

This weekly bulletin provides updates on threats monitored by ECDC.

## NEWS

### **33 000 people die every year due to infections with antibiotic-resistant bacteria**

The burden of infections due to bacteria resistant to antibiotics is comparable to that of influenza, tuberculosis and HIV/AIDS combined, according to a study published this week in [The Lancet Infectious Diseases](#). The estimates are based on 2015 data from the European Antimicrobial Resistance Surveillance Network (EARS-Net) indicating that about 33000 people die each year as a direct consequence of an infection due to bacteria resistant to antibiotics.

The study reveals that 75% of the burden of disease is due to healthcare-associated infections and that reducing this through adequate infection prevention and control measures, as well as antibiotic stewardship, could be an achievable goal in healthcare settings.

Infections with bacteria resistant to last-line antibiotics such as carbapenems and colistin cause 39% of the burden. This is an increase from 2007 and is worrying because these antibiotics are the last treatment options available. When these are no longer effective, it is extremely difficult or, in many cases, impossible to treat infections.

The study was developed by experts at ECDC and the Burden of AMR Collaborative Group. The results are used by the Organisation for Economic Co-operation and Development (OECD) to estimate the economic burden of antibiotic resistance.

## Detailed reports

### New! Local transmission of malaria – Greece – 2018

Opening date: 5 November 2018

Latest update: 9 November 2018

#### Epidemiological summary

Since August 2018, Greece has reported nine locally acquired malaria cases: eight *Plasmodium vivax* (*P. vivax*) and one *Plasmodium non-falciparum*. These cases are classified as 'introduced' (i.e. first generation transmission from an imported case).

The epidemic investigation suggests that there were two cases detected in August in the region of Evros in the municipalities of Tichero and Feres. More recently, Greece health authorities reported seven additional cases with probable exposure in Echedoros in the region of Thessaloniki, Central Macedonia. The onsets of symptoms range from 15 September to 5 October 2018.

Enhanced malaria surveillance is being implemented together with blood safety measures.

**Source:** [Greek public health authorities](#)

#### ECDC assessment

Greece has reported local transmission of *P. vivax* in recent years in the central and western regions of the country. The risk of malaria spread in the EU following these events remains very low. ECDC produced a [rapid risk assessment](#) in 2017 and its conclusions remain valid.

#### Actions

ECDC will continue to monitor this event.

### West Nile virus - Multistate (Europe) - Monitoring season 2018

Opening date: 30 May 2018

Latest update: 9 November 2018

#### Epidemiological summary

Between 31 October and 8 November 2018, EU Member States reported 23 human West Nile virus (WNV) infections in Italy (16), the Czech Republic (3), Greece (2), Austria (1) and Cyprus (1). The most recent onset dates are from week 43, 22 - 28 October. EU neighbouring countries reported no cases this week.

All human cases were reported from areas that have been affected during previous transmission seasons. This week, 3 deaths were reported, all by Greece.

In the same week, 9 outbreaks among equids were reported by Italy (5), France (2), Hungary (1) and Spain (1).

In 2018, as of 8 November 2018, EU Member States have reported 1 489 human cases in Italy (569), Greece (309), Romania (276), Hungary (214), Croatia (53), France (24), Austria (20), Bulgaria (15), the Czech Republic (5), Slovenia (3), and Cyprus (1). EU neighbouring countries reported 534 human cases in Serbia (410), Israel (110) and Kosovo\* (14). To date, 171 deaths due to West Nile virus infection have been reported by Greece (45), Italy (42), Romania (42), Serbia (35), Kosovo\* (3), Bulgaria (2), the Czech Republic (1) and Hungary (1).

In September 2018, a veterinarian was diagnosed with suspected WNV infection after performing an autopsy on a deceased owl found in a wildlife park near Poing, Ebersberg, Bavaria, Germany. WNV was detected in the owl by PCR in tissue samples recovered during the autopsy.

During the current transmission season, 276 outbreaks among equids have been reported by Italy (144), Hungary (90), Greece (15), France (13), Spain (7), Romania (2), Germany (2), Austria (1), Slovenia (1) and Portugal (1).

Please find the updated weekly WNV maps on the ECDC webpage [here](#).

In accordance with [European Commission Directive 2014/110/EU](#), prospective blood donors should be deferred for 28 days after leaving an area with evidence of WNV circulation among humans unless the results of an individual nucleic acid test are negative.

\*This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the International Court of Justice Opinion on the Kosovo Declaration of Independence.

**Publications:** [An early start of West Nile virus seasonal transmission: the added value of One Health surveillance in detecting early circulation and triggering timely response in Italy, June to July 2018](#)

[Early start of the West Nile fever transmission season 2018 in Europe](#)

**ECDC links:** [West Nile fever](#) | [Atlas](#)

**Sources:** [TESSy](#) | [ADNS](#)

## ECDC assessment

The 2018 transmission season started earlier than usual and higher case numbers have been reported compared with the same period in previous years. Germany detected the country's first autochthonous human West Nile virus infection in 2018, most likely infected through contact transmission during the autopsy of a deceased bird and not through a mosquito bite. All other autochthonous human cases were reported in previously affected countries. Since it has been a particularly intense transmission season for West Nile virus, precautionary measures for travellers and residents, mainly the elderly and immunocompromised individuals, to affected areas must be highlighted. As expected at this time of the year, the weekly number of cases has started to decrease.

