

Special Eurobarometer 488

Report

Europeans' attitudes towards vaccination

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Special Eurobarometer 488

Report

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TABLE OF CONTENTS

INTR	RODUCTION	2
KEY	FINDINGS	4
I. KN	IOWLEDGE ABOUT DISEASES	7
1	Perception of diseases	7
2	Perceived effectiveness of vaccinations	11
II. IN	ICIDENCE OF VACCINATIONS	14
1	Having received vaccinations	14
2	Reasons for getting vaccinated	17
3	Reasons for not getting vaccinated	21
4	Having a vaccination card	25
III. K	NOWLEDGE ABOUT VACCINATION	28
1	Knowing about the effects of vaccines	28
	a. Vaccines are rigorously tested	29
	b. Vaccines do not weaken the immune system	29
	c. Vaccines do not cause diseases against which they protect	30
	d. Vaccines do not often produce serious side effects	31
2	Knowing about the effects of vaccines	34
IV. A	ATTITUDES TOWARDS VACCINATION	36
1	Protection of others	37
2	Protection of those who cannot be vaccinated	38
3	Importance of routine vaccination	39
4	Health issues from not getting vaccinated	40
5	Vaccinations are not only important for children	41
6	Vaccination programmes	44
V. IN	IFORMATION ON VACCINATION AND THE MEDIA	48
1	Use of sources for information	48
2	Most trustworthy ources of information	52
3	Having heard about vaccination in the media	55
VI. C	ONCLUSIONS	59

ANNEXES

Technical specifications

Questionnaire

Tables

INTRODUCTION

Immunization through vaccination is the best defence against diseases that are serious and sometimes fatal, but are preventable, such as diphtheria, tetanus, pertussis, tuberculosis, polio, measles, and hepatitis B. In global terms, the Member States of the European Union enjoy high levels of immunization coverage, but there are parts of the region where coverage is less comprehensive. While a considerable amount of progress has been made in closing this gap, vaccine-preventable diseases still cause deaths in the countries of the European Union as a result of unequal access to vaccines and declining public confidence in their efficacy and safety.

For example, while Europe has been polio-free since 2002, in 2017 there were 89 cases of tetanus in the EU of which 14 were fatal. From February 2018 to January 2019 there were 12266 cases of measles in the EU, of which 33 were fatal. In 2016, 3280 confirmed cases of invasive meningococcal disease (IMD) were reported across 30 EU/EEA Member States, 304 of which were fatal. Around 4.7 million people in the EU/EEA are estimated to be chronically infected with hepatitis B (HBV), and in 2017, 2 486 cases of acute hepatitis B and 15 472 chronic cases were reported by EU/EEA countries. The deaths attributable to hepatitis, including liver disease, exceed those from HIV/AIDS and tuberculosis combined, and the trend is increasing.

While vaccination policy is a competence of national authorities, the EU plays a role in coordinating policies and programmes in this area. In response to the threat to public health posed by outbreaks of vaccine-preventable diseases, the EU is taking action to strengthen cooperation. In December 2018 the Council adopted a Recommendation, accompanied by a Commission Communication, providing guidance for activities to achieve 95% vaccination coverage rates, including routine checks of vaccination status, targeted outreach to vulnerable groups among whom rates of vaccination are lower, strengthening training in vaccinology in national medical curricula, and improving communication activities directed at the layperson¹.

For this initiative to be successful in increasing public confidence in and uptake of vaccination, it is necessary to have a better understanding of the attitudes of Europeans toward vaccines and vaccination. In October 2018 the European Commission published a report, State of Vaccine Confidence in the EU 2018², which assessed the overall state of confidence in vaccines among the public in all 28 EU Member States and among general practitioners in ten Member States. This survey found that the EU has among the lowest confidence in the safety and effectiveness of vaccines worldwide, that levels of confidence vary by vaccine, and that there is a correlation between the confidence of general practitioners in vaccines and the confidence of the general public.

Following on from the Confidence Report, this Special Eurobarometer will investigate not only beliefs about vaccines among citizens of the European Union, but also levels of knowledge and patterns of behaviour. The results will inform improvements in targeted action to strengthen cooperation in the area of vaccine-preventable diseases.

¹ https://eur-lex.europa.eu/legal-content/GA/TXT/?uri=OJ:JOC_2018_466_R_0001

² https://ec.europa.eu/health/sites/health/files/vaccination/docs/2018_vaccine_confidence_en.pdf

- To achieve these goals, the survey asks questions about:
- Europeans' perceptions of vaccine-preventable diseases and of the perceived effectiveness of vaccines,
- Europeans' experiences with vaccination, including whether they or a member of their family has recently been vaccinated, their reasons for getting vaccinated or not getting vaccinated, and whether they have a vaccination card,
- levels of Europeans' knowledge about the effects of vaccines,
- attitudes regarding the importance of vaccinations, whether or not avoiding vaccination leads to serious health issues, and who ought to be vaccinated,
- Europeans' sources of information about vaccines and the extent to which they trust them.

This survey was carried out by the Kantar network in the 28 EU Member States between the 15th and 29th of March 2019. Some 27,524 respondents from different social and demographic groups were interviewed face-to-face at home in their mother tongue. The survey was commissioned by the European Commission, Directorate General for Health and Food Safety (DG SANTE).

