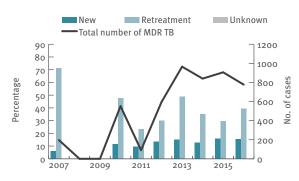


TB-HIV co-infection, 2007-2016

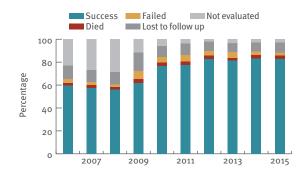


* Since 2015 data on HIV detection are collected for new TB cases and relapses.

MDR TB cases by previous treatment history, 2007–2016



Treatment outcome of new TB cases, 2006-2015



 $^{^{\}star\star}$ Treatment outcome as presented is treatment outcome after 24 months.

Belarus

Population estimate 2016 by UN Statistical Database: 9480042

Tuberculosis case notifications, 2016

Total number of cases	3	598
Notification rate per 100 000	3	8.0
New* & relapses	3	211
New* & relapses notification rate per 100 000	3	3.9
Pulmonary	2964	(92.3%)
of which smear positive	-	-
of which laboratory confirmed	2350	(79.3%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	44.2	years
Mean age of new foreign TB cases	_	years
Foreign origin of all TB cases	0	(0.0%)
New (not previously treated)	2653	(73.7%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Υ	'es
Completeness of HIV data**	Υ	'es
Case-linked data reporting	Υ	'es
Cases with DST results	2555 (108.7)	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	1600-1	500-1600
Pulmonary MDR TB cases notified	1222	(47.8%)
of which XDR TB cases	572	(46.8%)
Notified MDR	1543	-
of which XDR TB cases	572	-
TB cases tested for HIV	3148	(98.0%)
HIV-positive TB cases	275	(8.7%)
of these on antiretroviral therapy	229	(83.3%)

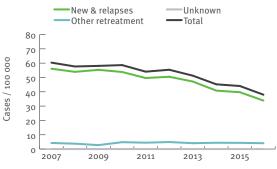
^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

Treatment outcome monitoring

Geographical coverage	Nat	ional		
Outcome cohort	TB case	l relapsed s notified 2014*	enrolled	TB cases l into MDR it in 2013**
Case-linked data reporting	١	'es		
Cases notified	2	2525		472
Success	2243	(88.8%)	872	(59.2%)
Died	76	(3.0%)	126	(8.6%)
Failed	72	(2.9%)	289	(19.6%)
Lost to follow-up	77	(3.0%)	181	(12.3%)
Not evaluated	57	(2.3%)	4	(0.3%)

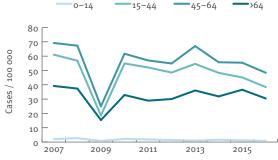
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016*



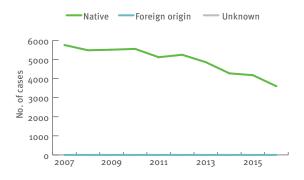
* Starting from 2013 onward cases with unknown history are included in new and relapses.

New and relapsed TB cases – notification rates by age group, 2007–2016*

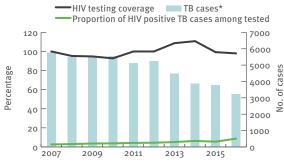


* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016

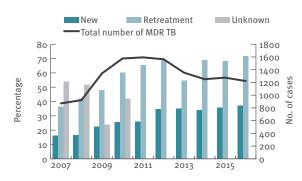


TB-HIV co-infection, 2007-2016

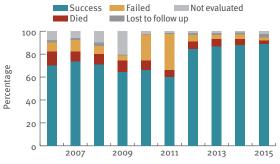


* Since 2015 data on HIV detection are collected for new TB cases and relapses.

MDR TB cases by previous treatment history, 2007–2016



Treatment outcome, new and relapsed TB cases, 2006-2015*



 $\ensuremath{^{\star}}\xspace$ 2005–2011 cohorts include new cases only.

^{**} More than 50% of TB cases with reported HIV status.

^{**} Treatment outcome as presented is treatment outcome after 24 months.

Belgium

Total population at 22 September 2017 by EUROSTAT: 11311117

Tuberculosis case notifications, 2016

Total number of cases	10)47
Notification rate per 100 000	9	.3
New* & relapses	986	
New* & relapses notification rate per 100 000	8	1.7
Pulmonary	715	(68.3%)
of which microscopy-positive	331	(46.3%)
of which laboratory confirmed	593	(82.9%)
Laboratory-confirmed TB cases	801	(76.5%)
Mean age of new native TB cases	45.2	years
Mean age of new foreign TB cases	35.5	years
Foreign origin of all TB cases	547	(52.2%)
New (not previously treated)	757	(72.3%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	,	res .
Completeness of HIV data**		No
Case-linked data reporting	,	res .
Cases with DST results	769 (96.09	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	16-	-6-26
Pulmonary MDR TB cases notified	9	(1.6%)
of which XDR TB cases	0	(0.0%)
Notified MDR TB	10	(1.3%)
of which XDR TB cases	0	(0.0%)
TB cases tested for HIV	479	(45.7%)
HIV-positive TB cases	33	(6.9%)
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

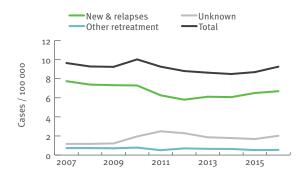
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Na	tional		
Outcome cohort	pulmona	ure positive ry TB cases d in 2015*		R TB cases d in 2014**
Case-linked data reporting	,	Yes		
Cases notified	422			11
Success	351	(79.4%)	6	(54.5%)
Died	34	(7.7%)	1	(9.1%)
Failed	0	(0.0%)	0	(0.0%)
Lost to follow-up	33	(7.5%)	0	(0.0%)
Still on treatment	12	(2.7%)	4	(36.4%)
Not evaluated	12	(2.7%)	0	(0.0%)

^{*} Treatment outcome as presented is treatment outcome after 12 months.

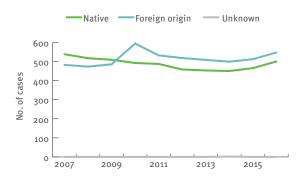
Tuberculosis notification rates by treatment history, 2007-2016



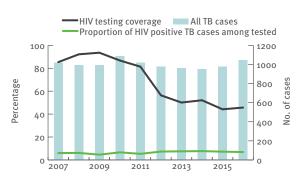
New and relapsed TB cases - notification rates by age group, 2007-2016



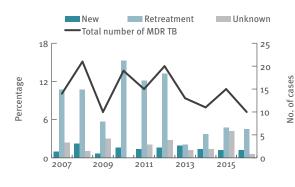
Tuberculosis cases by geographical origin, 2007-2016

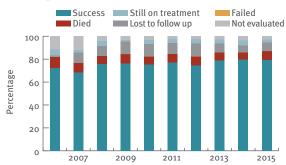


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Bosnia and Herzegovina

Population estimate 2016 by UN Statistical Database: 3516816

Tuberculosis case notifications, 2016

Total number of cases	907	
Notification rate per 100 000	25.8	
New* & relapses	907	
New* & relapses notification rate per 100 000	25.8	
Pulmonary	792	(87.3%)
of which smear positive	-	-
of which laboratory confirmed	597	(75.4%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	40.0 years	
Mean age of new foreign TB cases	- years	
Foreign origin of all TB cases	0	(0.0%)
New (not previously treated)	829	(91.4%)

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	No	
Case-linked data reporting	Yes	
Cases with DST results	597	(100.0%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	0-0-0	
Pulmonary MDR TB cases notified	0	(0.0%)
of which XDR TB cases	0	-
Notified MDR	0	-
of which XDR TB cases	0	-
TB cases tested for HIV	1	(0.1%)
HIV-positive TB cases	1	(100.0%)
of these on antiretroviral therapy	1	(100.0%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

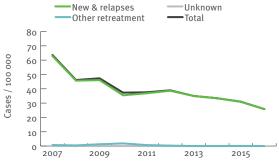
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Nat	tional		
Outcome cohort	New and relapsed TB cases notified in 2015*		enrolle	R TB cases d into MDR nt in 2014**
Case-linked data reporting	١	/es		
Cases notified	1	092		3
Success	707	(64.7%)	2	(66.7%)
Died	84	(7.7%)	1	(33.3%)
Failed	19	(1.7%)	0	(0.0%)
Lost to follow-up	2	(0.2%)	0	(0.0%)
Not evaluated	280	(25.6%)	0	(0.0%)

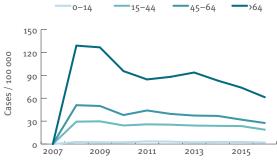
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016*



* Starting from 2013 onward cases with unknown history are included in new and relapses.

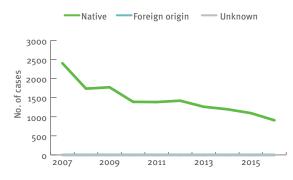
New and relapsed TB cases - notification rates by age group, 2007-2016



* Data up to 2012 includes new TB cases only.

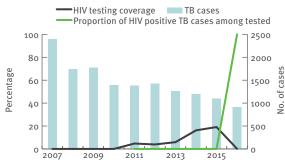
TB-HIV co-infection, 2007-2016

Tuberculosis cases by geographical origin, 2007-2016



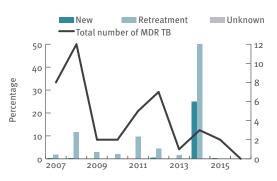
of cases

No.

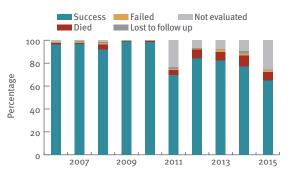


* Since 2015 data on HIV detection are collected for new TB cases and relapses.

MDR TB cases by previous treatment history, 2007-2016



Treatment outcome, new and relapsed TB cases, 2006-2015*



* 2005-2011 cohorts include new cases only.

 $^{^{\}star\star}$ Treatment outcome as presented is treatment outcome after 24 months.

Bulgaria

Total population at 22 September 2017 by EUROSTAT: 7153784

Tuberculosis case notifications, 2016

Total number of cases	1603	
Notification rate per 100 000	22.4	
New* & relapses	1525	
New* & relapses notification rate per 100 000	21.3	
Pulmonary	1186	(74.0%)
of which microscopy-positive	618	(52.1%)
of which laboratory confirmed	745	(62.8%)
Laboratory-confirmed TB cases	764	(47.7%)
Mean age of new native TB cases	46.1	years
Mean age of new foreign TB cases	26.0 years	
Foreign origin of all TB cases	4	(0.2%)
New (not previously treated)	1416	(88.3%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	I	No
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	670	(87.7%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	44-	27-61
Pulmonary MDR TB cases notified	19	(2.9%)
of which XDR TB cases	0	(0.0%)
Notified MDR	19	(2.8%)
of which XDR TB cases	0	(0.0%)
TB cases tested for HIV	1260	(78.6%)
HIV-positive TB cases	0	(0.0%)
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

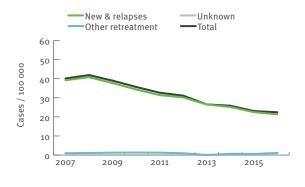
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

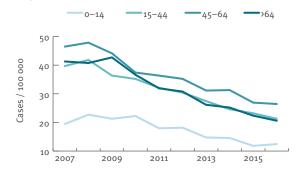
Na	tional		
pulmona	ry TB cases		R TB cases d in 2014**
,	Yes		
(663		37
574	(86.6%)	18	(48.6%)
56	(8.4%)	12	(32.4%)
10	(1.5%)	0	(0.0%)
18	(2.7%)	5	(13.5%)
2	(0.3%)	0	(0.0%)
3	(0.5%)	2	(5.4%)
	New cultipulmona notifie 574 56 10 18 2	56 (8.4%) 10 (1.5%) 18 (2.7%) 2 (0.3%)	New culture positive pulmonary TB cases notified in 2015* Yes 663 574 (86.6%) 18 56 (8.4%) 12 10 (1.5%) 0 18 (2.7%) 5 2 (0.3%) 0

^{*} Treatment outcome as presented is treatment outcome after 12 months.

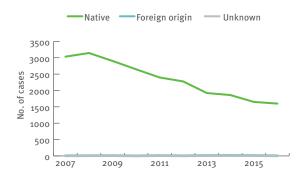
Tuberculosis notification rates by treatment history, 2007-2016



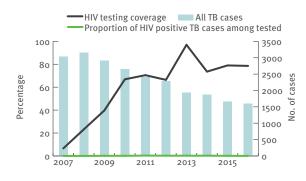
New and relapsed TB cases - notification rates by age group, 2007-2016



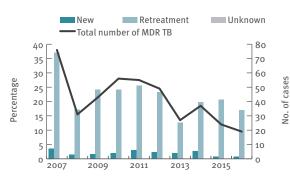
Tuberculosis cases by geographical origin, 2007-2016

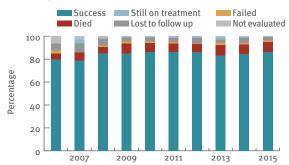


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Tuberculosis case notifications, 2016

Total number of cases	460	
Notification rate per 100 000	11.0	
New* & relapses	449	
New* & relapses notification rate per 100 000	10.7	
Pulmonary	307	(66.7%)
of which microscopy-positive	0	(0.0%)
of which laboratory confirmed	193	(62.9%)
Laboratory-confirmed TB cases	262	(57.0%)
Mean age of new native TB cases	52.5	years
Mean age of new foreign TB cases	66.3 years	
Foreign origin of all TB cases	3	(0.7%)
New (not previously treated)	293	(63.7%)

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	,	Yes
Completeness of HIV data**	Yes	
Case-linked data reporting	,	Yes
Cases with DST results	262	(100.0%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	0-	-0-0
Pulmonary MDR TB cases notified	0	(0.0%)
of which XDR TB cases	0	-
Notified MDR	0	(0.0%)
of which XDR TB cases	0	-
TB cases tested for HIV	-	-
HIV-positive TB cases	-	-
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

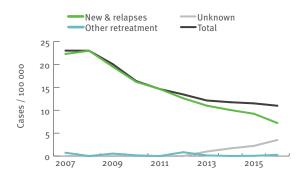
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

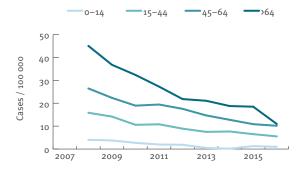
Na	tional		
pulmona	ry TB cases		R TB cases d in 2014**
1	Yes		
2	280		2
35	(12.5%)	0	(0.0%)
28	(10.0%)	1	(50.0%)
0	(0.0%)	0	(0.0%)
0	(0.0%)	0	(0.0%)
1	(0.4%)	0	(0.0%)
216	(77.1%)	1	(50.0%)
	New cultipulmona notifie	28 (10.0%) 0 (0.0%) 0 (0.0%) 1 (0.4%)	New culture positive pulmonary TB cases notified in 2015* Yes 280 35 (12.5%) 0 0 (0.0%) 0 0 (0.0%) 0 0 (0.0%) 0 1 (0.4%) 0

^{*} Treatment outcome as presented is treatment outcome after 12 months.

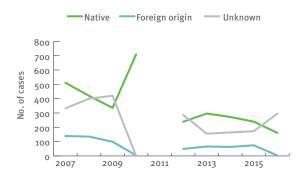
Tuberculosis notification rates by treatment history, 2007-2016



New and relapsed TB cases - notification rates by age group, 2007-2016



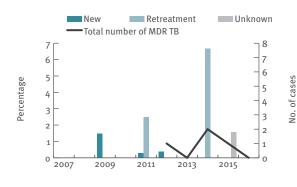
Tuberculosis cases by geographical origin, 2007-2016

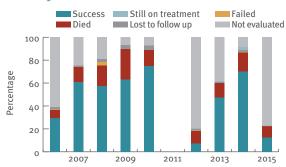


TB-HIV co-infection, 2007-2016

Data not available

MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

ion at 22 September 2017 by EUROSTAT: 848319

Tuberculosis case notifications, 2016

Total number of cases	(60
Notification rate per 100 000	7.1	
New* & relapses		57
New* & relapses notification rate per 100 000	6.7	
Pulmonary	51	(85.0%)
of which microscopy-positive	23	(45.1%)
of which laboratory confirmed	39	(76.5%)
Laboratory-confirmed TB cases	42	(70.0%)
Mean age of new native TB cases	37.3	years
Mean age of new foreign TB cases	36.9	years
Foreign origin of all TB cases	56	(93.3%)
New (not previously treated)	55	(91.7%)

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*		Yes
Completeness of HIV data**	Yes	
Case-linked data reporting		Yes
Cases with DST results	41 (97.6%	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	0-	-0-0
Pulmonary MDR TB cases notified	0	(0.0%)
of which XDR TB cases	0	-
Notified MDR	1	(2.4%)
of which XDR TB cases	0	(0.0%)
TB cases tested for HIV	48	(80.0%)
HIV-positive TB cases	0	(0.0%)
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

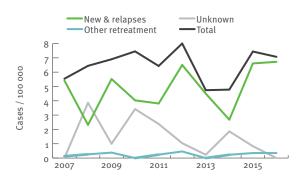
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

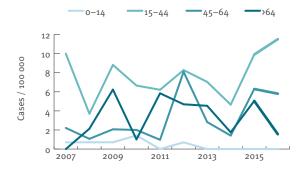
Geographical coverage	Na	tional		
Outcome cohort	pulmona	ure positive ry TB cases d in 2015*		R TB cases l in 2014**
Case-linked data reporting	,	Yes		
Cases notified		34		0
Success	18	(52,9%)	0	(0.0%)
Died	3	(8,8%)	0	(0.0%)
Failed	0	(0,0%)	0	(0.0%)
Lost to follow-up	2	(5,9%)	0	(0.0%)
Still on treatment	2	(5,9%)	0	(0.0%)
Not evaluated	9	(26,5%)	0	(0.0%)

^{*} Treatment outcome as presented is treatment outcome after 12 months.