## Actions

During the transmission season, ECDC publishes [West Nile fever maps](#) together with an epidemiological summary every Friday. ECDC published a rapid risk assessment on the [Early large increase in West Nile virus infections in the EU/EEA and EU neighbouring countries](#) on 13 August 2018 and [the latest epidemiological update](#) on 24 September 2018.

## Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 9 November 2018

### Epidemiological summary

Since the previous Communicable Disease Threats Report (CDTR) published on 13 October 2018 updates are provided for 21 EU/EFTA countries: Austria, Bulgaria, Czech Republic (Prague), Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, The Netherlands, Norway, Poland, Romania, Slovakia, Spain, Sweden, and Switzerland.

In 2018 and as of 7 November, most of the cases in the EU were reported from Romania (5 222), France (2 727), Greece (2 290), and Italy (2 295). Thirty-three deaths have been reported in 2018 from Romania (22), Italy (6), France (3) and Greece (2).

Outside EU/EFTA countries, Ukraine is experiencing the continuation of the largest outbreak with over 36 000 cases reported in 2018, including 15 deaths. A large ongoing outbreak has been reported by Serbia with over 5 700 cases and 15 deaths. Outbreaks are also reported in Belarus, Georgia, Israel, the Americas, Mauritius, Russia and Thailand.

The monthly measles report published in the CDTR provides the most recent data on measles cases and outbreaks based on the data reported on national authority websites or through media reports. It is supplementary to ECDC's [monthly measles and rubella monitoring report](#) based on data routinely submitted by 30 EU/EEA countries to The European Surveillance System (TESSy). The data presented in both monthly reports may differ.

Epidemiological summary for EU/EFTA countries with updates since last month:

[Austria](#) has reported 72 measles cases in 2018 as of 17 October 2018. This is an increase of 6 cases since the end of August 2018. All federal states are affected and 14% of the cases are healthcare professionals.

[Bulgaria](#) has reported 8 cases of measles in 2018 as of 4 November 2018. No new cases have been reported since the previous CDTR on 13 October 2018.

[Czech Republic](#): As of 5 October 2018, 94 cases of measles were reported in Prague in 2018.

[Denmark](#) has reported 7 cases of measles in 2018 as of 31 October 2018. No new cases have been reported since 21 September 2018.

[Finland](#) has reported seven cases of measles in 2018 as of 31 October 2018. No new cases have been reported since May 2018.

[France](#) has reported 2 727 cases in 2018 as of 14 October 2018, including three deaths. This is an increase of 25 cases since 19 September 2018. Since the beginning of the outbreak in November 2017, there have been 2 805 cases, including three deaths, reported across the country.

[Germany](#) has reported 516 cases of measles in 2018 as of 29 September 2018. This is an increase of 23 cases since the national report as of 19 September 2018.

[Greece](#) has reported 2 290 cases in 2018 as of 1 November 2018, including two deaths. No new cases have been reported since previous Greek report on 11 October 2018. As of 1 November 2018 and since the beginning of the outbreak in May 2017, Greece has reported 3 258 measles cases, of which 1 885 were laboratory-confirmed. Among the laboratory-confirmed cases, four deaths were reported.

[Hungary](#) has reported 18 cases of measles in 2018 as of 14 October 2018. No new cases have been reported since 10 June 2018, according to national reports.

[Ireland](#) has reported 86 cases of measles in 2018 as of 20 October 2018. No new cases have been reported since the previous national report on 6 October 2018.

[Italy](#) has reported 2 295 measles cases, including six deaths, between 1 January and 30 September 2018. This is an increase of 47 cases since 31 August 2018. Among these cases, 100 were healthcare professionals.

[Latvia](#) reported 22 cases of measles between January and August 2018. This is an increase of two cases since the previous CDTR on 13 October 2018.

[Lithuania](#) has reported two cases in 2018 as of 30 September 2018. This is an increase of one case since the previous CDTR 13 October 2018.

[The Netherlands](#) has reported 0.1 cases of measles per 100 000 population in 2018 as of 29 October 2018. According to TESSy data, there have been 22 cases reported in 2018.

[Norway](#) has reported 10 cases of measles in 2018 as of 31 October 2018. No change since previous CDTR.

[Poland](#) has reported 128 cases of measles in 2018 as of 15 October 2018. This is an increase of five cases since the previous national report on 30 September 2018.

[Romania](#) has reported 5 222 measles cases, including 22 deaths, in 2018 as of 2 November 2018. This is an increase of 122 cases since the previous CDTR on 13 October 2018. Since the beginning of the outbreak in October 2016 and as of 2 November 2018, Romania has reported 15 446 confirmed measles cases, including 59 deaths.

[Slovakia](#) has reported 446 cases of measles from the beginning of May 2018 until 17 October 2018. Of these, 428 were reported from Michalovce district. This is an increase of 18 cases since CDTR published on 14 September 2018. The outbreak started in the beginning of May in the village of Drahnov with three cases imported from Great Britain.

[Spain](#) has reported 216 confirmed measles cases in 2018 as of 30 October 2018. Since the previous CDTR on 13 October 2018, this represents an increase of three cases.

[Sweden](#) has reported 39 cases of measles since the beginning of 2018 as of 31 October 2018. This is an increase of four cases since the previous CDTR on 13 October 2018.

[Switzerland](#) has reported 41 cases as of 23 October 2018. This is an increase of one case since the CDTR on 13 October 2018.

### **Relevant epidemiological summary for countries outside EU/EFTA**

[Belarus](#) has reported 241 cases in 2018, according to media quoting the Ministry of Health on 6 November 2018.