The methodology used is that of the Standard Eurobarometer surveys carried out by the Directorate-General for Communication ("Media monitoring and Eurobarometer" Unit)³. It is the same for all countries and territories covered in the survey. A technical note on the manner in which interviews were conducted is appended as an annex to this report. Also included are the interview methods and confidence interval⁴.

<u>Note:</u> In this report, countries are referred to by their official abbreviation. The abbreviations used in this report correspond to:

Belgium	BE	Latvia	LV				
Bulgaria	BG	Luxembourg	LU				
Czechia	CZ	Hungary	HU				
Denmark	DK	Malta	MT				
Germany	DE	The Netherlands	NL				
Estonia	EE	Austria	AT				
Greece	EL	Poland	PL				
Spain	ES	Portugal	PT				
France	FR	Romania	RO				
Croatia	HR	Slovenia	SI				
Ireland	IE	Slovakia	SK				
Italy	IT	Finland	FI				
Republic of Cyprus	CY *	Sweden	SE				
Lithuania	LT	United Kingdom	UK				
Furonean Union – weighted	l average for the 2	8 Mamhar Statas	EU28				
European Union – weighted average for the 28 Member States EU28							

^{*} Cyprus as a whole is one of the 28 European Union Member States. However, the 'acquis communautaire' has been suspended in the part of the country which is not controlled by the government of the Republic of Cyprus. For practical reasons, only the interviews carried out in the part of the country controlled by the government of the Republic of Cyprus are included in the 'CY' category and in the EU28 average.

We wish to thank the people throughout the European Union who have given their time to take part in this survey. Without their active participation, this study would not have been possible.

³ http://ec.europa.eu/commfrontoffice/publicopinion

⁴ The results tables are annexed. It should be noted that the total of the percentages indicated in the tables in this report may exceed 100% when the respondent was able to choose several answers to the same question.

KEY FINDINGS

Half of the Europeans think that the flu and meningitis are still causing deaths in the European Union

- Over half of the respondents are aware that the flu (56%) and meningitis (53%) are still causing deaths, while a minority are aware of this for hepatitis (40%), measles (37%), tetanus (22%) and polio (17%).
- There are considerable country-level differences in the proportions of respondents who mention the flu, meningitis and measles, but tetanus and polio are only mentioned by a minority.
- Higher levels of awareness about vaccinations and media exposure to information about vaccinations are associated with greater awareness of the fatal nature of vaccine-preventable diseases

A majority of respondents in all countries think that vaccines are effective, but the extent of agreement varies considerably

- Nearly nine in ten (85%) of the respondents think that vaccines are effective, with just over a half (52%) saying they are 'definitely' effective and a third (33%) saying they are 'probably' effective.
- A majority of the respondents in all countries agree about the effectiveness of vaccines, but the proportions who think they are definitely effective vary considerably.
- Well educated Europeans, managers and those with high levels of knowledge are more likely to think that vaccines are effective.

The proportion of Europeans who have been vaccinated recently, or whose family members have been vaccinated, varies considerably between countries

- Half (45%) of the Europeans have been vaccinated during the last five years, while just over a quarter (27%) have children who have been vaccinated, and a fifth (20%) have another family member who has been vaccinated. A third (33%) have not been vaccinated and have no family members who have been vaccinated recently.
- In Finland (72%), Germany (69%), and Portugal (67%), at least a third have been vaccinated or have a family member who has been vaccinated. In 12 countries that joined the European Union in 2004 or after, the proportion who have been vaccinated is below the EU28 average, in some cases considerably lower.
- Younger and better educated Europeans are more likely to have been vaccinated or have a family member who has been vaccinated.
- Nearly half (47%) of the Europeans have a vaccination card, but there are considerable differences between countries, from over nine in ten (91%) in Luxembourg to just a quarter (25%) in the United Kingdom.

Around a third of Europeans that have not been vaccinated in the last 5 years do not see the need for vaccination, and this varies widely by country

- Around a third (34%) of those who did not get vaccinated do not see the need for vaccination, while slightly fewer (29%) are still covered by previous vaccines, and just over a fifth (22%) say they were not offered any vaccines by a medical practitioner.
- In countries where awareness of vaccines is high, such as Finland and the Netherlands, the
 respondents are more likely to say they have not had vaccines recently because they were
 already covered.
- There is a considerable education gap on this question: Respondents who finished their education at the age of 20 or more are more likely than those who finished their education at the age of 15 or less to say they were still covered by previous vaccines (36% vs. 17%).

Most Europeans know that vaccines are rigorously tested, but they are less well informed about their effects

- Eight in ten (80%) respondents correctly say it is true that vaccines are rigorously tested before being authorised for use, and a small majority (55%) correctly identify as false the statement that vaccines overload and weaken the immune system.
- However, just under a half (49%) correctly say that it is false to state that vaccines can cause the disease against which they protect, and only a minority (41%) of respondents correctly say that it is false that vaccines can often produce serious side-effects.
 - Sweden and the Netherlands stand out in particular for high levels of knowledge about vaccines, while in many countries – predominantly Eastern Member States – levels of knowledge are low, and particularly so in Latvia, Bulgaria and Cyprus.
 - Levels of knowledge about vaccines are greater among those with higher levels of education, managers, those who belong to higher social classes, those who live in large towns, and those who have heard about vaccination in the media.