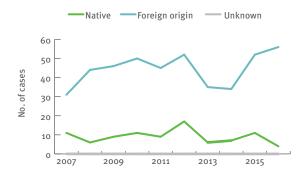
Tuberculosis notification rates by treatment history, 2007-2016



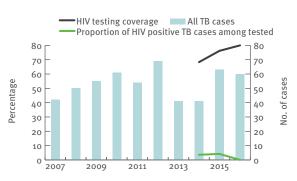
New and relapsed TB cases - notification rates by age group, 2007-2016



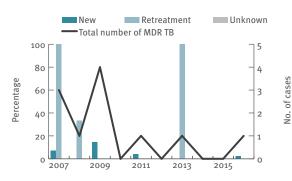
Tuberculosis cases by geographical origin, 2007-2016

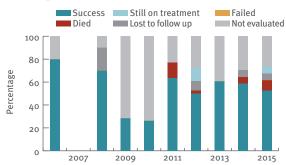


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Czech Republic

Tuberculosis case notifications, 2016

Total number of cases	5	16
Notification rate per 100 000	4	.9
New* & relapses	5	511
New* & relapses notification rate per 100 000	4	.8
Pulmonary	446	(86.4%)
of which microscopy-positive	212	(47.5%)
of which laboratory confirmed	349	(78.3%)
Laboratory-confirmed TB cases	392	(76.0%)
Mean age of new native TB cases	55.7	years
Mean age of new foreign TB cases	39.7	years
Foreign origin of all TB cases	151	(29.3%)
New (not previously treated)	490	(95.0%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	,	res .
Completeness of HIV data**	No	
Case-linked data reporting	,	/es
Cases with DST results	367 (93.6	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	13-	-3-22
Pulmonary MDR TB cases notified	6	(1.8%)
of which XDR TB cases	0	(0.0%)
Notified MDR TB	6	(1.6%)
of which XDR TB cases	0	(0.0%)
TB cases tested for HIV	205	(39.7%)
HIV-positive TB cases	5	(2.4%)
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

No. of cases

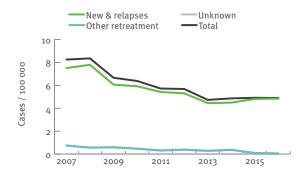
New and relapsed TB cases - notification rates by age group,

Treatment outcome monitoring

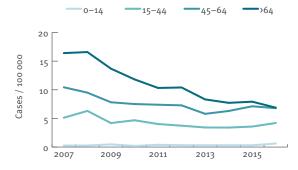
Geographical coverage	Na	tional		
Outcome cohort	pulmona	ew culture positive ulmonary TB cases notified in 2015* All MDR TB on the notified in 2		
Case-linked data reporting	,	Yes		
Cases notified	332		5	
Success	222	(66.9%)	2	(40.0%)
Died	72	(21.7%)	0	(0.0%)
Failed	2	(0.6%)	0	(0.0%)
Lost to follow-up	15	(4.5%)	1	(20.0%)
Still on treatment	12	(3.6%)	0	(0.0%)
Not evaluated	9	(2.7%)	2	(40.0%)

^{*} Treatment outcome as presented is treatment outcome after 12 months. ** Treatment outcome as presented is treatment outcome after 24 months.

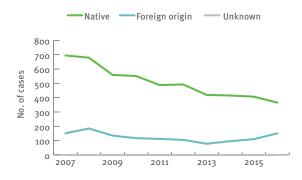
Tuberculosis notification rates by treatment history, 2007-2016



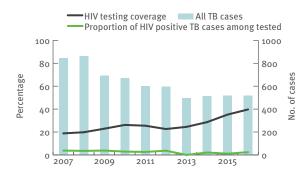
2007-2016



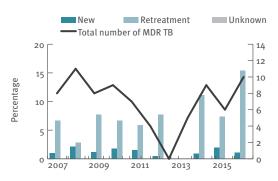
Tuberculosis cases by geographical origin, 2007-2016

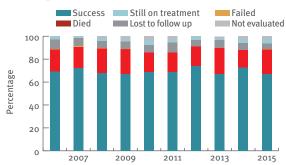


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007-2016





Tuberculosis case notifications, 2016

Total number of cases	3	30
Notification rate per 100 000	5.8	
New* & relapses	292	
New* & relapses notification rate per 100 000	5.2	
Pulmonary	262	(79.4%)
of which microscopy-positive	122	(46.6%)
of which laboratory confirmed	208	(79.4%)
Laboratory-confirmed TB cases	258	(78.2%)
Mean age of new native TB cases	44.7 years	
Mean age of new foreign TB cases	38.0 years	
Foreign origin of all TB cases	221	(67.0%)
New (not previously treated)	292	(88.5%)

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	,	res .
Completeness of HIV data**	No	
Case-linked data reporting	,	res .
Cases with DST results	252	(97.7%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	1-	0-4
Pulmonary MDR TB cases notified	3	(1.5%)
of which XDR TB cases	0	(0.0%)
Notified MDR TB	4	(1.6%)
of which XDR TB cases	0	(0.0%)
TB cases tested for HIV	150	(45.5%)
HIV-positive TB cases	9	(6.0%)
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

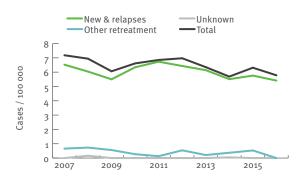
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

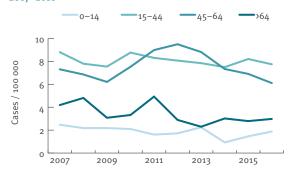
Geographical coverage	Nat	tional		
Outcome cohort	pulmona	ure positive ry TB cases d in 2015*		R TB cases d in 2014**
Case-linked data reporting	١	/es		
Cases notified	2	209		2
Success	100	(47.8%)	1	(50.0%)
Died	8	(3.8%)	0	(0.0%)
Failed	6	(2.9%)	0	(0.0%)
Lost to follow-up	1	(0.5%)	0	(0.0%)
Still on treatment	8	(3.8%)	0	(0.0%)
Not evaluated	86	(41.1%)	1	(50.0%

^{*} Treatment outcome as presented is treatment outcome after 12 months.

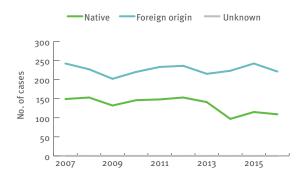
Tuberculosis notification rates by treatment history, 2007-2016



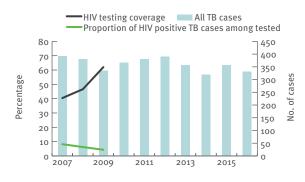
New and relapsed TB cases - notification rates by age group, 2007-2016



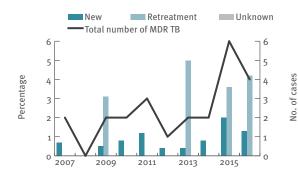
Tuberculosis cases by geographical origin, 2007-2016

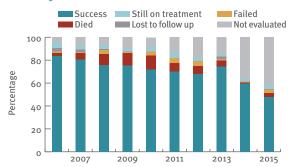


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Estonia

Total population at 22 September 2017 by EUROSTAT: 1315944

Tuberculosis case notifications, 2016

Total number of cases	1	92
Notification rate per 100 000	14.6	
New* & relapses	188	
New* & relapses notification rate per 100 000	14.3	
Pulmonary	177	(92.2%)
of which microscopy-positive	90	(50.8%)
of which laboratory confirmed	149	(84.2%)
Laboratory-confirmed TB cases	156	(81.3%)
Mean age of new native TB cases	50.2 years	
Mean age of new foreign TB cases	61.2 years	
Foreign origin of all TB cases	42	(21.9%)
New (not previously treated)	167	(87.0%)

^{*} Cases with unknown previous treatment included in new cases.

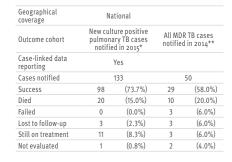
Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Υ	es
Completeness of HIV data**	Yes	
Case-linked data reporting	Υ	es
Cases with DST results	152	(97.4%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	34-2	23-45
Pulmonary MDR TB cases notified	23	(15.9%)
of which XDR TB cases	7	(30.4%)
Notified MDR TB	24	(15.8%)
of which XDR TB cases	7	(29.2%)
TB cases tested for HIV	184	(95.8%)
HIV-positive TB cases	22	(12.0%)
of these on antiretroviral therapy	20	(90.9%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

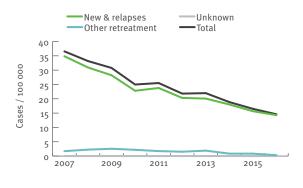
** More than 50% of TB cases with reported HIV status.

New and relapsed TB cases - notification rates by age group,

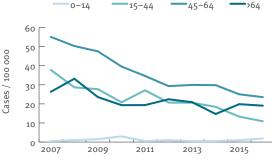


Treatment outcome monitoring

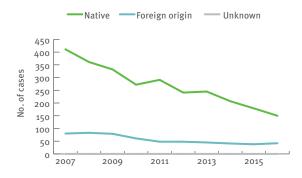
Tuberculosis notification rates by treatment history, 2007-2016



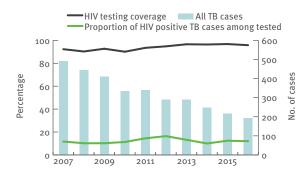
2007-2016



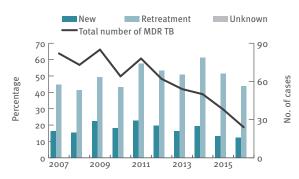
Tuberculosis cases by geographical origin, 2007-2016



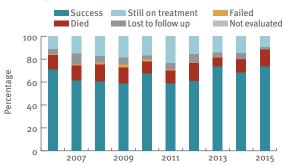
TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007–2016



Treatment outcome, new culture-confirmed pulmonary TB cases, 2006-2015



^{*} Treatment outcome as presented is treatment outcome after 12 months. ** Treatment outcome as presented is treatment outcome after 24 months.

Tuberculosis case notifications, 2016

Total number of cases	236	
Notification rate per 100 000	1	4.3
New* & relapses	2	25
New* & relapses notification rate per 100 000	4.1	
Pulmonary	175	(74.2%)
of which microscopy-positive	55	(31.4%)
of which laboratory confirmed	136	(77.7%)
Laboratory-confirmed TB cases	186	(78.8%)
Mean age of new native TB cases	67.4	years
Mean age of new foreign TB cases	33.4 years	
Foreign origin of all TB cases	111	(47.0%)
New (not previously treated)	219	(92.8%)

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	-	
Case-linked data reporting	Yes	
Cases with DST results	183	(98.4%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	3-	-0-6
Pulmonary MDR TB cases notified	3	(2.2%)
of which XDR TB cases	1	(33.3%)
Notified MDR TB	6	(3.3%)
of which XDR TB cases	1	(16.7%)
TB cases tested for HIV	-	-
HIV-positive TB cases	-	-
of these on antiretroviral therapy	_	_

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

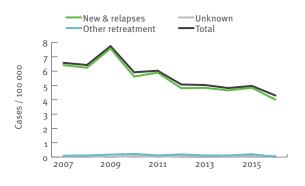
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

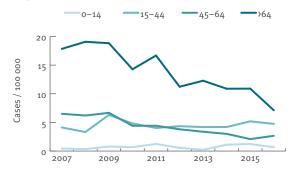
Geographical coverage	Na	tional		
Outcome cohort	pulmona	New culture positive pulmonary TB cases notified in 2015*		R TB cases d in 2014**
Case-linked data reporting	,	Yes		
Cases notified		161		8
Success	86	(53.4%)	0	(0.0%)
Died	14	(8.7%)	0	(0.0%)
Failed	0	(0.0%)	0	(0.0%)
Lost to follow-up	0	(0.0%)	0	(0.0%)
Still on treatment	2	(1.2%)	0	(0.0%)
Not evaluated	59	(36.6%)	8	(100.0%)

^{*} Treatment outcome as presented is treatment outcome after 12 months.

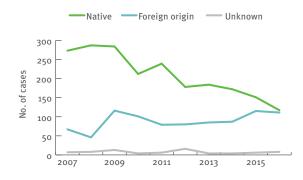
Tuberculosis notification rates by treatment history, 2007-2016



New and relapsed TB cases - notification rates by age group, 2007-2016



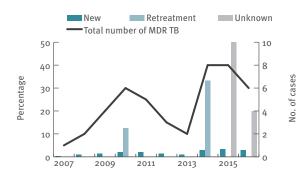
Tuberculosis cases by geographical origin, 2007-2016

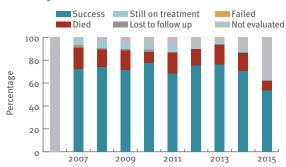


TB-HIV co-infection, 2007-2016

Data not available

MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

former Yugoslav Republic of Macedonia, the

Tuberculosis case notifications, 2016

Total number of cases	267	
Notification rate per 100 000	12.8	
New* & relapses	263	
New* & relapses notification rate per 100 000	12.6	
Pulmonary	211	(80.2%)
of which smear positive	-	-
of which laboratory confirmed	178	(84.4%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	41.3 years	
Mean age of new foreign TB cases		- years
Foreign origin of all TB cases	8	(3.0%)
New (not previously treated)	243	(91.0%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	143	(80.3%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	3-0-6	
Pulmonary MDR TB cases notified	2	(1.4%)
of which XDR TB cases	0	(0.0%)
Notified MDR	2	-
of which XDR TB cases	0	-
TB cases tested for HIV	207	(78.7%)
HIV-positive TB cases	0	(0.0%)
of these on antiretroviral therapy	-	-

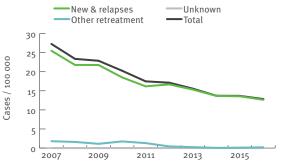
^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

coverage	Nat	tional		
Outcome cohort	New and relapsed TB cases notified in 2015*		All MDR TB cases enrolled into MDR treatment in 2014*	
Case-linked data reporting	١	/es		
Cases notified	2	282	3	
Success	243	(86.2%)	1	(33.3%)
Died	25	(8.9%)	0	(0.0%)
Failed	3	(1.1%)	0	(0.0%)
Lost to follow-up	7	(2.5%)	2	(66.7%)
Not evaluated	4	(1.4%)	0	(0.0%)

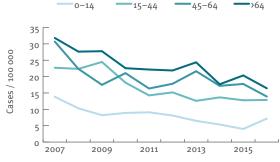
Treatment outcome monitoring

Tuberculosis notification rates by treatment history, 2007-2016*



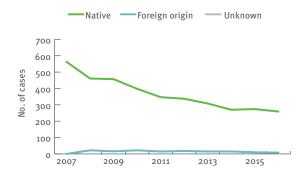
* Starting from 2013 onward cases with unknown history are included in new and relapses.

New and relapsed TB cases - notification rates by age group, 2007-2016

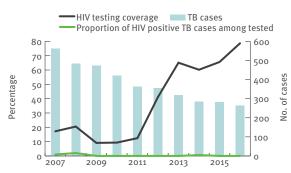


* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016

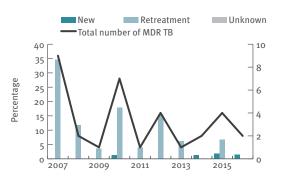


TB-HIV co-infection, 2007-2016

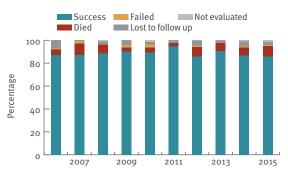


* Since 2015 data on HIV detection are collected for new TB cases and relapses.

MDR TB cases by previous treatment history, 2007–2016



Treatment outcome, new and relapsed TB cases, 2006-2015*



* 2005-2011 cohorts include new cases only.

^{*} Treatment outcome as presented is treatment outcome after 12 months. $\ensuremath{^{\star\star}}$ Treatment outcome as presented is treatment outcome after 24 months.