Georgia has reported 1 400 cases in 2018, including two deaths, according to [media reports](#) quoting health authorities on 14

October 2018.

Israel: According to [media reports](#) quoting health authorities, on 24 October 2018, the number of measles cases has reached 882 in 2018. This is an increase of over 400 cases since the previous CDTR on 13 October 2018.

[Serbia](#) reported 5 764 cases, including 15 deaths, between October 2017 and 2 November 2018, including the cases reported from Kosovo\*. This is an increase of 23 cases since the CDTR published on 13 October 2018. Of the reported cases, 2 912 were confirmed.

\*This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the International Court of Justice Opinion on the Kosovo Declaration of Independence.

[Ukraine](#) reported 36 455 cases of measles in 2018, as of 6 November 2018, including 15 deaths. This is an increase of 3 290 cases and one death since the previous CDTR on 13 October 2018. Among the cases, 14 111 were adults and 22 344 were children. Most of the cases were reported from Lviv, Ivano-Frankivsk, Zakarpatie, Odessa, Kyiv and the Ternopil region.

According to the [Pan American Health Organization](#), during 2018 and as of 27 October 2018, 11 countries reported 8 471 confirmed cases of measles. Most of the cases are reported by Venezuela (5 525) and Brazil (2 564).

[Mauritius](#) has reported 1 167 confirmed measles cases, including four deaths as of 21 October 2018. This is an increase of 230 cases since the CDTR published on 13 October 2018. The most affected districts are Port Louis and Black River.

Russia, according to a [media report](#) on 4 November 2018, reported about 4 000 cases of measles from January to September 2018. This is an increase of about 2 000 cases since the CDTR on 11 August 2018.

Thailand reported an increase of measles cases in Narathiwat Province (71 cases), according to a [media report](#) on 30 October 2018. The epidemic continues in Pattani (200 cases) and Yala (500 cases) Provinces. Small children are mostly affected.

## ECDC assessment

Given the current extent of measles circulation in the EU/EEA, the trend in recent years and the fact that vaccination coverage for the first and second dose is suboptimal, there is a high risk of continued measles transmission with mutual exportation and importation between EU/EEA Member States and third countries. For a more complete assessment, consult ECDC's rapid risk assessment, [Risk of measles transmission in the EU/EEA](#), published on 21 March 2018.

## Actions

ECDC is monitoring measles outbreaks through epidemic intelligence and reports monthly. ECDC also gathers measles surveillance data through The European Surveillance System (TESSy) for 30 EU/EEA countries.

## Autochthonous dengue – Spain – 2018

Opening date: 10 October 2018

Latest update: 9 November 2018

### Epidemiological summary

On 9 October 2018, the Spanish Ministry of Health reported two confirmed autochthonous dengue cases in Spain. Additionally, on 16 October 2018, a third case was confirmed. All cases belong to the same family and had onset of symptoms in late August 2018 after spending time together in municipalities in the Murcia region and Cádiz Province during the possible time of infection. All cases fully recovered and had no recent travel history to dengue-affected areas. Active case finding and response activities were implemented on site.

On 2 November 2018 and according to media sources quoting health authorities, two additional dengue cases were reported in the Murcia region. These cases had no recent travel history outside the region. Laboratory results showed that all five cases reported shared the same dengue serotype.

This outbreak is the first documented autochthonous dengue transmission in Spain since the end of the 19th century. Spanish authorities are continuing their investigations.

**Source:** [Spanish Ministry of Health](#), [Murcia Regional Government](#), [media](#), [media](#)

## ECDC assessment

Isolated cases or small clusters of autochthonous dengue in the south of Spain are not unexpected, as *Aedes albopictus* is present in the area. The map of the current known *Aedes albopictus* distribution as of June 2018 shows that the mosquito is established in the Murcia region and was introduced in Cádiz Province, the possible sites of infection according to the Ministry of Health. Similar occurrences have been documented in Europe in previous years. The risk of further transmission is considered to be low as the weather conditions are expected to become unfavourable in the coming weeks; active case-finding activities are ongoing. More information regarding dengue fever and *Aedes albopictus* geographical distribution is available from ECDC's [fact sheet](#) and [mosquito map](#).

## Actions

ECDC is monitoring this event through epidemic intelligence. ECDC has produced a rapid risk assessment on '[Local transmission of dengue fever in France and Spain – 2018](#)' published on 22 October 2018.

## Autochthonous dengue – France – 2018

Opening date: 8 October 2018

Latest update: 9 November 2018

### Epidemiological summary

On 4 October 2018, the French National Reference Laboratory for arboviruses confirmed an autochthonous case of dengue in Saint-Laurent-du-Var, Provence-Alpes-Côte d'Azur (PACA) region, Southern France. The onset of symptoms was on 21 September 2018. The lab results revealed serotype 2 (DEN-2). This is the first autochthonous case identified in 2018 in metropolitan France. The patient, a resident of Saint-Laurent-du-Var, did not travel outside of the PACA region in the 15 days prior to symptom onset. On 17 October 2018, according to media reports quoting French health authorities, door-to-door case finding conducted on 8 to 9 October in Saint-Laurent-du-Var led to the diagnosis of four additional cases residing close to the home of the index case. The Alpes-Maritimes department has been colonised by *Aedes albopictus* since 2004 and enhanced surveillance is implemented every year from May to November.