Most Europeans think that vaccines are important for all, but there is substantial variation between countries regarding the extent of agreement

- Nearly nine in ten (88%) agree that 'vaccines are important to protect not only yourself but also others', while nearly as many (87%) agree that vaccination of other people is important, as it protects those who cannot be vaccinated.
- Just over eight in ten (82%) agree that it is important for everybody to have routine vaccinations and that not getting vaccinated can lead to serious health issues (81%).
- In all countries, a majority of the respondents agree with the above statements, but Portugal, Finland and the Netherlands stand out for particularly high levels of agreement, while in Austria, Latvia, Romania and Bulgaria agreement is generally lower.
- Less than three in ten (29%) agree with the statement that vaccines are only important for children.

Most Europeans would consult a medical professional for information about vaccines, and most consider them the most trustworthy sources of information

- Nearly eight in ten (79%) of the respondents say that they would consult a general practitioner, doctor or paediatrician about vaccination, and nearly two thirds (65%) regard this source of information the most trustworthy. All other sources of information are mentioned only by a minority.
- Two thirds (65%) of Europeans have heard about vaccines via the media, mostly on TV (51%).

I. KNOWLEDGE ABOUT DISEASES

The first chapter of this report concerns Europeans' perceptions of vaccine-preventable diseases and of the perceived effectiveness of vaccines.

1 Perception of diseases

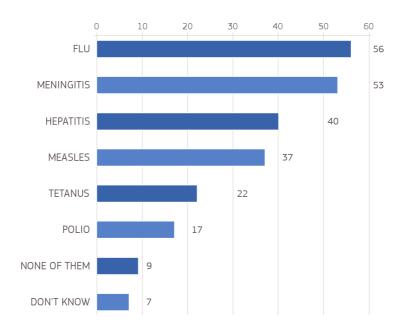
Respondents were asked whether they thought certain vaccine-preventable diseases were still causing deaths in the European Union today⁵.

Half of the Europeans are aware that the flu and meningitis are still causing deaths in the European Union

Over half of the respondents mentioned the flu (56%) and meningitis (53%), while around four in ten mentioned hepatitis (40%) and slightly fewer mentioned measles (37%). Just over a fifth (22%) thought that tetanus was still causing deaths, with less than a fifth (17%) mentioning polio. Less than one in ten (9%) of the respondents said that none of these diseases were still causing deaths, and slightly fewer (7%) do not know if the diseases are causing deaths or not..⁶

QC1 In your opinion, which of the following diseases are still causing deaths in the European Union nowadays? (MULTIPLE ANSWERS POSSIBLE)





Base: all respondents (N=27,524)

⁵ In your opinion, which of the following diseases are still causing deaths in the European Union nowadays? MULTIPLE ANSWERS POSSIBLE Flu, Measles, Polio, Hepatitis, Meningitis, Tetanus, None of them, Don't know.

⁶ All diseases that were answer options are still causing death in Europe, with the exception of Polio.

In 17 of the 28 Member States the disease most frequently thought to be still causing deaths is the flu. In Cyprus (84%), France (85%) and Greece (87%), over eight in ten respondents mention this, around double the proportion of those who mention it in Poland (44%), where it is nevertheless still the most common response. In seven countries less than half of the respondents mention the flu, but this ranges from nearly half (49%) of the respondents in Austria to less than a fifth (15%) of the respondents in Italy. Only in Italy the flu is not among the top three responses.

There are considerable country-level differences in the proportions of respondents who mention meningitis. The Netherlands stands out for a particularly large proportion giving this answer, at over eight in ten (82%) of the respondents . In Ireland (66%), Finland (68%) and Sweden (71%) two thirds or more of the respondents give this answer. In ten Member States, the proportion who mention meningitis is a minority, ranging from just over a quarter (26%) of the respondents in Poland to over four in ten (45%) of the respondents in Bulgaria. Meningitis is the most common response in ten countries, and the second most common in 11 countries.

In all but five Member States less than half of the respondents mention hepatitis, ranging from less than a quarter (23%) in Malta to nearly half of the respondents in Greece (47%), the United Kingdom (47%) and Denmark (49%). In Luxembourg and Latvia, (50%) half of the respondents give this answer, while Portugal, in which this is the most frequent response, stands out with more than six in ten (62%) mentioning hepatitis.

There are large country-level disparities in the proportions of respondents who say that measles still causes deaths in the European Union. In Spain, less than one in ten (9%) of respondents give this answer, as do slightly over one in ten of the respondents in Malta (11%) and Cyprus (12%). In all but four countries only a minority of the respondents give this response, the exceptions being Finland (50%), Germany (52%), Denmark (53%) and in particular Sweden (61%). This is the third most common response in 11 countries, and the second most common in five.

In all countries only a minority of respondents say that tetanus is still causing deaths, but this ranges from less than one in ten of the respondents in Cyprus (5%), Malta (6%) and Spain (7%) to over a third in Portugal (34%) and nearly four in ten (38%) in the Czech Republic, where this is the third most frequently mentioned disease. In most countries between one in ten (10%) and a third (33%) of the respondents give this answer.