Tuberculosis case notifications, 2016

Total number of cases	4958	
Notification rate per 100 000	7.5	
New* & relapses	4 675	
New* & relapses notification rate per 100 000	7.0	
Pulmonary	3 3 1 9	(66.9%)
of which microscopy-positive	-	-
of which laboratory confirmed	3120	(94.0%)
Laboratory-confirmed TB cases	4197	(84.7%)
Mean age of new native TB cases		years
Mean age of new foreign TB cases		years
Foreign origin of all TB cases	2758	(55.6%)
New (not previously treated)	-	-

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	-	
Case-linked data reporting	No	
Cases with DST results	4197 (84.7%	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	63-47-79	
Pulmonary MDR TB cases notified	51	(1.6%)
of which XDR TB cases	6	(11.8%)
Notified MDR TB	69	-
of which XDR TB cases	6	(6.3%)
TB cases tested for HIV	-	-
HIV-positive TB cases	-	-
of these on antiretroviral therapy	-	-

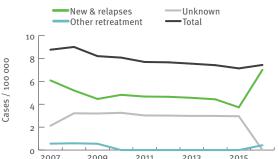
^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

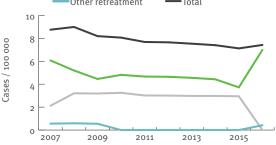
Treatment outcome monitoring

Data not available

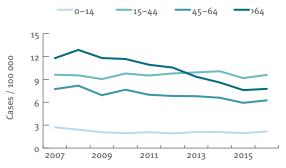
New and relapsed TB cases - notification rates by age group,



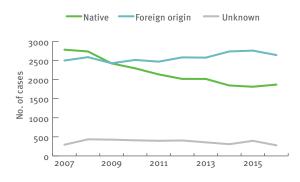
Tuberculosis notification rates by treatment history, 2007-2016



2007-2016



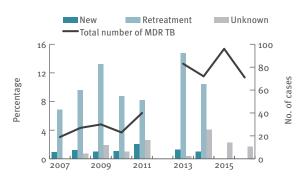
Tuberculosis cases by geographical origin, 2007-2016

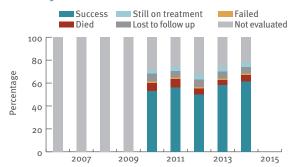


TB-HIV co-infection, 2007-2016

Data not available

MDR TB cases by previous treatment history, 2007–2016





All MDR TB cases enrolled into MDR

treatment in 2014*

411

(48.9%)

(7.8%)

(6.6%)

(28.7%)

(8.0%)

201

32

27

118

33

Georgia

Population estimate 2016 by UN Statistical Database: 3925405

Tuberculosis case notifications, 2016

Total number of cases	3330	
Notification rate per 100 000	84.8	
New* & relapses	2983	
New* & relapses notification rate per 100 000	76.0	
Pulmonary	2371	(79.5%)
of which smear positive	-	-
of which laboratory confirmed	1998	(84.3%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	42.2	years
Mean age of new foreign TB cases		years
Foreign origin of all TB cases	0	(0.0%)
New (not previously treated)	2463	(74.0%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	1791 (89.6%	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	460-420-500	
Pulmonary MDR TB cases notified	296	(16.5%)
of which XDR TB cases	52	(17.6%)
Notified MDR	401	-
of which XDR TB cases	56	-
TB cases tested for HIV	2866	(96.1%)
HIV-positive TB cases	61	(2.1%)
of these on antiretroviral therapy	56	(91.8%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

** Treatment outcome as presented is treatment outcome after 24 months.

Treatment outcome monitoring

New and relapsed

TB cases notified in 2015*

Yes

2841

* Treatment outcome as presented is treatment outcome after 12 months.

(84.0%)

(3.9%)

(2.1%)

(7.9%)

(2.1%)

2386

110

60

225

60

Geographical coverage

Outcome cohort

Case-linked data

Lost to follow-up

Not evaluated

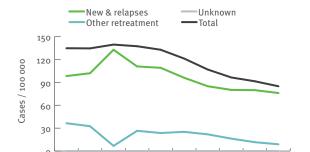
reporting Cases notified

Success

Died

Failed

New TB cases - notification rates by age group, 2007-2016*



Tuberculosis notification rates by treatment history, 2007-2016*

* Starting from 2013 onward cases with unknown history are included in new and relapses.

2011

2013

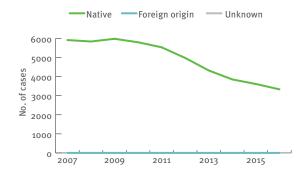
2015

0-14 15-44 45-64 **-**>64 200 Cases / 100 000 150 100 2009 2011 2013 2015

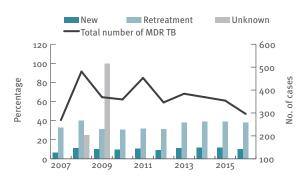
* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016

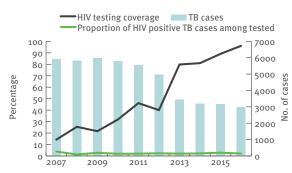
2009



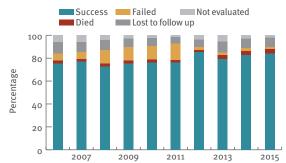
MDR TB cases by previous treatment history, 2007–2016



TB-HIV co-infection, 2007-2016



^{*} Since 2015 data on HIV detection are collected for new TB cases and relapses.



^{* 2005-2011} cohorts include new cases only.

Tuberculosis case notifications, 2016

Total number of cases	5915	
Notification rate per 100 000	7.2	
New* & relapses	5737	
New* & relapses notification rate per 100 000	7.0	
Pulmonary	4397	(74.3%)
of which microscopy-positive	1404	(31.9%)
of which laboratory confirmed	3 2 5 3	(74.0%)
Laboratory-confirmed TB cases	4164	(70.4%)
Mean age of new native TB cases	62.4 years	
Mean age of new foreign TB cases	35.7 years	
Foreign origin of all TB cases	4125	(69.7%)
New (not previously treated)	5589	(94.5%)

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	-	
Case-linked data reporting	Yes	
Cases with DST results	3757	(90.2%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	160 240	
Pulmonary MDR TB cases notified	90	(3.0%)
of which XDR TB cases	5	(8.6%)
Notified MDR TB	101	(2.7%)
of which XDR TB cases	5	(7.8%)
TB cases tested for HIV	-	-
HIV-positive TB cases	-	-
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

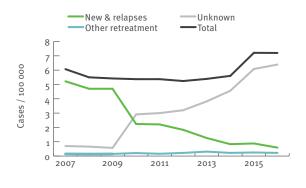
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

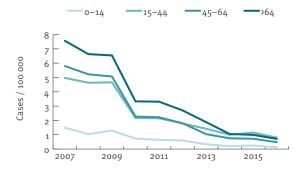
Geographical coverage	Na	tional		
Outcome cohort	New culture positive pulmonary TB cases notified in 2015*		All MDR TB cases notified in 2014**	
Case-linked data reporting	,	Yes		
Cases notified		312	92	
Success	176	(56.4%)	29	(31.5%)
Died	29	(9.3%)	9	(9.8%)
Failed	0	(0.0%)	1	(1.1%)
Lost to follow-up	4	(1.3%)	3	(3.3%)
Still on treatment	32	(10.3%)	12	(13.0%)
Not evaluated	71	(22.8%)	38	(41.3%)

^{*} Treatment outcome as presented is treatment outcome after 12 months.

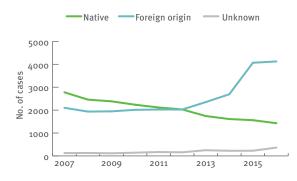
Tuberculosis notification rates by treatment history, 2007-2016



New and relapsed TB cases - notification rates by age group, 2007-2016



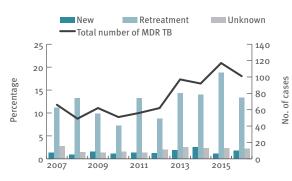
Tuberculosis cases by geographical origin, 2007-2016

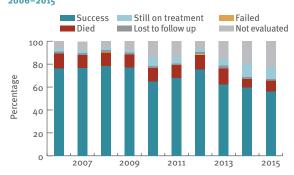


TB-HIV co-infection, 2007-2016

Data not available

MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Tuberculosis case notifications, 2016

Total number of cases	443	
Notification rate per 100 000	4.1	
New* & relapses	407	
New* & relapses notification rate per 100 000	3.8	
Pulmonary	394	(88.9%)
of which microscopy-positive	223	(56.6%)
of which laboratory confirmed	227	(57.6%)
Laboratory-confirmed TB cases	246	(55.5%)
Mean age of new native TB cases	61.1	years
Mean age of new foreign TB cases	35.1 years	
Foreign origin of all TB cases	189	(42.7%)
New (not previously treated)	407	(91.9%)

^{*} Cases with unknown previous treatment included in new cases.

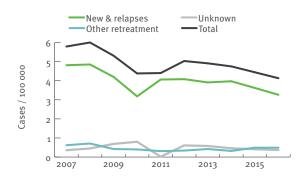
Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	No	
Completeness of HIV data**	-	
Case-linked data reporting	Yes	
Cases with DST results	124 (50.4%	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	10-0-23	
Pulmonary MDR TB cases notified	5	(4.3%)
of which XDR TB cases	0	-
Notified MDR TB	5	(4.0%)
of which XDR TB cases	0	-
TB cases tested for HIV	-	-
HIV-positive TB cases	-	-
of these on antiretroviral therapy		

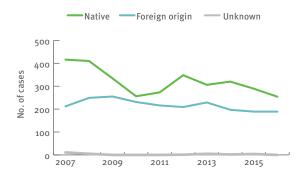
^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

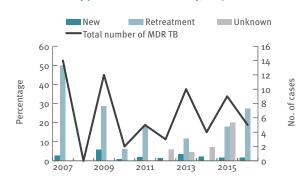
Tuberculosis notification rates by treatment history, 2007-2016



Tuberculosis cases by geographical origin, 2007-2016



MDR TB cases by previous treatment history, 2007-2016



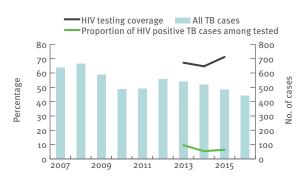
Treatment outcome monitoring

Data not available





TB-HIV co-infection, 2007-2016



Treatment outcome, new culture-confirmed pulmonary TB cases,

Data not available

Hungary

Total population at 22 September 2017 by EUROSTAT: 9855571

Tuberculosis case notifications, 2016

Total number of cases	786	
Notification rate per 100 000	8.0	
New* & relapses	737	
New* & relapses notification rate per 100 000	7.5	
Pulmonary	757	(96.3%)
of which microscopy-positive	252	(33.3%)
of which laboratory confirmed	396	(52.3%)
Laboratory-confirmed TB cases	404	(51.4%)
Mean age of new native TB cases	53.7	years
Mean age of new foreign TB cases	36.6 years	
Foreign origin of all TB cases	30	(3.8%)
New (not previously treated)	677	(86.1%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	No	
Case-linked data reporting	Yes	
Cases with DST results	340 (84.29	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	30-17-43	
Pulmonary MDR TB cases notified	18	(5.4%)
of which XDR TB cases	7	(46.7%)
Notified MDR TB	18	(5.3%)
of which XDR TB cases	7	(46.7%)
TB cases tested for HIV	19	(2.4%)
HIV-positive TB cases	1 (5.3%	
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

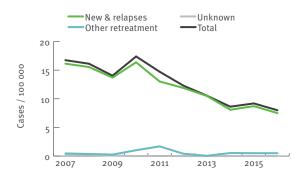
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Nat	ional		
Outcome cohort	New culture positive pulmonary TB cases notified in 2015*		All MDR TB cases notified in 2014*	
Case-linked data reporting	١	'es		
Cases notified	3	66	3	
Success	224	(61.2%)	3	(100.0%)
Died	55	(15.0%)	0	(0.0%)
Failed	4	(1.1%)	0	(0.0%)
Lost to follow-up	48	(13.1%)	0	(0.0%)
Still on treatment	17	(4.6%)	0	(0.0%)
Not evaluated	18	(4.9%)	0	(0.0%)

^{*} Treatment outcome as presented is treatment outcome after 12 months.

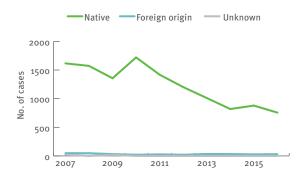
Tuberculosis notification rates by treatment history, 2007-2016



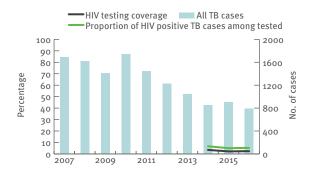
New and relapsed TB cases - notification rates by age group, 2007-2016



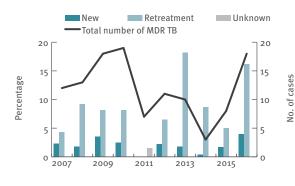
Tuberculosis cases by geographical origin, 2007-2016

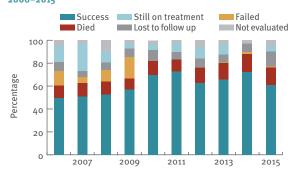


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history,2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Tuberculosis case notifications, 2016

Total number of cases	6	
Notification rate per 100 000	1.8	
New* & relapses	6	
New* & relapses notification rate per 100 000	1.8	
Pulmonary	6	(100.0%)
of which microscopy-positive	5	(83.3%)
of which laboratory confirmed	5	(83.3%)
Laboratory-confirmed TB cases	5	(83.3%)
Mean age of new native TB cases	69.0 years	
Mean age of new foreign TB cases	37.3 years	
Foreign origin of all TB cases	4	(66.7%)
New (not previously treated)	6 (100.0%	

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	4 (80.0%	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	0-0-4	
Pulmonary MDR TB cases notified	0	(0.0%)
of which XDR TB cases	0	-
Notified MDR TB	0	(0.0%)
of which XDR TB cases	0	-
TB cases tested for HIV	6	(100.0%)
HIV-positive TB cases	0	(0.0%)
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

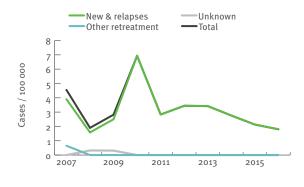
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

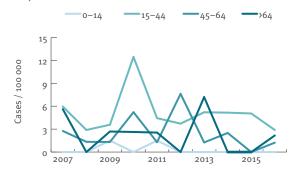
Geographical coverage	Na	ntional		
Outcome cohort	pulmona	ture positive ary TB cases ed in 2015*	All MDR notified i	TB cases in 2014**
Case-linked data reporting		Yes		
Cases notified		3	()
Success	3	(100.0%)	0	0
Died	0	(0.0%)	0	0
Failed	0	(0.0%)	0	0
Lost to follow-up	0	(0.0%)	0	0
Still on treatment	0	(0.0%)	0	0
Not evaluated	0	(0.0%)	0	0

^{*} Treatment outcome as presented is treatment outcome after 12 months.

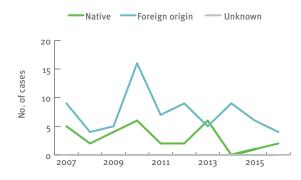
Tuberculosis notification rates by treatment history, 2007-2016



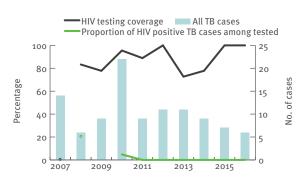
New and relapsed TB cases - notification rates by age group, 2007-2016



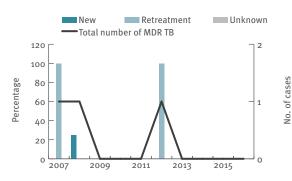
Tuberculosis cases by geographical origin, 2007-2016

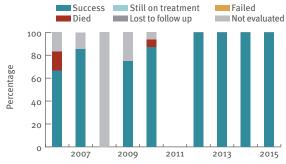


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007-2016





^{*} Not reported any new culture positive pulmonary cases for 2011.

^{**} Treatment outcome as presented is treatment outcome after 24 months.