On 10 October 2018, the French National Reference Laboratory for arboviruses confirmed an autochthonous case of dengue in the Montpellier area (Hérault department, Occitanie region, Southern France). The onset of symptoms was on 27 September 2018. RT-PCR assays performed on blood samples taken on the fifth and sixth days of illness confirmed dengue serotype 1 (DEN-1). The patient, a resident of Clapiers, a suburb of the city of Montpellier, did not travel out of the Occitanie region in the 15 days prior to symptom onset. The Hérault department has been colonized by *Aedes albopictus* since 2011 and enhanced surveillance is implemented every year from 1 May to 30 November.

So far, no epidemiological link has been established between the event in Saint-Laurent-du-Var and the event in Montpellier area. Control and prevention measures have been taken in the areas affected as per national recommendations.

Additionally, on 5 November 2018 regional health authorities have confirmed an autochthonous dengue case in Nîmes, Gard department. This is the second confirmed autochthonous dengue case reported in the Occitanie region this year.

**SOURCE:** InVS, [media report](#), [Regional Health Authority Occitanie](#)

## ECDC assessment

Isolated cases or small clusters of autochthonous dengue in the Provence-Alpes-Cote d'Azur and Occitanie regions are not unexpected as *Aedes albopictus* is established in the area and previous similar occurrences have been documented in the PACA region in 2010, 2013, 2014 and 2015. The risk of further transmission is considered to be low due to unfavourable weather conditions and active case-finding activities. More information regarding dengue fever and *Aedes albopictus* geographical distribution is available from ECDC's [fact sheet](#) and [mosquito map](#).

## Actions

ECDC is monitoring this event through epidemic intelligence. ECDC has produced a rapid risk assessment on '[Local transmission of dengue fever in France and Spain – 2018](#)' that was published on 22 October 2018.

## Influenza – Multistate (Europe) – Monitoring season 2018 – 2019

Opening date: 8 October 2018

Latest update: 9 November 2018

### Epidemiological summary

#### Week 44, 2018, 29 October to 4 November 2018

Influenza activity was low throughout Europe.

Influenza viruses were detected sporadically in specimens from persons with respiratory illness presenting to medical care. Both influenza A and B type viruses were detected in low numbers.

For week 44, 2018, data from the 18 countries or regions reporting to the [EuroMOMO](#) project indicated all-cause excess mortality to be at expected levels for this time of the year.

### ECDC assessment

As is usual for this time of the year, influenza activity so far was low in Europe.

**Source:** [Flu News Europe](#) | [EuroMOMO](#)

### Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the [Flu News Europe website](#).

Recommendations on the composition of the 2018–2019 influenza virus vaccine are available from [WHO](#).

## Influenza A(H5N6) – China – Monitoring human cases

Opening date: 17 January 2018

Latest update: 9 November 2018

### Epidemiological summary

Since 2014 and as of 8 November 2018, according to WHO, 22 human cases of influenza A(H5N6) have been reported from China. The cases occurred in Anhui (1), Fujian (1), Guangdong (8), Hubei (1), Jinan (4), Sichuan (1) and Yunnan (2) Provinces and Guangxi Zhuang Autonomous Region (4). Of the cases, at least 13 have died. All cases had exposure to live poultry or live poultry markets, except for four cases where the exposure source was not reported. No clustering of cases was reported. Additionally, one case with year of onset in 2015 has been reported in literature. The case is not included in WHO data.

**Sources:** [ECDC avian influenza page](#) | [WHO avian influenza page](#) | [ECDC/EFSA joint report: Avian influenza overview May - August 2018](#)

### ECDC assessment

Although avian influenza A(H5N6) has caused severe infection in humans, human infections remain rare and no sustained human-to-human transmission has been reported. However, the characterisation of this virus is ongoing and its implication to the evolution and potential emergence of a pandemic strain is unknown. According to [WHO](#), the risk of international disease spread is considered to be low.

The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to remain very low. As the likelihood of zoonotic transmission of newly introduced or emerging reassortant avian influenza viruses is unknown, the use of personal protective measures for people exposed to avian influenza viruses will minimise the remaining risk.