In Portugal, a third (33%) of the respondents say that polio is still causing deaths in the European Union. Elsewhere, no more than a quarter (25%) of respondents give this answer, with particularly low levels in Malta (4%) and Spain (5%).

Less than a fifth of respondents in all countries think that none of these diseases are causing deaths in the European Union, with the largest proportions of respondents giving this answer in Hungary (19%), Croatia (18%) and Spain (17%). In 17 of the 28 Member States, no more than one in ten (10%) give this response, with particularly low levels in Greece and France (both 2%).

In all but three countries, no more than one in ten (10%) of the respondents say that all of these diseases still cause deaths in the European Union. The exceptions are the Netherlands (13%), Lithuania (15%) and Portugal (23%). In Spain (1%), Cyprus and Malta (both 2%) very few of the respondents give this response.

In Portugal, nearly three in ten (28%) say that at least five of the diseases mentioned here still cause deaths, as do over a fifth of the respondents in Lithuania (22%) and the Netherlands (23%). In most cases, a minority of the respondents say that at least three of these diseases cause deaths, ranging from just over one in ten (13%) of the respondents in Malta to nearly half of the respondents in Denmark (48%) and France (48%). In Germany (50%), Luxembourg (50%) and Portugal (51%), around half of the respondents give this answer, while the Netherlands (59%) and Sweden (61%) stand out for the highest proportions of those who think that at least three of these diseases still cause deaths. In all countries, at least two thirds of the respondents think that at least one of these diseases still

causes deaths. Poland stands out for a somewhat lower figure, with only 68% giving this answer compared with three-quarters (75%) or more elsewhere. In eight Member States over nine in ten (90%) give this answer, with the highest figure in Greece, where nearly all (96%) do.

QC1 In your opinion, which of the following diseases are still causing deaths in the European Union nowadays?

(MULTIPLE ANSWERS POSSIBLE) (%)

(MULTIPLE ANSWI	ווככטד כאב	(70)							
	Flu	Measles	Polio	Hepatitis	Meningitis	Tetanus	None of them	Don't Know	All of them
EU28	56	37	17	40	53	22	9	7	7
BE	64	37	15	45	52	22	10	1	7
BG	50	44	17	34	45	20	7	18	8
cz	63	36	19	37	55	38	7	5	10
DK	54	53	14	49	63	19	10	5	7
DE	70	52	21	42	55	29	4	5	10
EE =	73	42	18	36	32	24	5	8	10
IE 🔲	54	43	15	41	66	17	9	6	7
EL 🝱	87	24	24	47	57	15	2	2	5
ES 🐁	46	9	5	39	40	7	17	8	1
FR	85	47	12	42	53	22	2	4	7
HR 🌉	60	24	14	30	29	15	18	3	4
IT	15	29	18	33	63	25	15	7	4
CY	84	12	10	38	35	5	5	4	2
LV	76	16	13	50	33	19	6	5	7
LT	74	44	22	44	58	32	5	3	15
LU	75	39	15	50	52	32	6	5	10
HU	30	30	16	39	53	19	19	7	6
MT	40	11	4	23	58	6	4	15	2
NL	74	45	25	51	82	28	4	2	13
AT	49	37	16	35	54	28	13	6	4
PL PT	44	32	9	28 62	26	14	13 7	19	4
	56 58	39 34	33		61	34	10	12	23
RO		41	21	38 34	33 32	18 18	16	11 5	10
SI E	64 59	41	13 21	30	34	30	10	5 4	8 5
FI =	44	50	20	43	68	27	5	3	8
SE	68	61	16	53	71	30	5	3	9
UK	55	34	19	47	63	22	6	11	9
1st MOST F				nd MOST F				OST FREQU	
	NED ITEM				NED ITEM			NTIONED I	
			.,						

Base: all respondents (N=27,524)

There are some considerable socio-demographic differences in the proportions of respondents who mention specific diseases as potentially fatal.

• Women are more likely than men to say that measles (41%, compared with 33%) and meningitis (56%, compared with 49%) are still causing deaths.

- Respondents aged between 15 and 24 are less likely than those in older age groups to say that measles (28%, compared with 34%-41%) or meningitis (43%, compared with 52%-58%) are still fatal diseases in the European Union.
- There are considerable differences between educational groups in most, but not all, cases. The proportion of those who stayed in education after the age of 20 who answer affirmatively is greater than the proportion of those who left education at or before the age of 15 in the cases of the flu (64% vs. 49%), measles (44% vs. 30%), hepatitis (45% vs. 38%) and meningitis (59% vs. 51%). The better educated are also slightly more likely to say that at least one of these diseases still causes deaths (87% vs. 82%).
- Those with children are not more likely than those without children to think that these diseases are still fatal. High levels of knowledge about vaccines and exposure to media coverage about vaccinations are associated with greater awareness of the fatal nature of these diseases: While 86% of those with high knowledge of vaccines and 88% of those who have been exposed to information in the media say that at least one of these diseases still causes deaths in the European Union, only 71% of those with low knowledge and 77% of those who have heard about vaccinations give this response.