Tuberculosis case notifications, 2016

Total number of cases	318		
Notification rate per 100 000	6.7		
New* & relapses	293		
New* & relapses notification rate per 100 000	6.2		
Pulmonary	211	(66.4%)	
of which microscopy-positive	85	(40.3%)	
of which laboratory confirmed	170	(80.6%)	
Laboratory-confirmed TB cases	237	(74.5%)	
Mean age of new native TB cases	52.7 years		
Mean age of new foreign TB cases	35.4 years		
Foreign origin of all TB cases	161 (50.69		
New (not previously treated)	293 (92.1%		

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Yes	
No	
Yes	
232 (97.99	
2-0-6	
6	(3.6%)
0	(0.0%)
6	(2.6%)
0	(0.0%)
132	(41.5%)
4	(3.0%)
3	(75.0%)
	232 2- 6 0 6 0 132 4

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

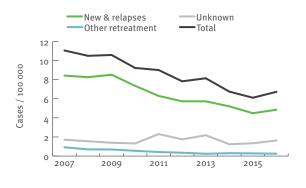
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

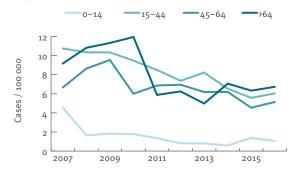
Geographical coverage	Na	tional		
Outcome cohort	pulmona	ure positive ry TB cases d in 2015*		R TB cases d in 2014**
Case-linked data reporting	,	Yes		
Cases notified		99	2	
Success	68	(68.7%)	1	(50.0%)
Died	3	(3.0%)	0	(0.0%)
Failed	0	(0.0%)	0	(0.0%)
Lost to follow-up	0	(0.0%)	0	(0.0%)
Still on treatment	0	(0.0%)	0	(0.0%)
Not evaluated	28	(28.3%)	1	(50.0%)

^{*} Treatment outcome as presented is treatment outcome after 12 months.

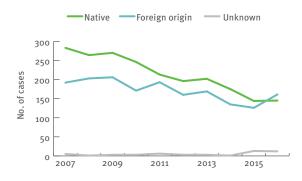
Tuberculosis notification rates by treatment history, 2007-2016



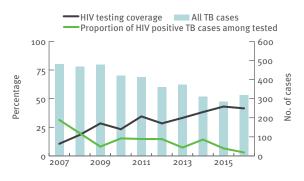
New and relapsed TB cases - notification rates by age group, 2007-2016



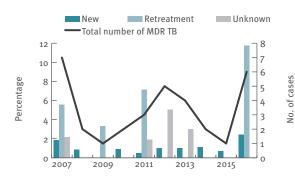
Tuberculosis cases by geographical origin, 2007-2016

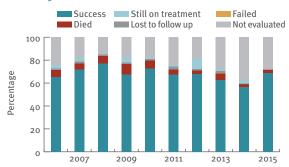


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

All MDR TB cases enrolled into MDR

treatment in 2014*

(75.0%)

(12.5%)

(0.0%)

12

Population estimate 2016 by UN Statistical Database: 8191828

Tuberculosis case notifications, 2016

Total number of cases	250	
Notification rate per 100 000	3.1	
New* & relapses	250	
New* & relapses notification rate per 100 000	3.1	
Pulmonary	184	(73.6%)
of which smear positive	-	-
of which laboratory confirmed	132	(71.7%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	37.4 years	
Mean age of new foreign TB cases	- years	
Foreign origin of all TB cases	202	(80.8%)
New (not previously treated)	242	(96.8%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Υ	'es
Case-linked data reporting	Υ	'es
Cases with DST results	123 (93,2%	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	13-5-22	
Pulmonary MDR TB cases notified	9	(7.3%)
of which XDR TB cases	2	(22.2%)
Notified MDR	11	-
of which XDR TB cases	2	-
TB cases tested for HIV	250	(100.0%)
HIV-positive TB cases	18	(7.2%)
of these on antiretroviral therapy	16	(88.9%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

Lost to follow-up (3.0%) (6.3%) Not evaluated 17 (6.5%) (6.3%) * Treatment outcome as presented is treatment outcome after 12 months. ** Treatment outcome as presented is treatment outcome after 24 months.

Treatment outcome monitoring

New and relapsed

TB cases notified in 2015*

Yes

263

(82.9%)

(7.2%)

(0.4%)

218

19

Geographical coverage

Outcome cohort

Case-linked data

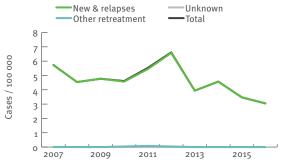
reporting Cases notified

Success

Died

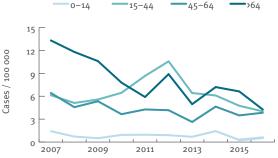
Failed

Tuberculosis notification rates by treatment history, 2007-2016*



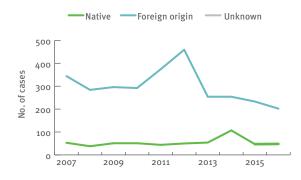
* Starting from 2013 onward cases with unknown history are included in new and relapses.

New and relapsed TB cases – notification rates by age group, 2007-2016

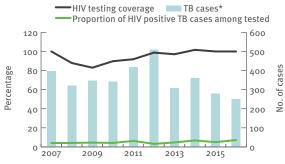


* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016

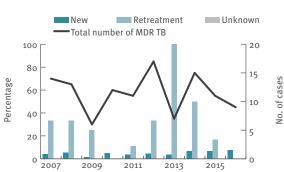


TB-HIV co-infection, 2007-2016

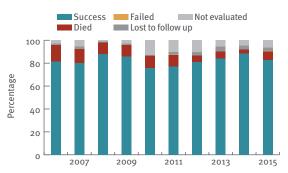


^{*} HIV testing data are available for new TB cases in civilian population only.

MDR TB cases by previous treatment history, 2007–2016



Treatment outcome, new and relapsed TB cases, 2006-2015*



^{* 2005–2011} cohorts include new cases only.

Treatment outcome monitoring

Data not available

Italy

Total population at 22 September 2017 by EUROSTAT: 60 655 551

Tuberculosis case notifications, 2016

Total number of cases	4032	
Notification rate per 100 000	6.6	
New* & relapses	3778	
New* & relapses notification rate per100 000	6.2	
Pulmonary	2820	(69.9%)
of which microscopy-positive	1515	(53.7%)
of which laboratory confirmed	1967	(69.8%)
Laboratory-confirmed TB cases	2666	(66.1%)
Mean age of new native TB cases	51.0	years
Mean age of new foreign TB cases	35.9 years	
Foreign origin of all TB cases	2509	(62.2%)
New (not previously treated)	3778 (93.7%	

^{*} Cases with unknown previous treatment included in new cases.

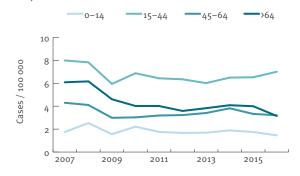
Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	No	
Case-linked data reporting	No	
Cases with DST results	2666 (100.09	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	110-76-150	
Pulmonary MDR TB cases notified	33	(1.7%)
of which XDR TB cases	5	(11.4%)
Notified MDR TB	70	(2.6%)
of which XDR TB cases	7	(12.7%)
TB cases tested for HIV	-	-
HIV-positive TB cases	-	-
of these on antiretroviral therapy	-	-

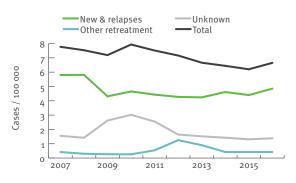
^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

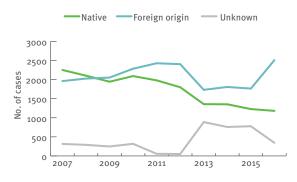
New and relapsed TB cases - notification rates by age group, 2007-2016



Tuberculosis notification rates by treatment history, 2007-2016



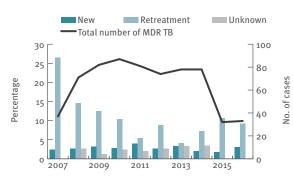
Tuberculosis cases by geographical origin, 2007-2016



TB-HIV co-infection, 2007-2016

Data not available

MDR TB cases by previous treatment history, 2007-2016



Treatment outcome, new culture-confirmed pulmonary TB cases,

Data not available

Tuberculosis case notifications, 2016

Total number of cases	12658	
Notification rate per 100 000	70.4	
New* & relapses	12322	
New* & relapses notification rate per 100 000	68.5	
Pulmonary	10927	(88.7%)
of which smear positive	-	-
of which laboratory confirmed	9 6 7 9	(88.6%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	40.3 years	
Mean age of new foreign TB cases	- years	
Foreign origin of all TB cases	153	(1.2%)
New (not previously treated)	9381	(74.1%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection,2016

Completeness of DRS data*	No	
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	5 213	(53.9%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	3500-3400-3600	
Pulmonary MDR TB cases notified	1231	(23.6%)
of which XDR TB cases	-	-
TB cases tested for HIV	5817	-
Notified MDR	386	-
of which XDR TB cases	10616	(86.2%)
HIV-positive TB cases	576	(5.4%)
of these on antiretroviral therapy	478	(83.0%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

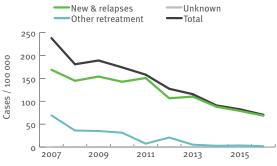
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Nat	ional		
Outcome cohort	New and relapsed TB cases notified in 2015*		enrolled	TB cases into MDR t in 2014**
Case-linked data reporting	Yes			
Cases notified	14006		6	320
Success	12691	(90.6%)	4813	(76.2%)
Died	674	(4.8%)	604	(9.6%)
Failed	440	(3.1%)	371	(5.9%)
Lost to follow-up	201	(1.4%)	468	(7.4%)
Not evaluated	0	(0.0%)	64	(1.0%)

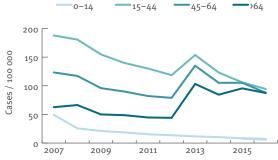
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016*



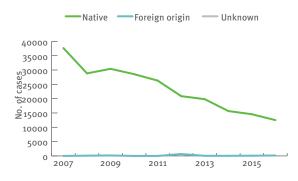
* Starting from 2013 onward cases with unknown history are included in new and relapses.

New and relapsed TB cases - notification rates by age group, 2007-2016

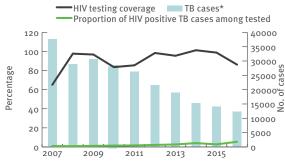


* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016

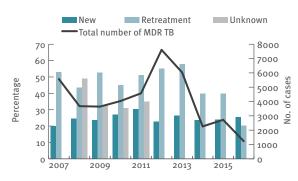


TB-HIV co-infection, 2007-2016

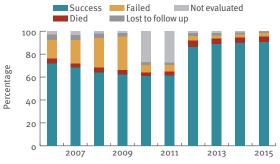


* Since 2015 data on HIV detection are collected for new TB cases and relapses.

MDR TB cases by previous treatment history, 2007–2016



Treatment outcome, new and relapsed TB cases 2006-2015*



* 2005–2011 cohorts include new cases only.

^{**} Treatment outcome as presented is treatment outcome after 24 months.

Kyrgyzstan

Tuberculosis case notifications, 2016

Total number of cases	7995	
Notification rate per 100 000	134.2	
New* & relapses	7 0 2 6	
New* & relapses notification rate per 100 000	118.0	
Pulmonary	5514	(78.5%)
of which smear positive	-	-
of which laboratory confirmed	3183	(57.7%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	38.9 years	
Mean age of new foreign TB cases	- years	
Foreign origin of all TB cases	0	(0.0%)
New (not previously treated)	5702	(71.3%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	2642	(83.0%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	2500-2400-2600	
Pulmonary MDR TB cases notified	864	(32.7%)
of which XDR TB cases	72	(8.3%)
Notified MDR	1236	-
of which XDR TB cases	73	-
TB cases tested for HIV	6254	(89.0%)
HIV-positive TB cases	210	(3.4%)
of these on antiretroviral therapy	144	(68.6%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

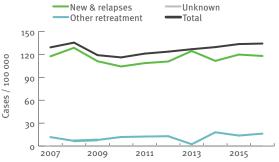
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Nat	ional		
Outcome cohort	New and relapsed TB cases notified in 2015*		enrolled	TB cases l into MDR it in 2014**
Case-linked data reporting	١	'es		
Cases notified	6139		1	157
Success	5063	(82.5%)	650	(56.2%)
Died	364	(5.9%)	142	(12.3%)
Failed	138	(2.2%)	105	(9.1%)
Lost to follow-up	564	(9.2%)	260	(22.5%)
Not evaluated	10	(0.2%)	0	(0.0%)

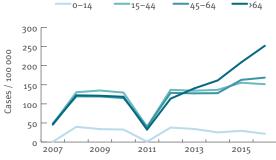
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016



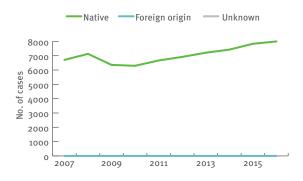
* Starting from 2013 onward cases with unknown history are included in new and relapses.

New and relapsed TB cases - notification rates by age group, 2007-2016*

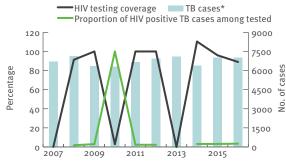


* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016

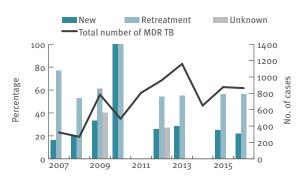


TB-HIV co-infection, 2007-2016

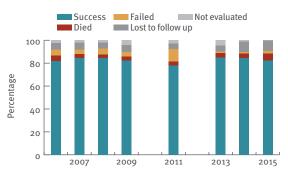


* Since 2015 data on HIV detection are collected for new TB cases and relapses.

MDR TB cases by previous treatment history, 2007–2016



Treatment outcome of new TB cases, 2006-2015



* 2005–2011 cohorts include new cases only.

 $^{^{\}star\star}$ Treatment outcome as presented is treatment outcome after 24 months.

All MDR TB cases notified in 2014**

(74.3%)

(7.1%)

(1.4%)

(15.7%)

(0.0%)

(1.4%)

52

70

60

50

40

30

20

10

0

Cases / 100 000

Total population at 22 September 2017 by EUROSTAT: 1986 957

Tuberculosis case notifications, 2016

Total number of cases	660	
Notification rate per 100 000	33.5	
New* & relapses	641	
New* & relapses notification rate per 100 000	32.6	
Pulmonary	619	(93.8%)
of which microscopy-positive	265	(42.8%)
of which laboratory confirmed	535	(86.4%)
Laboratory-confirmed TB cases	559	(84.7%)
Mean age of new native TB cases	44.1 years	
Mean age of new foreign TB cases	56.6 years	
Foreign origin of all TB cases	43	(6.5%)
New (not previously treated)	560	(84.8%)

^{*} Cases with unknown previous treatment included in new cases

Tuberculosis notification rates by treatment history, 2007-2016

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	536	(95.9%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	62-47-78	
Pulmonary MDR TB cases notified	53	(10.4%)
of which XDR TB cases	20	(37.7%)
Notified MDR TB	56	(10.4%)
of which XDR TB cases	21	(37.5%)
TB cases tested for HIV	507	(76.8%)
HIV-positive TB cases	57	(11.2%)
of these on antiretroviral therapy	34	(59.6%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

New and relapsed TB cases - notification rates by age group,

Treatment outcome monitoring

New culture positive

pulmonary TB cases notified in 2015*

Yes

477

* Treatment outcome as presented is treatment outcome after 12 months. ** Treatment outcome as presented is treatment outcome after 24 months.

(80.3%)

(7.5%)

(0.0%)

(4.8%)

(6.9%)

(0.4%)

383

36

0

23

33

Geographical coverage

Outcome cohort

Case-linked data

Lost to follow-up

Still on treatment

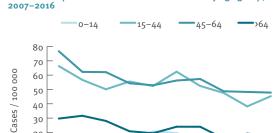
Not evaluated

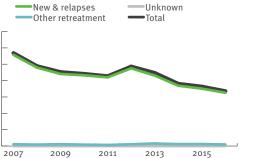
reporting Cases notified

Success

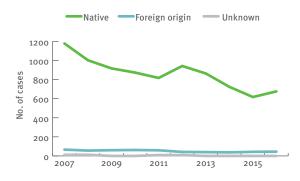
Died

Failed

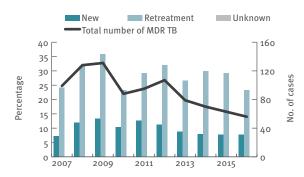








MDR TB cases by previous treatment history, 2007–2016



TB-HIV co-infection, 2007–2016

2009

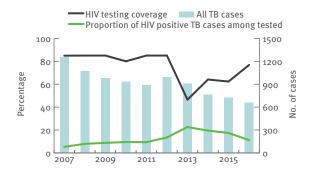
30

20

10

0

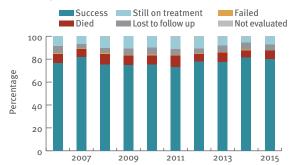
2007



2011

2013

2015



Tuberculosis case notifications, 2016

Total number of cases	1442	
Notification rate per 100 000	49.9	
New* & relapses	1347	
New* & relapses notification rate per 100 000	46.6	
Pulmonary	1327	(92.0%)
of which microscopy-positive	827	(62.3%)
of which laboratory confirmed	1171	(88.2%)
Laboratory-confirmed TB cases	1201	(83.3%)
Mean age of new native TB cases	46.0	years
Mean age of new foreign TB cases	57.3	years
Foreign origin of all TB cases	13	(0.9%)
New (not previously treated)	1150	(79.8%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	1201 (100.09	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	260-2	40-290
Pulmonary MDR TB cases notified	242	(20.7%)
of which XDR TB cases	58	(24.0%)
Notified MDR TB	244	(20.3%)
of which XDR TB cases	58	(23.8%)
TB cases tested for HIV	1138	(78.9%)
HIV-positive TB cases	41	(3.6%)
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

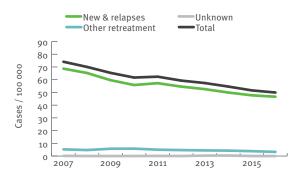
Geographical coverage	Nat	tional			
Outcome cohort	New culture positive pulmonary TB cases notified in 2015*		All MDR TB cases notified in 2014*		
Case-linked data reporting	١	/es			
Cases notified	8	394		271	
Success	607	(67.9%)	32	(11.8%)	
Died	111	(12.4%)	59	(21.8%)	
Failed	12	(1.3%)	7	(2.6%)	
Lost to follow-up	66	(7.4%)	37	(13.7%)	
Still on treatment	97	(10.9%)	131	(48.3%)	
Not evaluated	1	(0.1%)	5	(1.8%)	

^{*} Treatment outcome as presented is treatment outcome after 12 months.