#### Assessment related to the ongoing outbreaks in poultry in Europe:

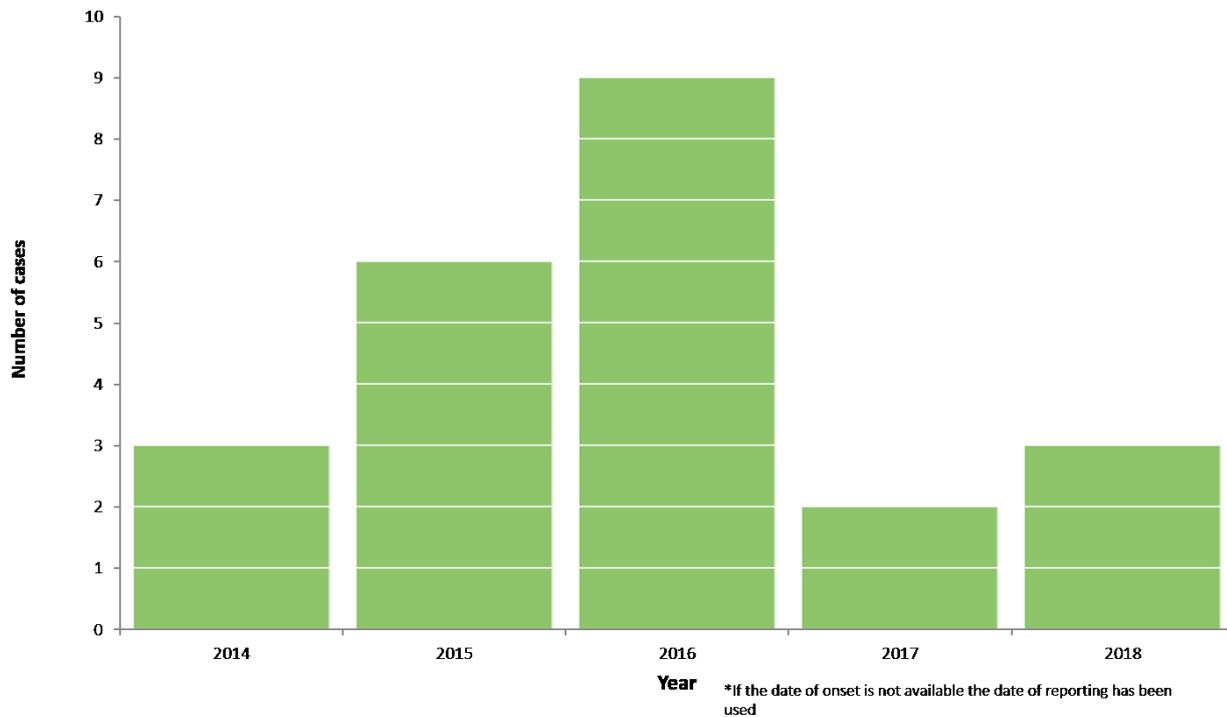
The World Organisation for Animal Health/Food and Agriculture Organization/EU reference laboratory for avian influenza at the Animal and Plant Health Agency Weybridge have conducted a detailed genetic analysis of a small number of H5N6 highly pathogenic avian influenza (HPAI) viruses recently detected in both Europe and Asia. The European strains can be differentiated from those associated with zoonotic infection in Asia. Furthermore, they do not carry any virulence markers strongly associated with human infection risk. In addition, there have been no reported human infections with this particular genetic sublineage of H5N6 highly pathogenic avian influenza to date.

## Actions

ECDC monitors outbreaks of avian influenza in humans through epidemic intelligence.

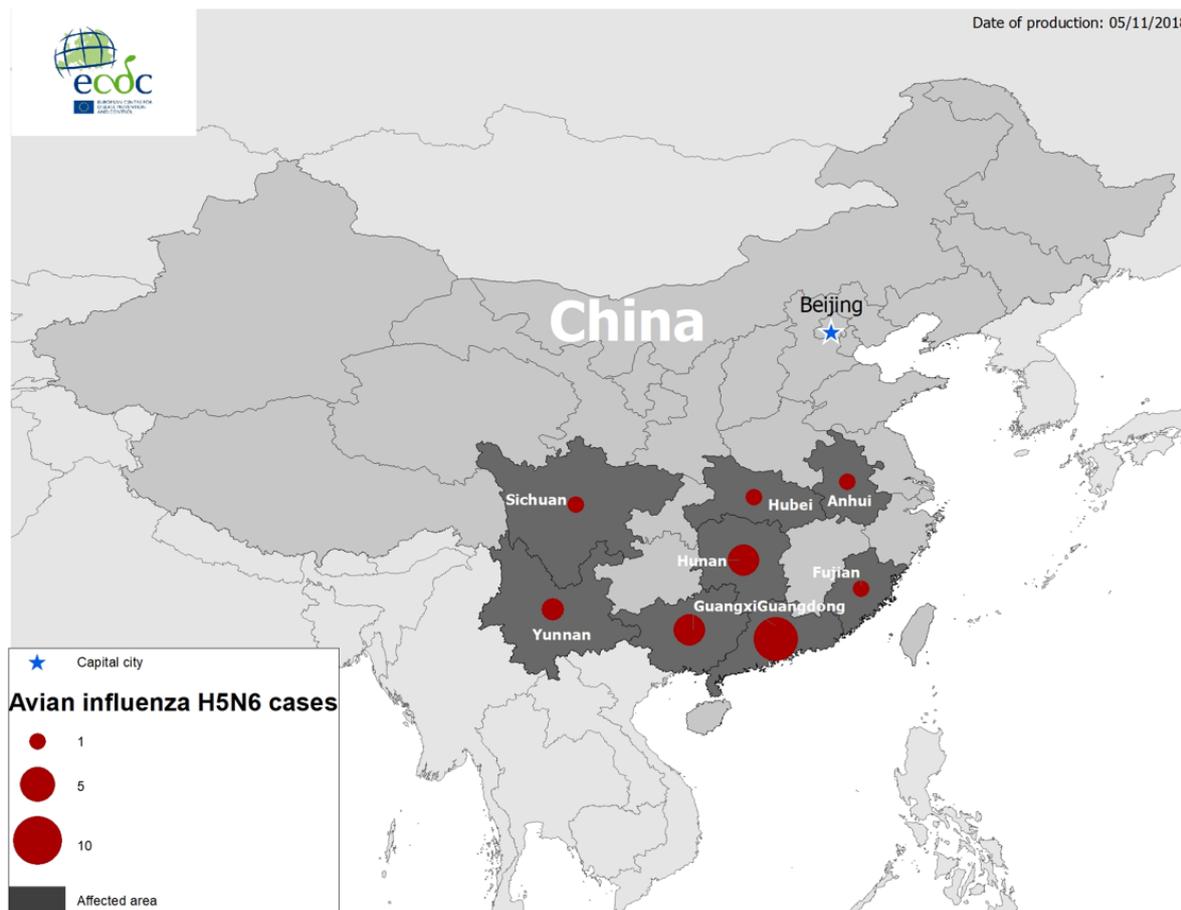
### Distribution of confirmed cases of A(H5N6) by year of onset 2014 – 2018 (n=23)

Hong Kong



## Geographical distribution of confirmed cases of A(H5N6), China, 2014 – 2018

Hong Kong



## Ebola virus disease - tenth outbreak - Democratic Republic of the Congo - 2018

Opening date: 1 August 2018

Latest update: 9 November 2018

### Epidemiological summary

As of 7 November 2018, there have been 312 Ebola virus disease cases (277 confirmed, 35 probable), including 191 deaths (156 of which were confirmed cases), since the beginning of the outbreak.