QC1 In your opinion, which of the following diseases are still causing deaths in the European Union nowadays? (MULTIPLE ANSWERS POSSIBLE) (% - EU)

	Flu	Measles	Polio	Hepatitis	Meningitis	Tetanus	All of them	At least one
EU28	56	37	17	40	53	22	7	84
Gender								
Man	56	33	16	39	49	22	7	83
Woman	57	41	17	41	56	23	8	85
⊞ Age					,			
15-24	47	28	17	36	43	21	6	80
25-39	57	34	16	42	52	20	6	84
40-54	60	38	17	42	58	22	8	86
55 +	57	41	17	40	53	24	8	84
Education (End of)								
15-	49	30	16	38	51	21	6	82
16-19	55	36	17	40	51	22	7	84
20+	64	44	17	45	59	23	8	87
Still studying	48	29	16	35	44	21	5	81
Household situation								
Single Household without children	54	33	16	39	48	21	6	83
Single Household with children	59	33	17	41	55	24	8	84
Multiple Household without children	56	40	18	41	51	23	8	83
Household with children	58	38	16	40	58	22	7	86
Vaccinated in past 5 years								
Yes, yourself	63	42	18	44	57	25	8	89
Yes, your children	63	43	17	44	61	24	8	89
Yes, someone else	67	43	18	47	58	25	9	90
No	47	31	15	35	47	20	6	77
Index Knowledge about vaccines								
High knowledge	58	41	16	42	56	23	. 7	86
Medium knowledge	56	35	19	40	52	23	8	85
Low knowledge	48	25	13	33	43	19	7	71
Heard about vaccination in media								
Yes	61	44	18	43	56	25	8	88
No	48	24	14	36	46	18	5	77
	Ва	se: all resp	oondents (i	N=27,524))			

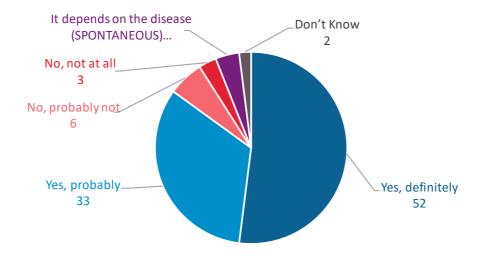
2 Perceived effectiveness of vaccinations

The Respondents were then asked whether they thought that vaccines were effective in preventing the diseases mentioned in the previous question⁷.

A majority of the respondents in all countries think that vaccines are effective, but the extent of agreement varies considerably

Just over half (52%) of the respondents agree that vaccines are definitely effective in preventing these diseases, and a further third (33%) say that they are probably effective. Less than one in ten give a negative answer, with 6% saying they are probably not effective and 3% saying they are not at all effective, while 4% say that it depends on the disease.





Base: all respondents (N=27,524)

In all countries, a majority of respondents express some degree of agreement with the claim that vaccines can be effective in preventing these diseases, but the extent of this agreement varies considerably. In 15 countries, over half (50%) of the respondents think that vaccinations are definitely effective in preventing these diseases, from just over half in Ireland (51%) and the Czech Republic (52%) to over two thirds of the respondents in Spain (69%) and Sweden (70%) and over three quarters in the Netherlands (76%) and Denmark (81%). At the other end of the scale, less than a third (32%) of the respondents in Austria say that vaccinations are definitely effective, and in Latvia less than a quarter (24%) do so.

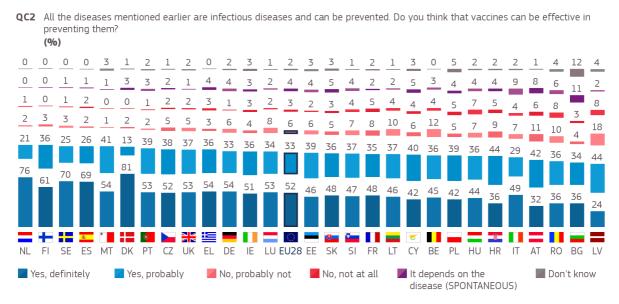
There is less variation in the proportions of respondents who express qualified agreement. In all countries, less than half of the respondents give this answer, varying from just over one in ten (13%)

⁷ QC2. All the diseases mentioned earlier are infectious diseases and can be prevented. Do you think that vaccines can be effective in preventing them? ONE ANSWER ONLY Yes, definitely; Yes, probably; No, probably not; No, not at all; It depends on the disease; Don't know.

of respondents in Denmark to over four in ten of the respondents in Malta (41%), Austria (42%), Croatia (44%) and Latvia (44%).

In three countries, Denmark, Finland and Malta, none of the respondents express total disagreement with the idea that vaccines are effective against these diseases. In all other cases, less than one in ten respondents give this answer, with the highest figures in Latvia (8%) and Romania (8%). Latvia stands out for a particularly high proportion of respondents who think that these vaccines are probably not effective, with nearly a fifth (18%) giving this answer, as do over one in ten respondents in Austria (11%) and Belgium (12%). In all other countries no more than one in ten (10%) give this response, with the lowest figure in Malta (1%).

In most cases, no more than 5% of respondents say that whether vaccines are effective depends on the disease. Austria (8%), Italy (9%) and Bulgaria (11%) stand out for a relatively high proportion of respondents who give this answer, but in Finland and the Netherlands none of the respondents do so. Bulgaria also has a particularly large minority (12%) of respondents who do not know what answer to give to this question, but elsewhere few respondents give this answer.