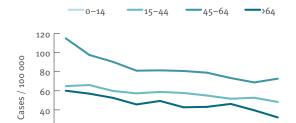
2013

2015

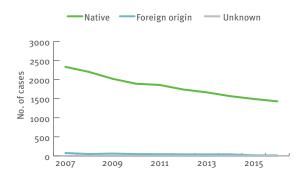
Tuberculosis notification rates by treatment history, 2007-2016



New and relapsed TB cases - notification rates by age group, 2007-2016



Tuberculosis cases by geographical origin, 2007-2016

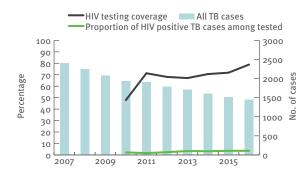


TB-HIV co-infection, 2007-2016

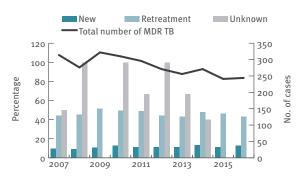
2009

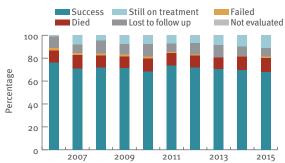
2007

20



MDR TB cases by previous treatment history, 2007–2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Tuberculosis case notifications, 2016

Total number of cases	29	
Notification rate per 100 000	5	.0
New* & relapses		29
New* & relapses notification rate per 100 000	5.0	
Pulmonary	24	(82.8%)
of which microscopy-positive	10	(41.7%)
of which laboratory confirmed	22	(91.7%)
Laboratory-confirmed TB cases	26	(89.7%)
Mean age of new native TB cases	42.9.	years
Mean age of new foreign TB cases	49.0	years
Foreign origin of all TB cases	22	(75.9%)
New (not previously treated)	29	(100.0%)

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	No	
Case-linked data reporting	Yes	
Cases with DST results	25 (96.2%)	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	0-0-0	
Pulmonary MDR TB cases notified	1	(4.8%)
of which XDR TB cases	0	-
Notified MDR TB	1	(4.0%)
of which XDR TB cases	0	-
TB cases tested for HIV	5	(17.2%)
HIV-positive TB cases	2	(39.7%)
of these on antiretroviral therapy	-	-

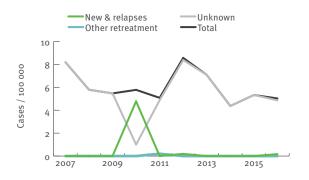
^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

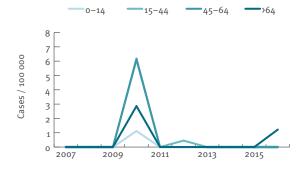
New and relapsed TB cases - notification rates by age group, 2007-2016

Treatment outcome monitoring

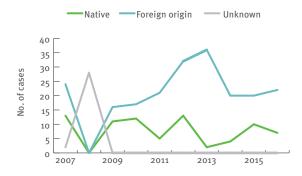
Data not available



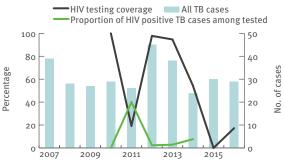
Tuberculosis notification rates by treatment history, 2007-2016



Tuberculosis cases by geographical origin, 2007-2016

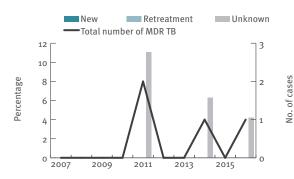


TB-HIV co-infection, 2007-2016*



* No data available for 2006-2009

MDR TB cases by previous treatment history, 2007-2016



Treatment outcome, new culture-confirmed pulmonary TB cases,

Data not available

Tuberculosis case notifications, 2016

Total number of cases	50	
Notification rate per 100 000	11.5	
New* & relapses	50	
New* & relapses notification rate per 100 000	11.5	
Pulmonary	37	(74.0%)
of which microscopy-positive	18	(48.6%)
of which laboratory confirmed	33	(89.2%)
Laboratory-confirmed TB cases	42	(84.0%)
Mean age of new native TB cases	85.0 years	
Mean age of new foreign TB cases	30.3 years	
Foreign origin of all TB cases	48	(96.0%)
New (not previously treated)	50	(100.0%)

^{*} Cases with unknown previous treatment included in new cases.

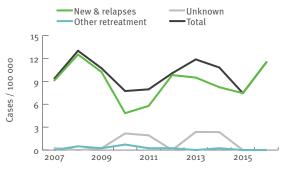
Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	42 (100.0%	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	0-0-4	
Pulmonary MDR TB cases notified	0	(0.0%)
of which XDR TB cases	0	-
Notified MDR TB	0	(0.0%)
of which XDR TB cases	0	-
TB cases tested for HIV	46	(92.0%)
HIV-positive TB cases	8	(17.4%)
of these on antiretroviral therapy	8	(100.0%)

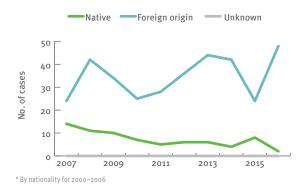
^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

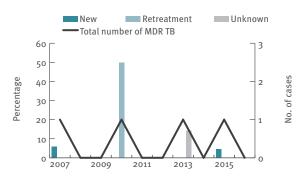
Tuberculosis notification rates by treatment history, 2007-2016



Tuberculosis cases by geographical origin, 2007-2016



MDR TB cases by previous treatment history, 2007-2016



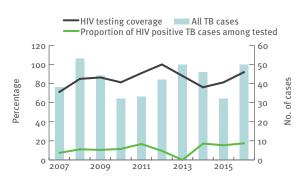
Treatment outcome monitoring

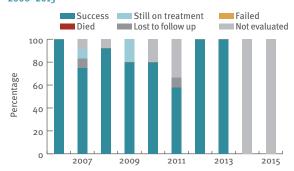
Data not available

New and relapsed TB cases - notification rates by age group,



TB-HIV co-infection, 2007-2016





Population estimate 2016 by UN Statistical Database: 4059608

Tuberculosis case notifications, 2016

Total number of cases	4134	
Notification rate per 100 000	101.8	
New* & relapses	3571	
New* & relapses notification rate per 100 000	88.0	
Pulmonary	3 2 3 5	(90.6%)
of which smear positive	-	-
of which laboratory confirmed	2 0 1 9	(62.4%)
Laboratory-confirmed TB cases	-	-
Mean age of new native TB cases	43.3	years
Mean age of new foreign TB cases	-	years
Foreign origin of all TB cases	39	(0.9%)
New (not previously treated)	2846	(68.8%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	1574 (78.0)	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	1400-13	300-1400
Pulmonary MDR TB cases notified	525	(33.4%)
of which XDR TB cases	42	(8.0%)
Notified MDR	1031	-
of which XDR TB cases	72	-
TB cases tested for HIV	3366	(94.3%)
HIV-positive TB cases	293	(8.7%)
of these on antiretroviral therapy	193	(65.9%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

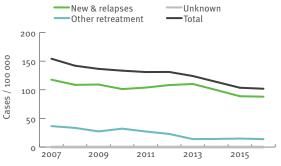
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Nat	ional		
Outcome cohort	New and relapsed TB cases notified in 2015*		All MDR TB cases enrolled into MDI treatment in 2014	
Case-linked data reporting	Y	'es		
Cases notified	2	992		919
Success	2379	(79.5%)	457	(49.7%)
Died	338	(11.3%)	129	(14.0%)
Failed	86	(2.9%)	142	(15.5%)
Lost to follow-up	137	(4.6%)	188	(20.5%)
Not evaluated	52	(1.7%)	3	(0.3%)

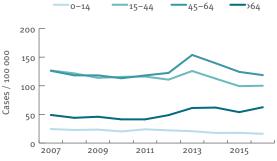
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016*



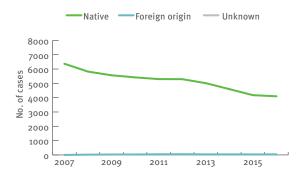
* Starting from 2013 onward cases with unknown history are included in new and relapses.

New and relapsed TB cases - notification rates by age group, 2007-2016

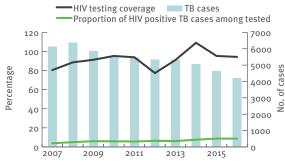


* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016

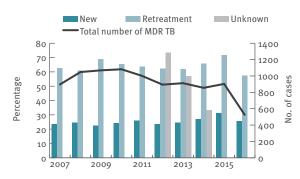


TB-HIV co-infection, 2007-2016

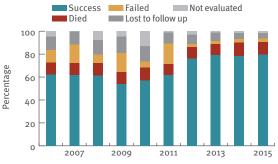


** Since 2015 data on HIV detection are collected for new TB cases and relapses.

MDR TB cases by previous treatment history, 2007–2016



Treatment outcome, new and relapsed TB cases, 2006-2015*



 $^{^{\}star\star}$ Treatment outcome as presented is treatment outcome after 24 months.

New and relapsed

TB cases notified in 2015*

Yes

80

* Treatment outcome as presented is treatment outcome after 12 months.

 ** Treatment outcome as presented is treatment outcome after 24 months.

(92.5%)

(3.8%)

(0.0%)

(3.8%)

(0.0%)

2013

2015

74

All MDR TB cases enrolled into MDR

treatment in 2014*

(0.0%)

(50.0%)

(0.0%)

(50.0%)

(0.0%)

Geographical coverage

Outcome cohort

Case-linked data

Lost to follow-up

Not evaluated

reporting Cases notified

Success

Died

Failed

Montenegro

Population estimate 2016 by UN Statistical Database: 628615

Tuberculosis case notifications, 2016

Total number of cases	87	
Notification rate per 100 000	13.8	
New* & relapses	87	
New* & relapses notification rate per 100 000	13.8	
Pulmonary	77	(88.5%)
of which smear positive	-	-
of which laboratory confirmed	58	(75.3%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	47.6 years	
Mean age of new foreign TB cases	- years	
Foreign origin of all TB cases	2	(2.3%)
New (not previously treated)	73	(83.9%)

^{*} Cases with unknown previous treatment included in new cases

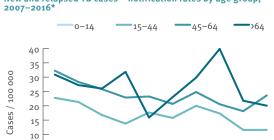
Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	57 (98.39	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	0-0-0	
Pulmonary MDR TB cases notified	0	(0.0%)
of which XDR TB cases	0	-
Notified MDR	0	-
of which XDR TB cases	-	-
TB cases tested for HIV	60	(69.0%)
HIV-positive TB cases	0	(0.0%)
of these on antiretroviral therapy	0	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

New and relapsed TB cases – notification rates by age group,



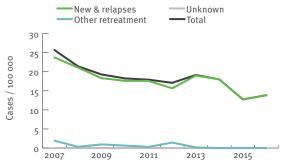
^{*} Data up to 2012 includes new TB cases only.

2009

2007

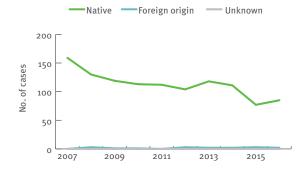
5 0

Tuberculosis notification rates by treatment history, 2007-2016*

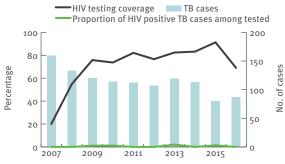


* Starting from 2013 onward cases with unknown history are included in new and relapses.

Tuberculosis cases by geographical origin, 2007-2016

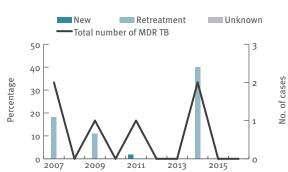


TB-HIV co-infection, 2007-2016

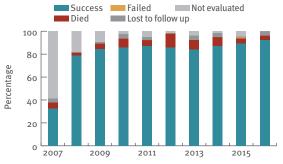


* Since 2015 data on HIV detection are collected for new TB cases and relapses.

MDR TB cases by previous treatment history, 2007–2016



Treatment outcome of new TB cases, 2006-2015*



Netherlands

Tuberculosis case notifications, 2016

Total number of cases	889	
Notification rate per 100 000	5.2	
New* & relapses	877	
New* & relapses notification rate per 100 000	5.2	
Pulmonary	477	(53.7%)
of which microscopy-positive	185	(38.8%)
of which laboratory confirmed	353	(74.0%)
Laboratory-confirmed TB cases	583	(65.6%)
Mean age of new native TB cases	44.2	years
Mean age of new foreign TB cases	38.2 years	
Foreign origin of all TB cases	669	(75.3%)
New (not previously treated)	862	(97.0%)

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Yes	
Case-linked data reporting	١	res .
Cases with DST results	583	(100.0%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	15-	-6-24
Pulmonary MDR TB cases notified	8	(2.3%)
of which XDR TB cases	0	(0.0%)
Notified MDR TB	12	(2.1%)
of which XDR TB cases	0	(0.0%)
TB cases tested for HIV	554	(62.3%)
HIV-positive TB cases	21	(3.8%)
of these on antiretroviral therapy	15	(71.4%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

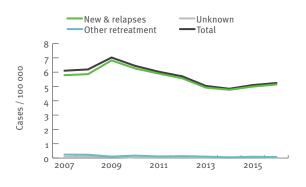
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

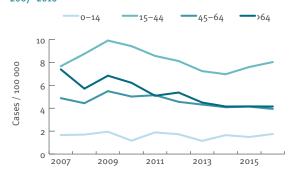
Geographical coverage	Na	tional			
Outcome cohort	pulmona	ure positive ry TB cases d in 2015*	All MDR TB cases notified in 2014*		
Case-linked data reporting	,	Yes			
Cases notified	369		7		
Success	315	(85.4%)	5	(71.4%)	
Died	22	(6.0%)	0	(0.0%)	
Failed	0	(0.0%)	0	(0.0%)	
Lost to follow-up	4	(1.1%)	0	(0.0%)	
Still on treatment	6	(1.6%)	1	(14.3%)	
Not evaluated	22	(6.0%)	1	(14.3%)	

^{*} Treatment outcome as presented is treatment outcome after 12 months.

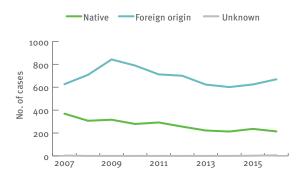
Tuberculosis notification rates by treatment history, 2007-2016



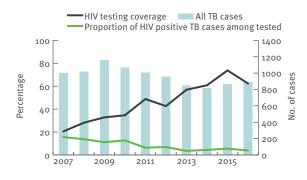
New and relapsed TB cases - notification rates by age group, 2007-2016



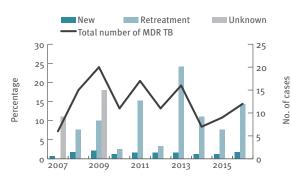
Tuberculosis cases by geographical origin, 2007-2016

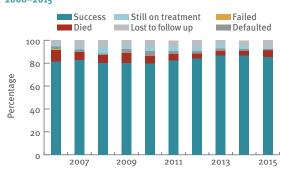


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Norway

Total population at 22 September 2017 by EUROSTAT: 5210721

Tuberculosis case notifications, 2016

Total number of cases	299	
Notification rate per 100 000	5.7	
New* & relapses	278	
New* & relapses notification rate per 100 000	5.3	
Pulmonary	186	(62.2%)
of which microscopy-positive	72	(38.7%)
of which laboratory confirmed	158	(84.9%)
Laboratory-confirmed TB cases	230	(76.9%)
Mean age of new native TB cases	47.0 years	
Mean age of new foreign TB cases	34.3 years	
Foreign origin of all TB cases	264	(88.3%)
New (not previously treated)	278	(93.0%)

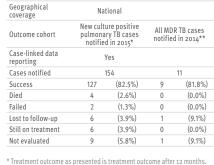
^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	,	res .
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	228	(99.1%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	6-1-10	
Pulmonary MDR TB cases notified	7	(4.5%)
of which XDR TB cases	0	(0.0%)
Notified MDR TB	10	(4.4%)
of which XDR TB cases	0	(0.0%)
TB cases tested for HIV	254	(84.9%)
HIV-positive TB cases	10	(3.9%)
of these on antiretroviral therapy	8	(80.0%)

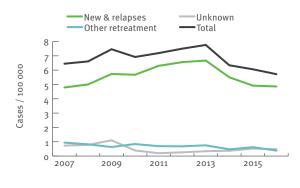
^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

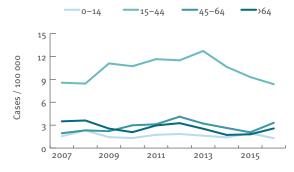


^{**} Treatment outcome as presented is treatment outcome after 24 months.