Twelve health zones in two provinces have reported confirmed and probable Ebola virus disease cases: Beni, Butembo, Kalungata, Mabalako, Masereka, Musienene, Mutwanga, Oicha and Vuhovi health zones in North Kivu Province and Komanda, Mangina and Tchomia health zones in Ituri Province.

**Response activities:** According to the WHO Regional Office for Africa Situation Report, as of 6 November 2018, 5 430 contacts have been identified in Beni (3 851), Butembo (596), Kalungata (618), Mabalako (155), Mandima (1), Musienene (84) and Vuhovi (125). A total of 91.9% of these contacts were followed up.

According to the latest Ministry of Health update, as of 5 November 2018, 26 724 people have been vaccinated in Beni (14 160),

Bunia (434), Butembo (1 435), Kalunguta (507), Katwa (2 152), Komanda (240), Mabalako (4 436), Mandima (1 663), Masereka (690), Musienene (160), Mutwanga (184), Oicha (178), Tchomia (355) and Vuhovi (130).

**Travel:** [Uganda](#)'s Ministry of Health, with support from WHO, has started vaccinating frontline health workers against Ebola virus disease. The exercise has begun today in Ntoroko district and will initially be implemented in the five high-risk districts bordering the Democratic Republic of the Congo. Other Ebola virus disease [preparatory activities](#) are ongoing.

[South Sudan](#) is one of four high-risk countries prioritised by WHO to enhance preparedness and operational readiness and has activated a multisectoral Ebola virus disease taskforce to coordinate preparedness and response activities. In partnership with the International Organization for Migration, two new border screening points at the South Sudan/Uganda border have been opened. Additionally, [WHO](#) is supporting the Ministry of Health of South Sudan, to train a total of 214 members of the Rapid Response Teams at the national level and in all the Ebola virus disease high-risk states.

Furthermore, [Burundi](#), [Rwanda](#) and [Zimbabwe](#) have established entry screening. According to [WHO](#), as of 30 October 2018, health screening has been established at 65 Points of Entry.

[Belgium](#), [Germany](#), [Italy](#), [Spain](#) and the [United Kingdom](#) have issued advice against traveling to the North Kivu region due to the Ebola outbreak. Additionally, the [CDC](#) and [WHO](#) have issued travel recommendations.

**Sources:** [Ministry of Health of the Democratic Republic of the Congo](#) | [WHO](#)

## ECDC assessment

**ECDC assessment:** While no confirmed cases in neighbouring countries have been documented as of 23 October 2018, the fact that the outbreak is ongoing in areas with an important cross-border population flow with Rwanda and Uganda remains of particular concern. In addition, the implementation of response measures in the field remains challenging because the outbreak occurs in areas affected by prolonged humanitarian crises and an unstable security situation arising from a complex armed conflict.

The probability of exposure to the disease for EU/EEA citizens who live or travel in Ebola virus disease-affected areas of the Democratic Republic of the Congo is low provided they adhere to recommended precautionary measures. The overall risk of introduction and further spread of Ebola virus within the EU/EEA is very low. However, the risk can only be eliminated by stopping transmission on a local level.

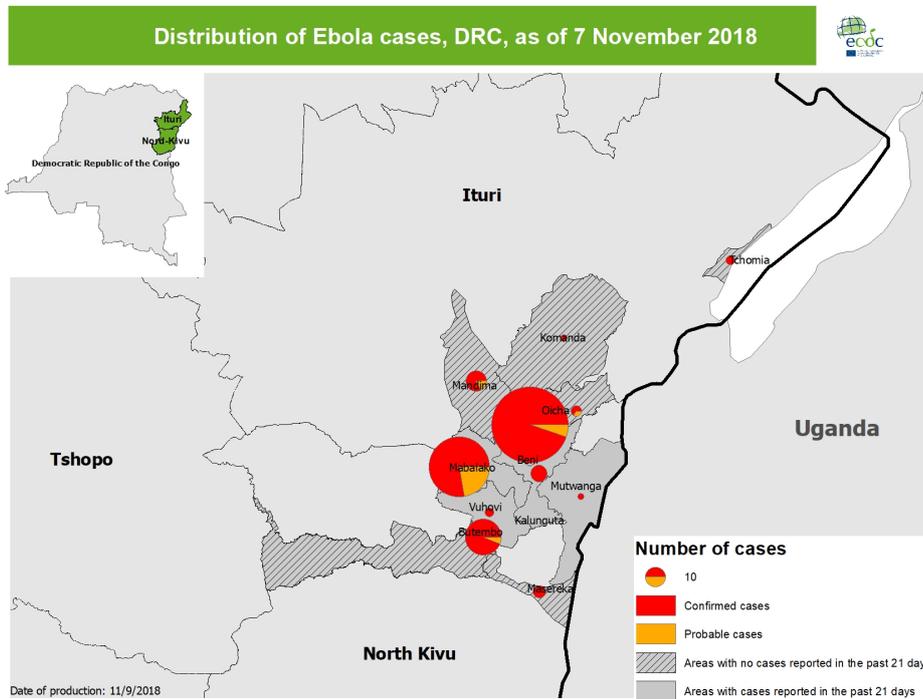
**WHO Assessment:** As of 25 October 2018, the [WHO assessment](#) states that the risk of spread is low at global level, but remains very high at national and regional levels.