Base: all respondents (N=27,524)

There are few considerable socio-demographic differences on this question, with the most prominent differences occurring in the case of those who express definite agreement.

- Nearly six in ten (59%) of those who completed their education at or after the age of 20, definitely agree that vaccines prevent the infectious diseases in question, compared with only half (50%) of those who completed their education at or before the age of 15.
- Among occupational groups, managers (61%) are considerably more likely than manual workers (46%) and the unemployed (46%) to give this answer.
- Levels of knowledge are strongly associated with agreement: over two thirds (68%) of those who have high knowledge about vaccines say that they are definitely effective, compared with less than a fifth (19%) of those with low levels of knowledge. The same is true of those who have been exposed to media coverage about vaccines (57%) compared with those who have not (44%).

QC2 All the diseases mentioned earlier are infectious diseases and can be prevented. Do you think that vaccines can be effective in preventing them?

(% - EU)

	Yes, definitely	Yes, probably
EU28	52	33
Education (End of)		
15-	50	33
16-19	48	36
20+	59	30
Still studying	52	37
Socio-professional categ	ory	
Self-employed	54	32
Managers	61	29
Other white collars	51	35
Manual workers	46	36
House persons	52	31
Unemployed	46	37
Retired	54	32
Students	52	37
Index Knowledge about	vaccines	
High knowledge	68	26
Medium knowledge	43	41
Low knowledge	19	38
Heard about vaccination	in media	
Yes	57	31
No	44	37
Base: all respondent	s (N=27,52	24)

II. INCIDENCE OF VACCINATIONS

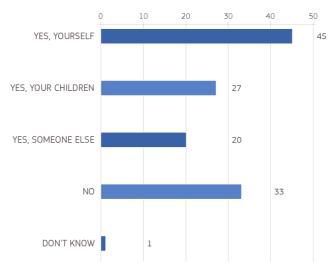
This chapter looks at Europeans' experiences with vaccination, including whether they or a member of their family has recently been vaccinated, their reasons for getting vaccinated or not getting vaccinated, and whether they have a vaccination card.

1 Having received vaccinations

The proportion of Europeans who have been vaccinated recently, or whose family members have been vaccinated, varies considerably between countries

First, respondents were asked whether they or a family member had been vaccinated in the last five years⁸. Two thirds (66%) of the respondents give at least one answer to this question, with nearly half (45%) saying that they themselves had received a vaccination, just over a quarter (27%) saying that their children had received a vaccination, and a fifth (20%) saying that someone else in their family had been vaccinated. A third (33%) of the respondents say that nobody in their family, including themselves, has been vaccinated in the last five years.

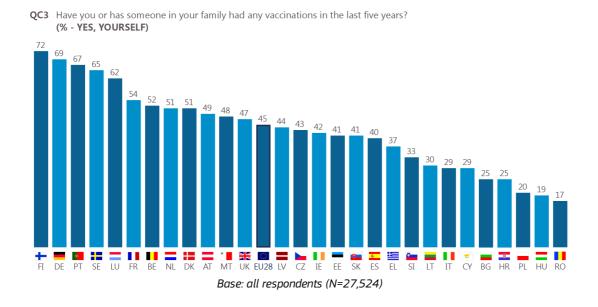




Base: all respondents (N=27,524)

⁸ QC3. Have you or has someone in your family had any vaccinations in the last five years? MULTIPLE ANSWERS POSSIBLE Yes, yourself; Yes, your children; Yes, someone else; No; Don't know.

There is considerable variation at the country level when comparing the proportions of those who say that they have been vaccinated in recent years. In 25 of the 28 Member States, at least a quarter of the respondents give this response, but the figure varies from below one in five in Romania (17%), and Hungary (17%) to over two thirds in Finland (72%), Germany (69%) and Portugal (67%).



There are some considerable socio-demographic differences on this question:

- The youngest (58%) are most likely to have received personally a vaccination in the last five years, followed by the oldest (48%, compared with 39-40% among the other age groups)
- Those with the lowest level of education are nearly equally likely to have had a vaccination as those with the highest level (47% and 46%)
- Respondents that say they have never difficulties paying bills are more likely to have had vaccinations (49%), compared to those that have most of the time difficulties (38%) or from time to time (35%)
- Those with high knowledge about vaccines more often have had a vaccination (51%), especially compared to this with low knowledge (26%)
- Respondents have heard about vaccination in the media, have had vaccinations more often (48%) then those who did not (39%)

QC3 Have you or has someone in your family had any vaccinations in the last five years? (MULTIPLE ANSWERS POSSIBLE) (% - EU)

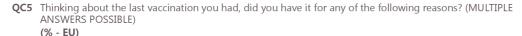
	Yes, yourself	Yes, your children	Yes, someone else	o Z
EU28	45	27	20	33
⊞ Age				
15-24	58	6	26	26
25-39	40	44	18	27
40-54	39	46	17	31
55 +	48	12	20	40
Education (End of)				
15-	47	14	16	40
16-19	40	29	17	36
20+	46	37	23	27
Still studying	60	3	27	24
☑ Difficulties paying bills				
Most of the time	38	27	15	39
From time to time	35	27	16	40
Almost never/ Never	49	27	22	30
Index Knowledge about v	accines			
High knowledge	51	30	23	27
Medium knowledge	43	25	17	35
Low knowledge	26	18	14	50
Heard about vaccination	in media			
Yes	48	30	22	28
No	39	21	15	42

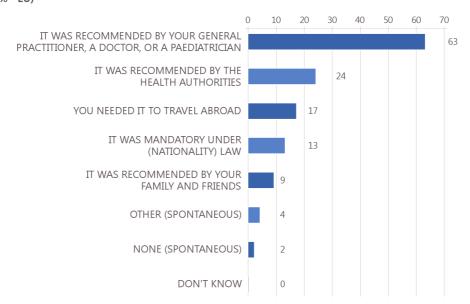
2 Reasons for getting vaccinated

Those respondents who said that they had personally received a vaccine during the last five years were asked about their reasons for doing this⁹.