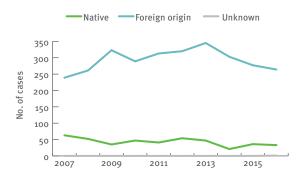
Tuberculosis notification rates by treatment history, 2007-2016



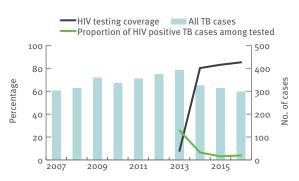
New and relapsed TB cases - notification rates by age group, 2007-2016



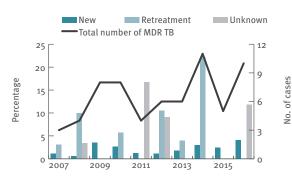
Tuberculosis cases by geographical origin, 2007-2016

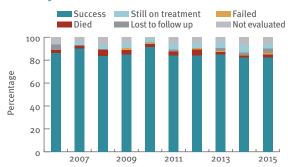


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007–2016





Tuberculosis case notifications, 2016

Total number of cases	6444	
Notification rate per100 000	17.0	
New* & relapses	6143	
New* & relapses notification rate per100 000	16.2	
Pulmonary	6116	(94.9%)
of which microscopy-positive	2644	(43.2%)
of which laboratory confirmed	4 4 7 5	(73.2%)
Laboratory-confirmed TB cases	4 619	(71.7%)
Mean age of new native TB cases	53.2	years
Mean age of new foreign TB cases	34.6 years	
Foreign origin of all TB cases	92	(1.4%)
New (not previously treated)	5713	(88.7%)

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Yes	
-	
Yes	
4189 (90.7)	
77-56-98	
45	(1.1%)
8	(21.1%)
46	(1.1%)
8	(20.5%)
-	-
-	-
-	-
	4189 77-1 45 8 46

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

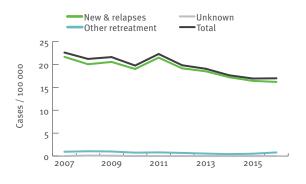
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

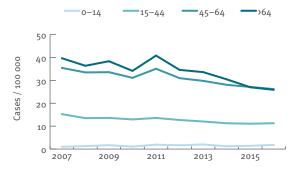
Geographical coverage	Nat	ional			
Outcome cohort	pulmona	re positive ry TB cases d in 2015*	All MDR TB case notified in 2014*		
Case-linked data reporting	١	'es			
Cases notified	3 978		35		
Success	2085	(52.4%)	3	(8.6%)	
Died	414	(10.4%)	12	(34.3%)	
Failed	3	(0.1%)	0	(0.0%)	
Lost to follow-up	209	(5.3%)	5	(14.3%)	
Still on treatment	8	(0.2%)	0	(0.0%)	
Not evaluated	1259	(31.6%)	15	(42.9%)	

^{*} Treatment outcome as presented is treatment outcome after 12 months.

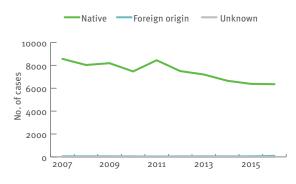
Tuberculosis notification rates by treatment history, 2007-2016



New and relapsed TB cases - notification rates by age group, 2007-2016



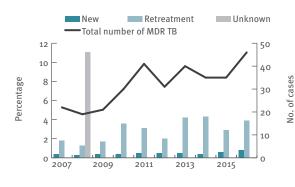
Tuberculosis cases by geographical origin, 2007-2016

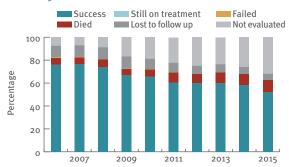


TB-HIV co-infection, 2007-2016

Data not available

MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Portugal

Total population at 22 September 2017 by EUROSTAT 10 341330

Tuberculosis case notifications, 2016

Total number of cases	1836	
Notification rate per 100 000	17.8	
New* & relapses	1794	
New* & relapses notification rate per 100 000	17.3	
Pulmonary	1302	(70.9%)
of which microscopy-positive	760	(58.4%)
of which laboratory confirmed	945	(72.6%)
Laboratory-confirmed TB cases	1123	(61.2%)
Mean age of new native TB cases	52.2	years
Mean age of new foreign TB cases	40.7	years
Foreign origin of all TB cases	336	(18.3%)
New (not previously treated)	1715	(93.4%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*		No
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	789	(70.3%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	19-10-27	
Pulmonary MDR TB cases notified	10	(1.5%)
of which XDR TB cases	1	(25.0%)
Notified MDR TB	12	(1.5%)
of which XDR TB cases	2	(40.0%)
TB cases tested for HIV	1212	(66.0%)
HIV-positive TB cases	168	(13.9%)
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

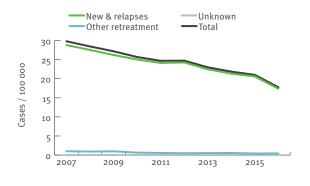
Geographical coverage	Na	tional		
Outcome cohort	New culture positive pulmonary TB cases notified in 2015*		All MDR TB cases notified in 2014*	
Case-linked data reporting	,	/es		
Cases notified	1157		25	
Success	835	(72.2%)	13	(52.0%)
Died	98	(8.5%)	7	(28.0%)
Failed	0	(0.0%)	0	(0.0%)
Lost to follow-up	40	(3.5%)	0 (0.0	
Still on treatment	153	(13.2%)	1	(4.0%)
Not evaluated	31	(2.7%)	4	(16.0%)

^{*} Treatment outcome as presented is treatment outcome after 12 months.

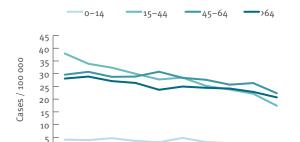
2013

2015

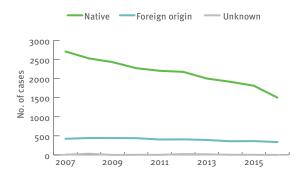
Tuberculosis notification rates by treatment history, 2007-2016



New and relapsed TB cases - notification rates by age group, 2007-2016



Tuberculosis cases by geographical origin, 2007-2016

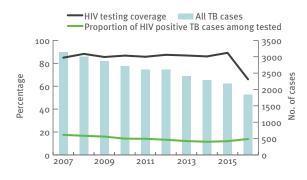


TB-HIV co-infection, 2007-2016

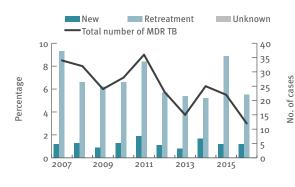
2009

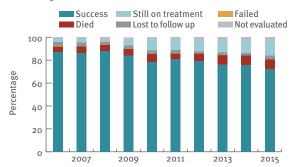
0

2007



MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Tuberculosis case notifications, 2016

Total number of cases	13 617	
Notification rate per 100 000	68.5	
New* & relapses	12790	
New* & relapses notification rate per 100 000	64.4	
Pulmonary	11523	(84.6%)
of which microscopy-positive	7 454	(64.7%)
of which laboratory confirmed	9185	(79.7%)
Laboratory-confirmed TB cases	9 5 1 7	(69.9%)
Mean age of new native TB cases	42.9	years
Mean age of new foreign TB cases	31.8	years
Foreign origin of all TB cases	24	(0.2%)
New (not previously treated)	10 741	(78.9%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Υ	'es
Case-linked data reporting	Yes	
Cases with DST results	8440	(88.7%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	730-6	70-790
Pulmonary MDR TB cases notified	458	(5.6%)
of which XDR TB cases	62	(29.8%)
Notified MDR TB	463	(5.5%)
of which XDR TB cases	63	(30.0%)
TB cases tested for HIV	10634	(78.1%)
HIV-positive TB cases	287	(2.7%)
of these on antiretroviral therapy	254	(88.5%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

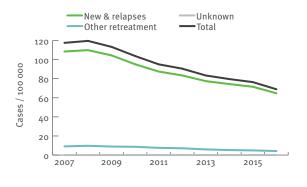
Treatment outcome monitoring

Geographical coverage

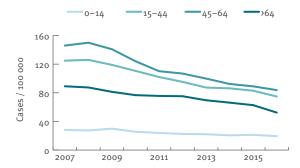
Outcome cohort	pulmona	re positive ry TB cases d in 2015*		TB cases in 2014**
Case-linked data reporting	١	'es		
Cases notified	7	417		32
Success	6282	(84.7%)	199	(37.4%)
Died	518	(7.0%)	93	(17.5%)
Failed	152	(2.0%)	156	(29.3%)
Lost to follow-up	371	(5.0%)	80	(15.0%)
Still on treatment	89	(1.2%)	4	(0.8%)
Not evaluated	5	(0.1%)	0	(0.0%)

^{*} Treatment outcome as presented is treatment outcome after 12 months.

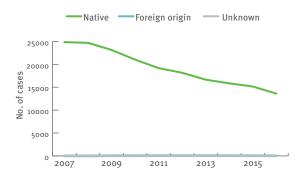
Tuberculosis notification rates by treatment history, 2007-2016



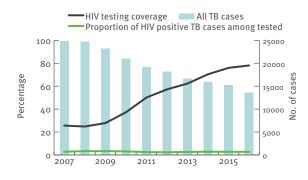
New and relapsed TB cases - notification rates by age group, 2007-2016



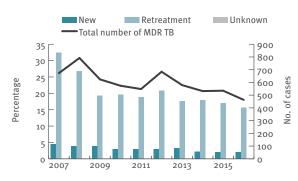
Tuberculosis cases by geographical origin, 2007-2016

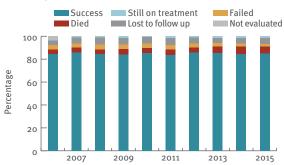


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Population estimate 20156 by UN Statistical Database: 143 964513

Tuberculosis case notifications, 2016

Total number of cases	121046	
Notification rate per 100 000**	8-	4.1
New* & relapses	92 407	
New* & relapses notification rate per 100 000	64.2	
Pulmonary	84066	(91.0%)
of which smear positive	26060	31%
of which laboratory confirmed	42681	(50.8%)
Laboratory-confirmed TB cases***	63638	(52.6%)
Mean age of new and relapse TB cases	41.6 years	
Mean age of new foreign TB cases	34.6 years	
Foreign origin of all TB cases	2797	(2.3%)
New (not previously treated)	78121	(64.5%)

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	,	res .
Completeness of HIV data**	,	/es
Case-linked data reporting	,	/es
Cases with DST results	57 910	(91.0%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	47000-46	5000-47000
Pulmonary MDR TB cases notified	25 971	(44.8%)
of which XDR TB cases	3402	(13.1%)
Notified MDR	27363	-
of which XDR TB cases	3402	-
TB cases tested for HIV	79935	(86.5%)
HIV-positive TB cases	16570	(20.7%)
of these on antiretroviral therapy	10549	(63.7%)

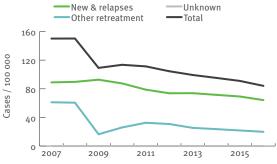
^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Nat	ional				
Outcome cohort	New and relapsed All MDR TB ca TB cases notified enrolled into in 2015* treatment in 20		into MDR			
Case-linked data reporting	Υ	es				
Cases notified	80 424		80 424		20	089
Success	57060	(70.9%)	10170	(50.6%)		
Died	8 0 3 5	(10.0%)	3409	(17.0%)		
Failed	5646	(7.0%)	2 655	(13.2%)		
Lost to follow-up	4074	(5.1%)	1830	(9.1%)		
Not evaluated	5609	(7.0%)	2 0 2 5	(10.1%)		

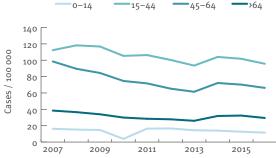
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016*



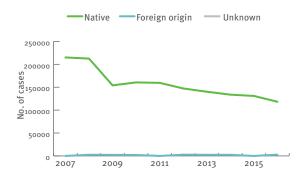
* Starting from 2013 onward cases with unknown history are included in new and relapses.

New and relapsed TB cases - notification rates by age group, 2007-2016*

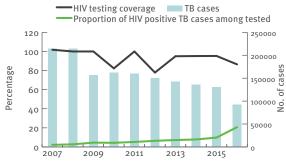


* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016

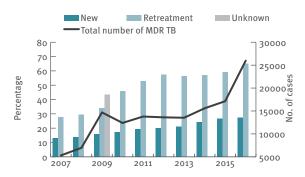


TB-HIV co-infection, 2007-2016*

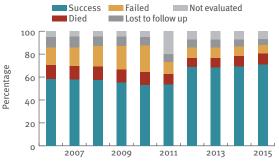


* HIV testing data are available for new TB cases in civilian population only.

MDR TB cases by previous treatment history, 2007–2016



Treatment outcome, new and relapsed TB cases, 2006-2015*



^{*} Cases with unknown previous treatment included in new cases.

** UN Population Division estimates are lower than the
population registered by the Federal State Statistics Service of
the Russian Federation.

^{***} New & relapses before start of treatment.

^{**} Treatment outcome as presented is treatment outcome after 24 months.

Population estimate 2016 by UN Statistical Database: 8820083

Tuberculosis case notifications, 2016

Total number of cases	1488	
Notification rate per 100 000	16.9	
New* & relapses	1472	
New* & relapses notification rate per 100 000	16.7	
Pulmonary	1206	(81.9%)
of which microscopy-positive	-	-
of which laboratory confirmed	815	(67.6%)
Laboratory-confirmed TB cases	-	-
Mean age of new native TB cases	41.8 years	
Mean age of new foreign TB cases		years
Foreign origin of all TB cases	5	(0.3%)
New (not previously treated)	1348	(90.6%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	No	
Completeness of HIV data**		No
Case-linked data reporting	Yes	
Cases with DST results	398	(48.8%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	19-	-8-29
Pulmonary MDR TB cases notified	6	(1.5%)
of which XDR TB cases	1	(16.7%)
Notified MDR TB	8	-
of which XDR TB cases	1	-
TB cases tested for HIV	84	(5.7%)
HIV-positive TB cases	5	(6.0%)
of these on antiretroviral therapy	5	(100.0%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

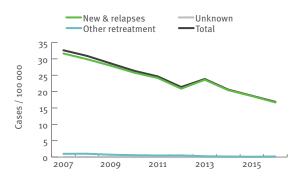
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Nat	ional		
Outcome cohort	New culture positive pulmonary TB cases notified in 2015* All MDR TB cases notified in 201			
Case-linked data reporting	١	'es		
Cases notified	1	647		19
Success	1471	(89.3%)	12	(63.2%)
Died	82	(5.0%)	2	(10.5%)
Failed	12	(0.7%)	2	(10.5%)
Lost to follow-up	60	(3.6%)	3	(15.8%)
Not evaluated	22	(1.3%)	0	(0.0%)

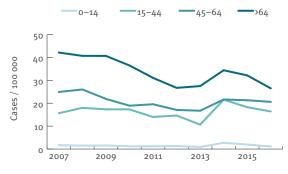
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016

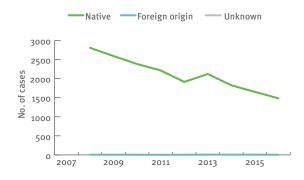


New and relapsed TB cases - notification rates by age group,

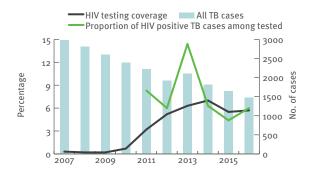




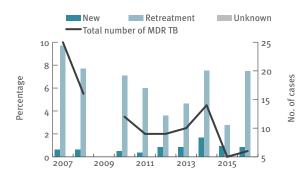
Tuberculosis cases by geographical origin, 2007-2016

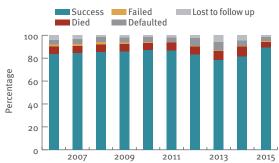


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Slovakia

Total population at 22 September 2017 by EUROSTAT: 5 426 252

Tuberculosis case notifications, 2016

Total number of cases	2	96
Notification rate per 100 000	5	.5
New* & relapses	2	81
New* & relapses notification rate per 100 000	5	.2
Pulmonary	253	(85.5%)
of which microscopy-positive	88	(34.8%)
of which laboratory confirmed	115	(45.5%)
Laboratory-confirmed TB cases	117	(39.5%)
Mean age of new native TB cases	44.4	years
Mean age of new foreign TB cases	30.4	years
Foreign origin of all TB cases	11	(3.7%)
New (not previously treated)	257 (86.8%	

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

No	
No	
Yes	
113 (96.6	
1-0-4	
3	(2.7%)
0	(0.0%)
3	(2.7%)
0	(0.0%)
132	(44.6%)
0	(0.0%)
0	(0.0%)
	113 1- 3 0 3 0 132

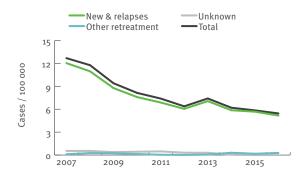
^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

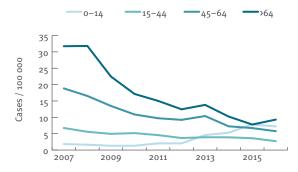
Geographical coverage	Na	tional		
Outcome cohort	pulmona	ure positive ry TB cases d in 2015*		R TB cases d in 2014**
Case-linked data reporting	,	/es		
Cases notified		136		3
Success	119	(87.5%)	1	(33.3%)
Died	14	(10.3%)	2	(66.7%)
Failed	0	(0.0%)	0	(0.0%)
Lost to follow-up	1	(0.7%)	0	(0.0%)
Still on treatment	1	(0.7%)	0	(0.0%)
Not evaluated	1	(0.7%)	0	(0.0%)

^{*} Treatment outcome as presented is treatment outcome after 12 months.