## Actions

ECDC published an updated [rapid risk assessment](#) on 5 October 2018 and an [epidemiological update](#) on 26 October 2018.

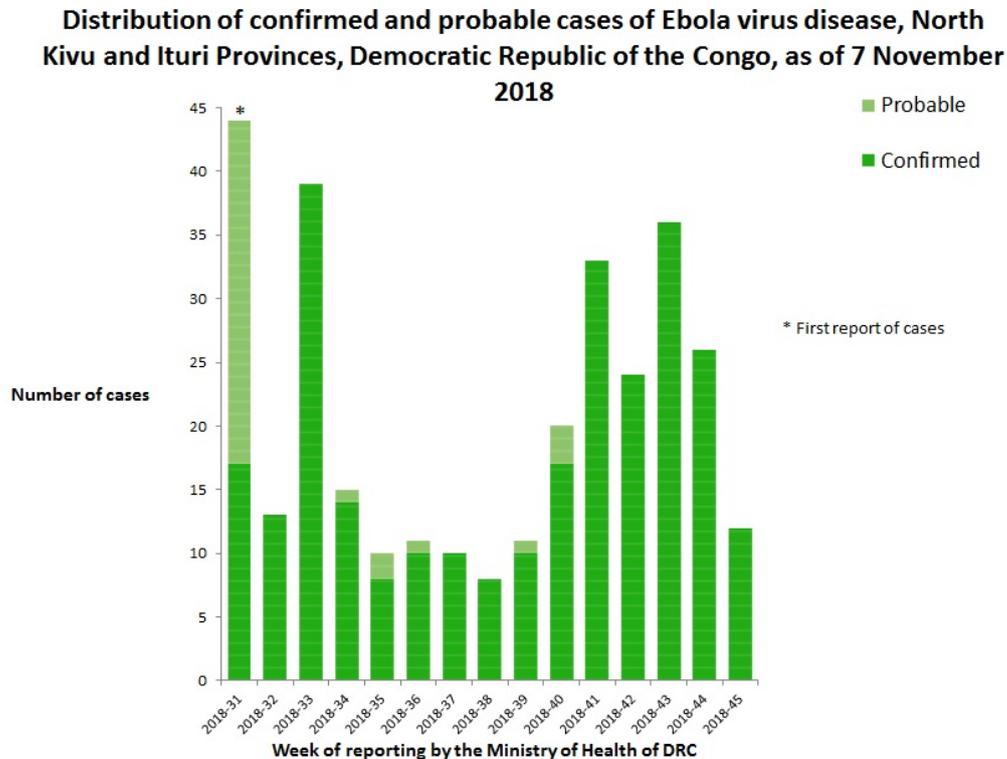
Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 7 November 2018

ECDC



## Distribution of confirmed and probable cases of Ebola Virus Disease, North Kivu and Ituri Provinces, DRC, as of 7 November 2018

ECDC



## Middle East respiratory syndrome coronavirus (MERS-CoV) – Multistate

Opening date: 24 September 2012

Latest update: 9 November 2018

### Epidemiological summary

Since April 2012 and as of 31 October 2018, 2 283 cases of MERS-CoV, including close to 850 deaths, have been reported by health authorities worldwide.

**Sources:** [ECDC MERS-CoV page](#) | [WHO MERS-CoV](#) | [WHO MERS updates](#) | [ECDC fact sheet for professionals](#)

### ECDC assessment

The risk of sustained human-to-human transmission in Europe remains very low. ECDC's conclusion continues to be that the MERS-CoV outbreak poses a low risk to the EU, as stated in the [rapid risk assessment](#) published on 29 August 2018, which also provides details on the last case reported in Europe.

On 2 August 2018, ECDC published a [risk assessment regarding public health risks related to communicable diseases during the](#)