Nearly two thirds of Europeans who have recently been vaccinated did so on the recommendation of a medical professional

By far the most common response to this question is that vaccinations were recommended by a medical practitioner. Nearly two thirds (63%) of the respondents give this response. Other responses are mentioned by less than a quarter of the respondents, with the next highest proportion saying that they had been vaccinated on the recommendation of the health authorities (24%), followed by those who needed it to travel abroad (17%), those who had it because it was mandatory (13%) and those who were vaccinated because it was recommended by family and friends (9%). Very few respondents give other answers (4%) or say that they did not have a particular reason (2%).





Base: those who received a vaccination in the last five years (12,368 respondents)

In all but two countries, the reason most frequently cited for having a vaccination is that it was recommended by a general practitioner, doctor or paediatrician, and in all but five countries a majority of respondents give this answer. The notable exceptions are Finland and Sweden, where only a quarter (25%) mention this reason, and where it is only the third most frequently mentioned item. In four countries, more than three quarters (75%) give this reason: in Hungary (78%), Slovakia (78%), Germany (79%) and Greece (86%).

⁹ Q5. Thinking about the last vaccination you had, did you have it for any of the following reasons? MULTIPLE ANSWERS POSSIBLE It was recommended by the health authorities, It was mandatory under (NATIONALITY) law, You needed it to travel abroad, It was recommended by your general practitioner, a doctor, or a paediatrician, It was recommended by your family and friends, Other, None, Don't know.

In 16 of the 28 Member States, the second most frequently mentioned reason is that vaccination was recommended by the health authorities, and this is the most frequently mentioned reason in Finland (50%) and Sweden (52%). However, few of the respondents in Bulgaria (9%) or Germany (10%) give this answer.

In seven countries, the second most frequently mentioned reason for vaccination is that it was mandatory to do so. Bulgaria (37%) and Portugal (40%) stand out for a particularly high proportion of respondents who give this answer, but in most countries less than a quarter do, and in 10 countries the proportion who give this response is less than one in ten (10%).

There is a similar pattern in the case of respondents who say that they needed vaccinations to travel abroad. In Denmark (36%), the Netherlands (37%) and Sweden (38%), over a third had vaccinations for travel purposes, but in 13 of the 28 Member States less than one in ten (10%) give this answer.

In Estonia (21%), Lithuania and Romania (both 21%), over a fifth of respondents were vaccinated on the recommendation of their family and friends, but in 12 countries less than one in ten (10%) give this response, with particularly low proportions in Portugal (4%) and the United Kingdom (4%).

In most cases, only a small minority of respondents mention other reasons for vaccination, or say that they do not know why they were vaccinated. However, in Estonia a fifth (20%) of the respondents give other reasons.

QC5 Thinking about the last vaccination you had, did you have it for any of the following reasons? (MULTIPLE ANSWERS POSSIBLE) (%)

(MOLITI LL ANSWI	ווככט ו כאב	DLL) (10)					1	
	It was recommended by the health authorities	It was mandatory under (NATIONALITY) law	You needed it to travel abroad	It was recommended by your general practitioner, a doctor, or a paediatrician	It was recommended by your family and friends	Other (SPONTANEOUS)	None (SPONTANEOUS)	Don't Know
EU28	24	13	17	63	9	4	2	0
BE	22	13	22	68	7	4	1	-
BG	9	37	7	65	10	0	1	2
CZ	12	23	14	64	12	4	2	
DK	40	9	36	48	13	7	-	0
DE	10	7	17	79	11	4	4	0
EE ==	26	6	11	40	21	20	6	1
IE	34	5	19	63	12	1	0	0
EL 🔚	22	8	6	86	13	8	1	-
EL ES FR HR IT CY LV LT LU HU MT NL AT PL PT	24	9	7	71	7	4	1	-
FR	32	22	14	56	6	5	2	0
HR 🐺	34	24	4	66	16	1	2	
IT	25	21	18	61	14	0	1	-
CY 😴	18	13	5	59	7	9	3	-
LV	18	23	6	56	12	13	2	1
LT	17	11	10	58	21	11	4	-
LU	24	18	28	65	8	4	1	-
HU	10	15	8	78	8	3	1	-
MT *	47	11	9	54	8	3	0	7
NL	41	4	37	47	5	1	1	-
AT	29	6	24	63	14	6	2	-
PL	22	24	8	53	12	3	3	-
PT	17	40	4	58	4	2	0	0
RM	27	15	5	70	21	4	1	-
SI 🔤	28	19	6	53	17	11	2	-
SK 😃	10	28	8	78	9	2	0	-
FI 🖶	50	10	29	25	8	7	2	0
SE	52	5	38	25	15	8	1	0
UK 🕌	32	7	20	54	4	2	1	1
1st MOST F		LY		OST FREQU			OST FREQ	
	NED ITEM			NTIONED IT			NTIONED	
aco those who re	רפועפל מ	vaccina	rion in th	p inst tiv	D VIDATE I	1/568	rosnondo	oritc i