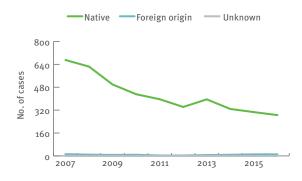
Tuberculosis notification rates by treatment history, 2007-2016



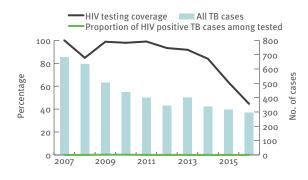
New and relapsed TB cases - notification rates by age group, 2007-2016



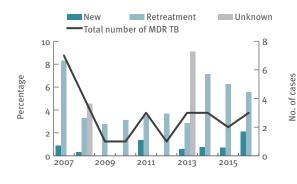
Tuberculosis cases by geographical origin, 2007-2016

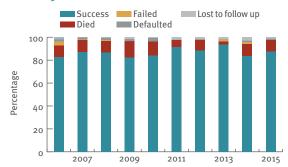


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Tuberculosis case notifications, 2016

Total number of cases	118	
Notification rate per 100 000	5.7	
New* & relapses	118	
New* & relapses notification rate per 100 000	5.7	
Pulmonary	103	(87.3%)
of which microscopy-positive	58	(56.3%)
of which laboratory confirmed	96	(93.2%)
Laboratory-confirmed TB cases	109	(92.4%)
Mean age of new native TB cases	60.2 years	
Mean age of new foreign TB cases	53.3 years	
Foreign origin of all TB cases	43	(36.4%)
New (not previously treated)	113	(95.8%)

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Yes	
Yes	
Yes	
109 (100.0%	
0-0-0	
0	(0.0%)
0	-
0	(0.0%)
0	-
95	(80.5%)
1	(1.1%)
1	(100.0%)
	0 0 0 0 0 0 95

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

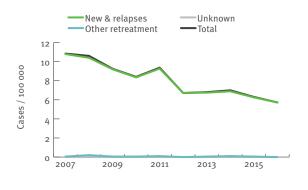
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

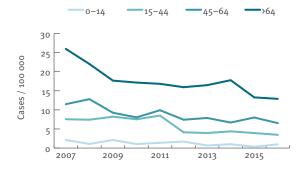
Geographical coverage	Na	tional		
Outcome cohort	New culture positive pulmonary TB cases notified in 2015*			TB cases in 2014**
Case-linked data reporting	,	Yes		
Cases notified		88	(0
Success	76	(86.4%)	0	-
Died	11	(12.5%)	0	-
Failed	0	(0.0%)	0	-
Lost to follow-up	0	(0.0%)	0	-
Still on treatment	1	(1.1%)	0	-
Not evaluated	0	(0.0%)	0	_

^{*} Treatment outcome as presented is treatment outcome after 12 months.

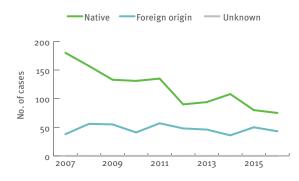
Tuberculosis notification rates by treatment history, 2007-2016



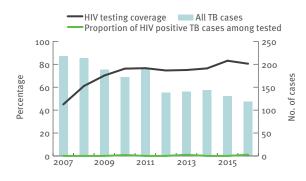
New and relapsed TB cases - notification rates by age group, 2007-2016



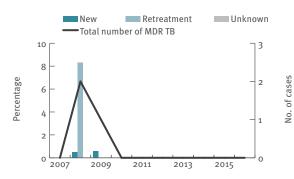
Tuberculosis cases by geographical origin, 2007-2016

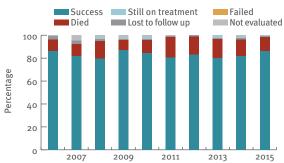


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

Tuberculosis case notifications, 2016

Total number of cases	4877	
Notification rate per 100 000	10.5	
New* & relapses	4734	
New* & relapses notification rate per 100 000	10.2	
Pulmonary	3 5 1 5	(72.1%)
of which microscopy-positive	1675	(47.7%)
of which laboratory confirmed	2689	(76.5%)
Laboratory-confirmed TB cases	3372	(69.1%)
Mean age of new native TB cases	51.8 years	
Mean age of new foreign TB cases	38.7 years	
Foreign origin of all TB cases	1391	(28.5%)
New (not previously treated)	4734	(97.1%)

^{*} Cases with unknown previous treatment included in new cases

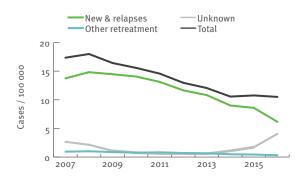
Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	No	
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	896 (26.69	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	25-10-40	
Pulmonary MDR TB cases notified	39	(4.4%)
of which XDR TB cases	0	(0.0%)
Notified MDR TB	39	(4.4%)
of which XDR TB cases	0	(0.0%)
TB cases tested for HIV	2925	(60.0%)
HIV-positive TB cases	226	(7.7%)
of these on antiretroviral therapy	-	-

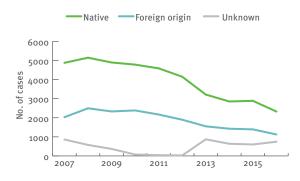
^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

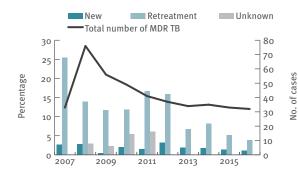
Tuberculosis notification rates by treatment history, 2007-2016



Tuberculosis cases by geographical origin, 2007-2016



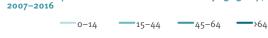
MDR TB cases by previous treatment history, 2007-2016

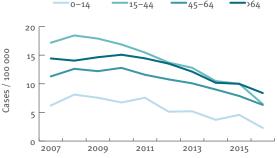


Treatment outcome monitoring

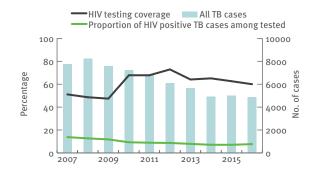
Data not available

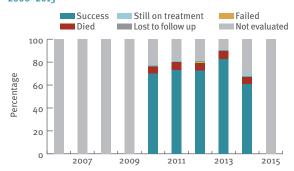
New and relapsed TB cases - notification rates by age group,





TB-HIV co-infection, 2007-2016





Tuberculosis case notifications, 2016

Total number of cases	726	
Notification rate per 100 000	7.4	
New* & relapses	702	
New* & relapses notification rate per 100 000	7.2	
Pulmonary	482	(66.4%)
of which microscopy-positive	123	(25.5%)
of which laboratory confirmed	419	(86.9%)
Laboratory-confirmed TB cases	597	(82.2%)
Mean age of new native TB cases	49.5 years	
Mean age of new foreign TB cases	30.3 years	
Foreign origin of all TB cases	652	(89.8%)
New (not previously treated)	697	(96.0%)

^{*} Cases with unknown previous treatment included in new cases.

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	595	(99.7%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	23-13-32	
Pulmonary MDR TB cases notified	14	(3.3%)
of which XDR TB cases	4	(28.6%)
Notified MDR TB	22	(3.7%)
of which XDR TB cases	4	(18.2%)
TB cases tested for HIV	-	-
HIV-positive TB cases	_	-
of these on antiretroviral therapy	-	-

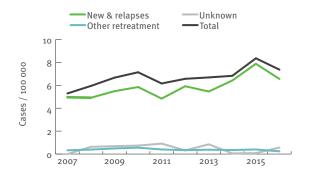
^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

** More than 50% of TB cases with reported HIV status.

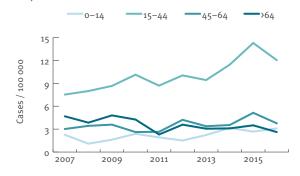
Geographical coverage	Na	tional		
Outcome cohort	pulmona	ure positive ry TB cases d in 2015*		R TB cases d in 2014**
Case-linked data reporting	,	/es		
Cases notified	428			15
Success	345	(80.6%)	13	(86.7%)
Died	15	(3.5%)	1	(6.7%)
Failed	0	(0.0%)	0	(0.0%)
Lost to follow-up	6	(1.4%)	0	(0.0%)
Still on treatment	24	(5.6%)	0	(0.0%)
Not evaluated	38	(8.9%)	1	(6.7%)

Treatment outcome monitoring

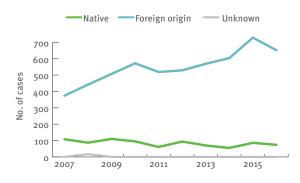
Tuberculosis notification rates by treatment history, 2007-2016



New and relapsed TB cases - notification rates by age group, 2007-2016



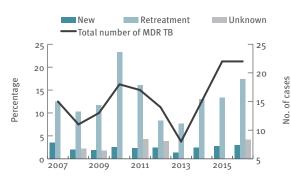
Tuberculosis cases by geographical origin, 2007-2016

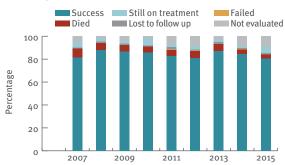


TB-HIV co-infection, 2007-2016

Data not available

MDR TB cases by previous treatment history, 2007-2016





^{*} Treatment outcome as presented is treatment outcome after 12 months.

^{**} Treatment outcome as presented is treatment outcome after 24 months.

Switzerland

Tuberculosis case notifications, 2016

Total number of cases	609	
Notification rate per 100 000	7.2	
New* & relapses	573	
New* & relapses notification rate per 100 000	6.8	
Pulmonary	402	(70.2%)
of which smear positive	-	-
of which laboratory confirmed	362	(90.0%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	34.8 years	
Mean age of new foreign TB cases	- years	
Foreign origin of all TB cases	486	(79.8%)
New (not previously treated)	573	(94.1%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	,	res .
Completeness of HIV data**	No	
Case-linked data reporting	Yes	
Cases with DST results	296 (81.89	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	22-	11-34
Pulmonary MDR TB cases notified	13	(4.4%)
of which XDR TB cases	0	(0.0%)
Notified MDR	18	-
of which XDR TB cases	0	-
TB cases tested for HIV	-	-
HIV-positive TB cases	-	-
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

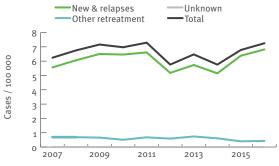
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Nati	onal		
Outcome cohort	New culture positive pulmonary TB cases notified in 2015*			R TB cases d in 2014**
Case-linked data reporting	Ye	es		
Cases notified	-	-		12
Success	-	-	9	(75.0%)
Died	-	-	0	(0.0%)
Failed	-	-	1	(8.3%)
Lost to follow-up	-	-	0	(0.0%)
Not evaluated	-	-	2	(16.7%)

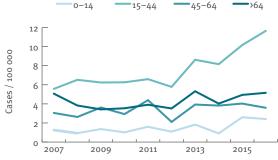
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016*



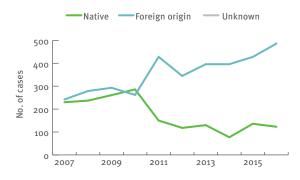
* Starting from 2013 onward cases with unknown history are included in new and relapses.

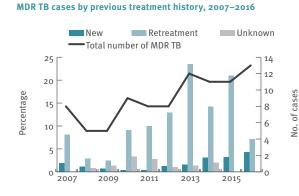
New and relapsed TB cases - notification rates by age group, 2007-2016*



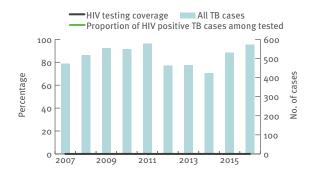
* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016





TB-HIV co-infection, 2007-2016



Treatment outcome, new and relapsed TB cases, 2006-2015

Data not available

 $^{^{\}star\star}$ Treatment outcome as presented is treatment outcome after 24 months.

Population estimate 2016 by UN Statistical Database: 8734951

Tuberculosis case notifications, 2016

Total number of cases	6 241	
Notification rate per 100 000	71.4	
New* & relapses	5965	
New* & relapses notification rate per 100 000	68.3	
Pulmonary	4368	(73.2%)
of which smear positive	-	-
of which laboratory confirmed	3 011	(68.9%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	37.1 years	
Mean age of new foreign TB cases	- years	
Foreign origin of all TB cases	0	(0.0%)
New (not previously treated)	5241	(84.0%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Υ	es
Case-linked data reporting	Yes	
Cases with DST results	2702 (89.7%	
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	1200-1200-1300	
Pulmonary MDR TB cases notified	646	(23.9%)
of which XDR TB cases	59	(9.1%)
Notified MDR	748	-
of which XDR TB cases	59	-
TB cases tested for HIV	5850	(98.1%)
HIV-positive TB cases	201	(3.4%)
of these on antiretroviral therapy	182	(90.5%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

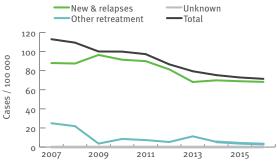
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Nat	ional				
Outcome cohort	New and relapsed TB cases notified in 2015*					
Case-linked data reporting	Y	'es				
Cases notified	5298		5298		8	304
Success	4734	(89.4%)	398	(49.5%)		
Died	237	(4.5%)	170	(21.1%)		
Failed	111	(2.1%)	67	(8.3%)		
Lost to follow-up	172	(3.2%)	159	(19.8%)		
Not evaluated	44	(0.8%)	10	(1.2%)		

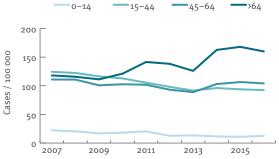
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016*



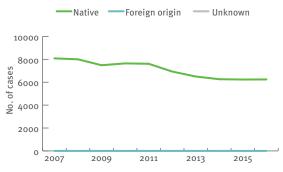
* Starting from 2013 onward cases with unknown history are included in new and relapses.

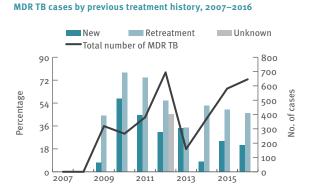
New and relapsed TB cases - notification rates by age group, 2007-2016



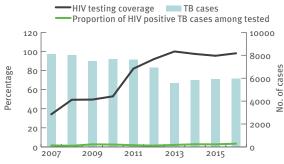
* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016



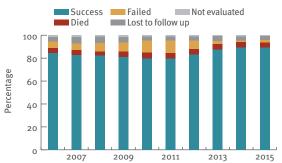


TB-HIV co-infection, 2007-2016



* Since 2015 data on HIV detection are collected for new TB cases and relapses.

Treatment outcome, new culture-confirmed pulmonary TB cases, 2006-2015*



 $^{^{\}star\star}$ Treatment outcome as presented is treatment outcome after 24 months.