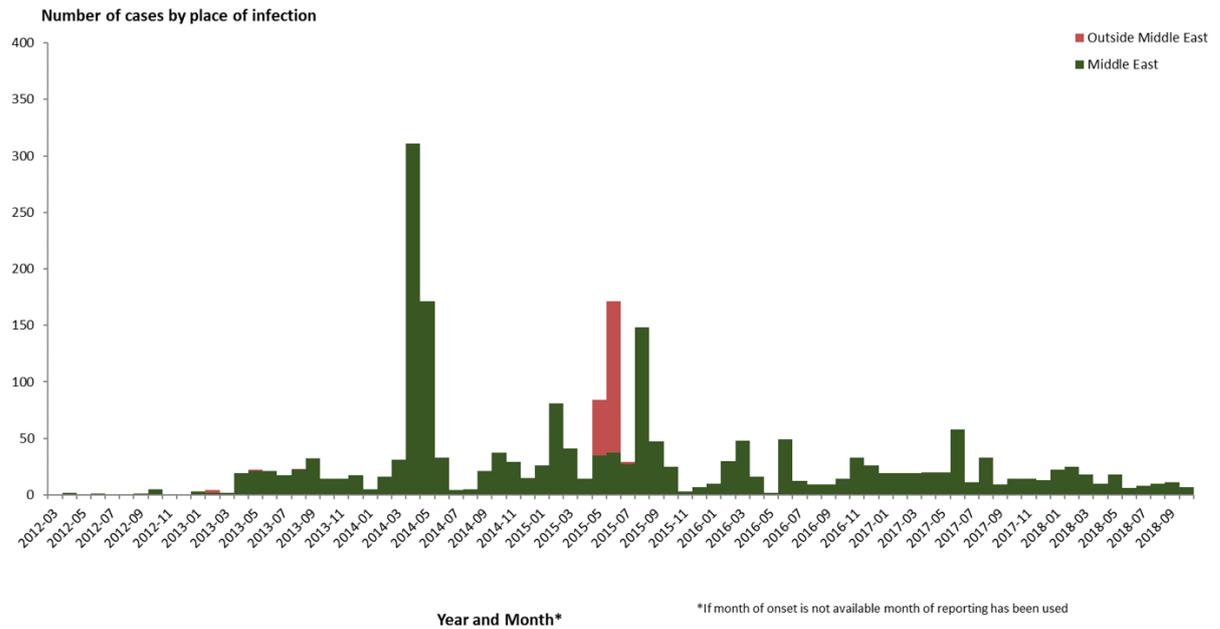
2018 Hajj, Saudi Arabia, 19–24 August 2018 where MERS-CoV is discussed.

## Actions

ECDC is monitoring this threat through epidemic intelligence and monthly reports.

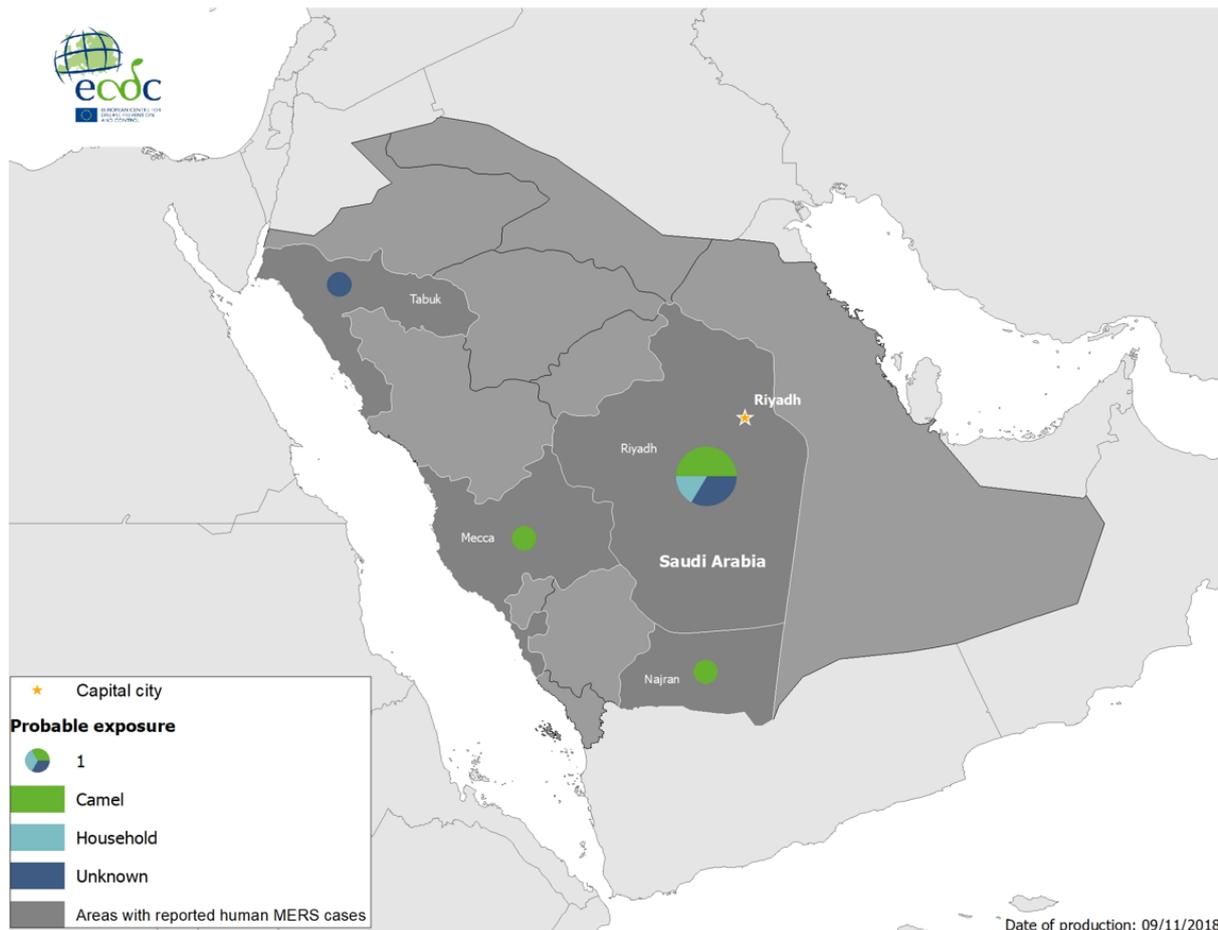
## Distribution of confirmed cases of MERS-CoV by first available month and region, from March 2012 and as of 31 October 2018

ECDC



Geographical distribution of confirmed MERS-CoV cases by probable region of infection and exposure type, month of October 2018

ECDC



The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.