Population estimate 2016 by UN Statistical Database: 79512426

Tuberculosis case notifications, 2016

Total number of cases	12	417
Notification rate per 100 000	15.6	
New* & relapses	12186	
New* & relapses notification rate per 100 000	15.3	
Pulmonary (new and relapse)	8044	(66.0%)
of which smear positive	-	-
of which laboratory confirmed	6334	(78.7%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	41.4	years
Mean age of new foreign TB cases	-	years
Foreign origin of all TB cases	904	(7.3%)
New (not previously treated)	11442	(92.1%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Yes	
Completeness of HIV data**	Yes	
Case-linked data reporting	Yes	
Cases with DST results	5 612	(88.6%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	350-3	00-390
Pulmonary MDR TB cases notified	190	(3.4%)
of which XDR TB cases	9	(4.7%)
Notified MDR	256	-
of which XDR TB cases	9	-
TB cases tested for HIV	8549	(70.2%)
HIV-positive TB cases	56	(0.7%)
of these on antiretroviral therapy	51	(91.1%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

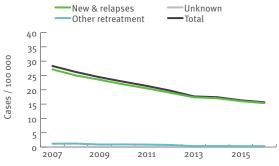
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Nat	ional					
Outcome cohort	New and relapsed TB cases notified in 2015*		All MDR TB cases enrolled into MD treatment in 2014				
Case-linked data reporting	Υ	'es					
Cases notified	12362		12 362			257	
Success	10735	(86.8%)	163	(63.4%)			
Died	695	(5.6%)	27	(10.5%)			
Failed	30	(0.2%)	15	(5.8%)			
Lost to follow-up	432	(3.5%)	30	(11.7%)			
Not evaluated	470	(3.8%)	22	(8.6%)			

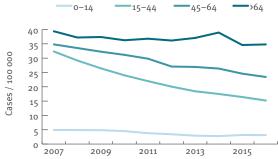
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016*



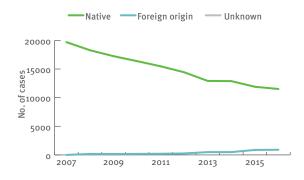
* Starting from 2013 onward cases with unknown history are included in new and relapses.

New and relapsed TB cases - notification rates by age group, 2007-2016*

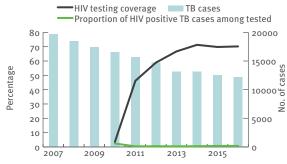


* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016

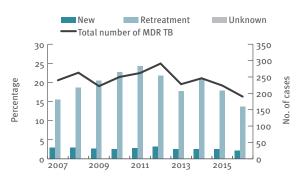


TB-HIV co-infection, 2007-2016

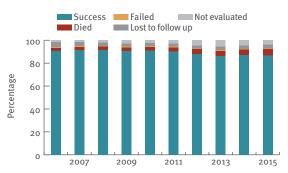


* Since 2015 data on HIV detection are collected for new TB cases and relapses.

MDR TB cases by previous treatment history, 2007–2016



Treatment outcome, new and relapsed TB cases, 2006-2015*



^{**} Treatment outcome as presented is treatment outcome after 24 months.

Tuberculosis case notifications, 2016

Total number of cases	2	376
Notification rate per 100 000	4	2.0
New* & relapses	2104	
New* & relapses notification rate per 100 000	3	37.2
Pulmonary	1616	(76.8%)
of which smear positive	-	-
of which laboratory confirmed	1616	(100.0%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	40.0	years
Mean age of new foreign TB cases	-	years
Foreign origin of all TB cases	0	(0.0%)
New (not previously treated)	1952	(82.2%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Ye	es
Completeness of HIV data**	N	0
Case-linked data reporting	N	0
Cases with DST results	-	-
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	450-39	90-520
Pulmonary MDR TB cases notified	557	-
of which XDR TB cases	-	-
Notified MDR	557	-
of which XDR TB cases	-	-
TB cases tested for HIV	-	-
HIV-positive TB cases	-	-
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

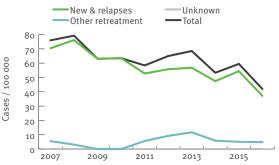
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

Geographical coverage	Nat	tional		
Outcome cohort	TB case	d relapsed s notified 2015*		
Case-linked data reporting	١	/es		
Cases notified	2 472		- 2	213
Success	2126	(86.0%)	143	(67.1%)
Died	105	(4.2%)	24	(11.3%)
Failed	105	(4.2%)	32	(15.0%)
Lost to follow-up	82	(3.3%)	9	(6.6%)
Not evaluated	54	(2.2%)	0	(0.0%)

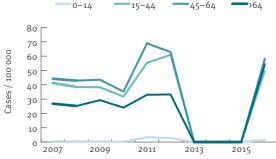
^{*} Treatment outcome as presented is treatment outcome after 12 months.

Tuberculosis notification rates by treatment history, 2007-2016*



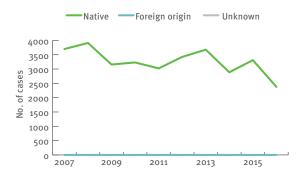
* Starting from 2013 onward cases with unknown history are included in new and relapses.

New and relapsed TB cases - notification rates by age group, 2007-2016*

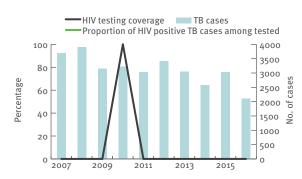


* Data up to 2012 includes new TB cases only.

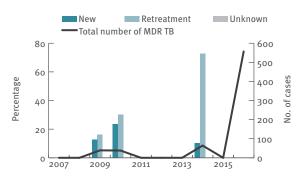
Tuberculosis cases by geographical origin, 2007-2016



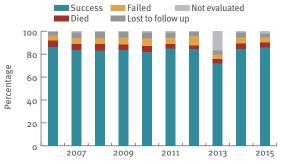
TB-HIV co-infection, 2006-2014



MDR TB cases by previous treatment history, 2007–2016



Treatment outcome of new TB cases, 2006-2015*



 $^{^{\}star\star}$ Treatment outcome as presented is treatment outcome after 24 months.

New and relapsed

TB cases notified in 2015*

Yes

23 892

(75.1%)

(10.0%)

(8.2%)

(6.5%)

(0.2%)

17939

2393

1950

1552

58

* Treatment outcome as presented is treatment outcome after 12 months.

** Treatment outcome as presented is treatment outcome after 24 months.

All MDR TB cases enrolled into MDR

treatment in 2014*

7174

(46.0%)

(16.9%)

(17.9%)

(16.5%)

(2.7%)

3297

1210

1284

1186

197

Geographical coverage

Outcome cohort

Case-linked data

Lost to follow-up

Not evaluated

reporting Cases notified

Success

Died

Failed

Population estimate 2016 by UN Statistical Database: 44438625

Tuberculosis case notifications, 2016

Total number of cases	34088	
Notification rate per100 000	76.7	
New* & relapses	29	052
New* & relapses notification rate per100 000	65.4	
Pulmonary	26 357	(90.7%)
of which smear positive	-	-
of which laboratory confirmed	18125	(68.8%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	41.8 years	
Mean age of new foreign TB cases	- years	
Foreign origin of all TB cases	20	(0.1%)
New (not previously treated)	23 316	(68.4%)

^{*} Cases with unknown previous treatment included in new cases

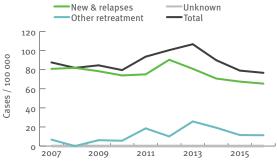
Drug resistance surveillance & TB-HIV co-infection, 2016

1	/es
١	/es
1	/es
20 147	(111.2%)
10 000-10	000-11000
5756	(28.6%)
247	(4.3%)
8 6 5 1	-
1195	-
28194	(97.0%)
5832	(20.7%)
3945	(67.6%)
	20147 10000-10 5756 247 8651 1195 28194 5832

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

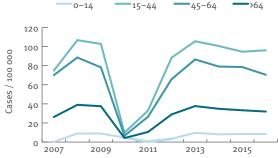
** More than 50% of TB cases with reported HIV status.

Tuberculosis notification rates by treatment history, 2007-2016*



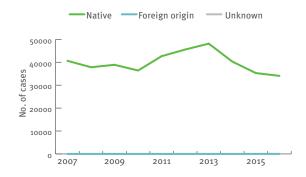
* Starting from 2013 onward cases with unknown history are included in new and relapses

New and relapsed TB cases - notification rates by age group, 2007-2016

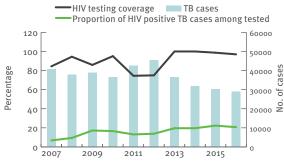


* Data up to 2012 includes new TB cases only.

Tuberculosis cases by geographical origin, 2007-2016

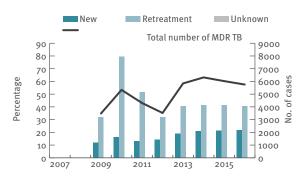


TB-HIV co-infection, 2007-2016

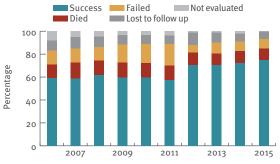


* Since 2015 data on HIV detection are collected for new TB cases and relapses.

MDR TB cases by previous treatment history, 2007–2016



Treatment outcome, new and relapsed TB cases, 2006-2015*



United Kingdom

Tuberculosis case notifications, 2016

Total number of cases	6175	
Notification rate per 100 000	9.4	
New* & relapses	5793	
New* & relapses notification rate per 100 000	8.9	
Pulmonary	3354	(54.3%)
of which microscopy-positive	1379	(41.1%)
of which laboratory confirmed	2535	(75.6%)
Laboratory-confirmed TB cases	3907	(63.3%)
Mean age of new native TB cases	43.7	years
Mean age of new foreign TB cases	41.5 years	
Foreign origin of all TB cases	4369	(70.8%)
New (not previously treated)	5793	(93.8%)

^{*} Cases with unknown previous treatment included in new cases

Drug resistance surveillance & TB-HIV co-infection, 2016

Completeness of DRS data*	Υ	'es
Completeness of HIV data**	No	
Case-linked data reporting	Yes	
Cases with DST results	3789	(97.0%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	58-3	39-78
Pulmonary MDR TB cases notified	43	(1.8%)
of which XDR TB cases	6	(15.4%)
Notified MDR TB	56	(1.5%)
of which XDR TB cases	7	(14.0%)
TB cases tested for HIV	-	-
HIV-positive TB cases	-	-
of these on antiretroviral therapy	-	-

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+ 75%, EQA 95%.

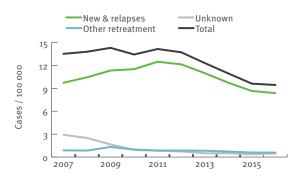
** More than 50% of TB cases with reported HIV status.

Treatment outcome monitoring

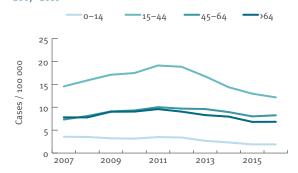
Geographical coverage	Nat	ional			
Outcome cohort	New culture positive pulmonary TB cases notified in 2015*		ses All WDK IB Cas		3 cases All MDR 1B cases
Case-linked data reporting	١	'es			
Cases notified	2210			56	
Success	1679	(76.0%)	29	(51.8%)	
Died	158	(7.1%)	2	(3.6%)	
Failed	0	(0.0%)	0	(0.0%)	
Lost to follow-up	112	(5.1%)	12	(21.4%)	
Still on treatment	226	(10.2%)	10	(17.9%)	
Not evaluated	35	(1.6%)	3	(5.4%)	

^{*} Treatment outcome as presented is treatment outcome after 12 months.

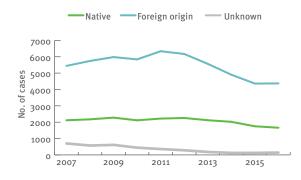
Tuberculosis notification rates by treatment history, 2007-2016



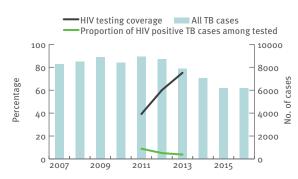
New and relapsed TB cases - notification rates by age group, 2007-2016



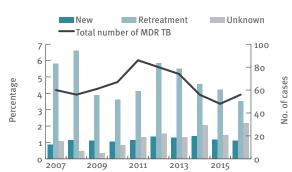
Tuberculosis cases by geographical origin, 2007-2016

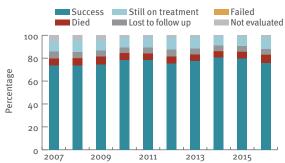


TB-HIV co-infection, 2007-2016



MDR TB cases by previous treatment history, 2007-2016





^{**} Treatment outcome as presented is treatment outcome after 24 months.

New and relapsed

TB cases notified in 2015*

Yes

15 2 2 0

* Treatment outcome as presented is treatment outcome after 12 months.

** Treatment outcome as presented is treatment outcome after 24 months.

(88.9%)

(4.5%)

(1.3%)

(1.1%)

(4.1%)

13536

688

193

172

631

All MDR TB cases enrolled into MDR

treatment in 2014*

3602

(61.5%)

(16.3%)

(6.1%)

(6.1%)

(9.9%)

2216

587

221

220

358

Geographical coverage

Outcome cohort

Case-linked data

Lost to follow-up

Not evaluated

reporting Cases notified

Success

Died

Failed

Uzbekistan

Tuberculosis case notifications, 2016

Total number of cases	18 441	
Notification rate per 100 000	58.6	
New* & relapses	16 050	
New* & relapses notification rate per 100 000	51.0	
Pulmonary (new and relapse)	10709	(66.7%)
of which smear positive	-	-
of which laboratory confirmed	4854	(45.3%)
Laboratory-confirmed TB cases	-	-
Mean age of new and relapse TB cases	39.8 years	
Mean age of new foreign TB cases	- years	
Foreign origin of all TB cases	0	(0.0%)
New (not previously treated)	14436	(78.3%)

^{*} Cases with unknown previous treatment included in new cases

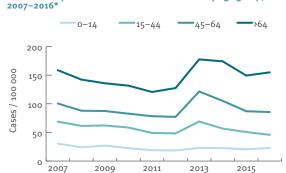
Drug resistance surveillance & TB-HIV co-infection,2016

Completeness of DRS data*	No	
Completeness of HIV data**	Υ	'es
Case-linked data reporting	Υ	'es
Cases with DST results	1986	(40.9%)
Estimated RR-TB among notified pulmonary cases N, (best-low-high)	5800-49	900-6600
Pulmonary MDR TB cases notified	603	(30.4%)
of which XDR TB cases	184	
Notified MDR	1956	-
of which XDR TB cases	184	-
TB cases tested for HIV	18 441	(114.9%)
HIV-positive TB cases	758	(4.1%)
of these on antiretroviral therapy	496	(65.4%)

^{*} National coverage 100% or culturing 90%, C+/All TB cases 50%, DST done for C+75%, EQA 95%.

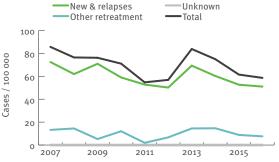
** More than 50% of TB cases with reported HIV status.

New and relapsed TB cases - notification rates by age group,



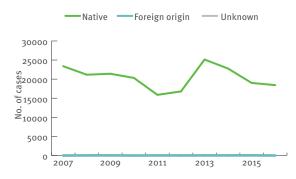
^{*} Data up to 2012 includes new TB cases only.

Tuberculosis notification rates by treatment history, 2007-2016*

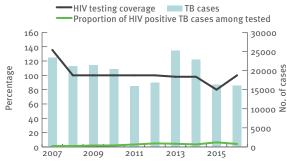


^{*} Starting from 2013 onward cases with unknown history are included in new and relapses

Tuberculosis cases by geographical origin, 2007-2016

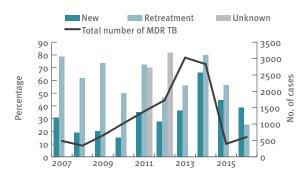


TB-HIV co-infection, 2007-2016

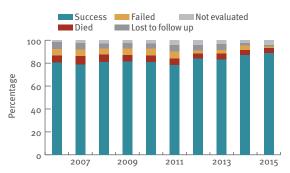


^{*} Since 2015 data on HIV detection are collected for new TB cases and relapses.

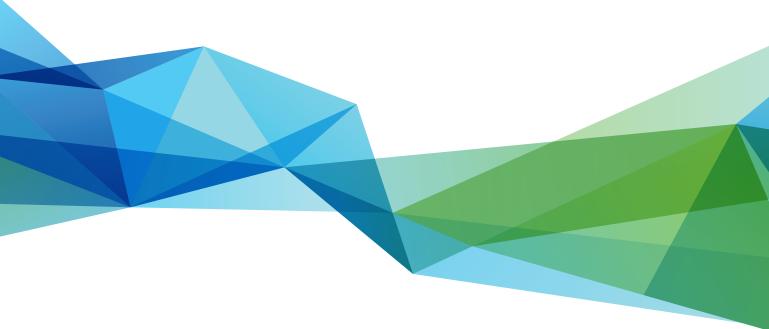
MDR TB cases by previous treatment history, 2007–2016



Treatment outcome, new and relapsed TB cases, 2006-2015*



^{* 2005-2011} cohorts include new cases only.



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