Base: those who received a vaccination in the last five years (12,368 respondents)

The most considerable socio-demographic differences on this question are as follows:

- Just over a quarter (26%) of respondents aged between 15 and 24 say that they were vaccinated because it was mandatory, compared with less than one in ten (6%) of those aged 55 or more. On the other hand, the oldest cohort is much more likely to have been vaccinated recently on the advice of a medical practitioner (69%, compared with 53% of those aged 15 to 24).
- Respondents who finished their education at the age of 20 or more are more likely than those who finished at the age of 15 or less to mention recommendation from the health authorities (30%, compared with 19%) or the need to travel abroad (27%, compared with 4%) as their reason for vaccination, while those with lower levels of education are considerably more likely to mention advice from a medical practitioner (76%, compared with 56%).
- Subjective social class membership has a considerable relationship with these answers. Only just over a fifth of the working class or lower middle class (22%) mention recommendation

from the health authorities as their reason for vaccination, compared with nearly half (47%) of those belonging to the upper class. There is a similar pattern in the case of recommendation by family and friends (9%, compared with 22%). On the other hand, working class and lower middle class respondents are more likely than those in the upper class to say that they were vaccinated on the recommendation of a medical practitioner (68%, compared with 47%).

Thinking about the last vaccination you had, did you have it for any of the following reasons? (MULTIPLE ANSWERS POSSIBLE) (% - EU)

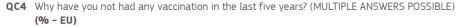
	It was recommended by the health authorities	It was mandatory under (NATIONALITY) law	You needed it to travel abroad	It was recommended by your general practitioner, a doctor, or a paediatrician	It was recommended by your family and friends
EU28	24	13	17	63	9
⊞ Age					
15-24	22	26	20	53	14
25-39	26	17	25	58	8
40-54	25	14	19	64	8
55 +	24	6	11	69	8
Education (End of)					
15-	19	7	4	76	8
16-19	22	13	12	67	9
20+	30	13	27	56	8
Still studying	24	26	22	53	15
Consider belonging to					
The working class	22	12	9	68	9
The lower middle class	22	14	10	68	7
The middle class	24	14	19	63	10
The upper middle class	32	10	38	49	10
The upper class	47	7	27	47	22

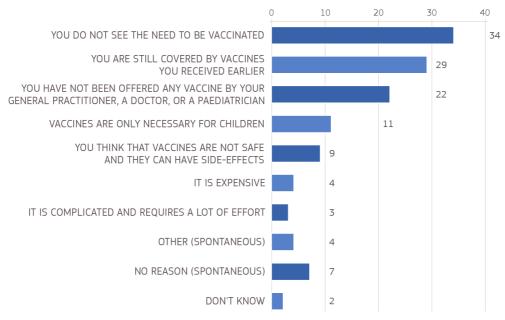
3 Reasons for not getting vaccinated

Those respondents who said they had not been vaccinated in the last five years were asked why they had not done so¹⁰.

Around a third of unvaccinated Europeans do not see the need for vaccination, and this varies widely by country

The most frequently mentioned reason for not getting vaccinated is that the respondent does not see the need for it. Just over a third (34%) give this response. Slightly fewer (29%) are still covered by previous vaccines. Just over a fifth (22%) say they were not offered any vaccines by a medical practitioner. Just over one in ten (11%) believe vaccines are only necessary for children, and less than one in ten of the respondents mention any other reasons.





Base: those who did not receive a vaccination in the last five years (15,156 respondents)

There are considerable country-level differences in the proportions of respondents who say they were not vaccinated because they do not see the need for it, which is the most frequently mentioned response in 19 of the 28 Member States. The proportion of respondents who give this answer ranges from less than a fifth (17%) in Bulgaria (the only country in which this response is not among the three most frequently given) to over half of the respondents in Malta (54%), Denmark (55%), Lithuania (56%), Sweden (57%) and over six in ten in Slovenia (63%).

¹⁰ Q4. Why have you not had any vaccination in the last five years? MULTIPLE ANSWERS POSSIBLE You are still covered by vaccines you received earlier, You do not see the need to be vaccinated, You think that vaccines are not safe and they can have side-effects, Vaccines are only necessary for children, You have not been offered any vaccine by your general practitioner, a doctor, or a paediatrician, It is expensive, It is complicated and requires a lot of effort, None, No reason, Don't know.

In eight countries, the most frequently mentioned response is that the respondent is still covered by previous vaccines, and in 12 countries this is the second most frequently mentioned response. In two countries, Finland (56%) and the Netherlands (53%), over half of the respondents mention this as a reason for not having vaccinations. In all other cases only a minority of respondents give this answer, but this ranges from nearly half of the respondents in Germany (45%) and Denmark (47%) to less than one in ten (6%) in Lithuania.

In ten countries, the second most frequently mentioned response is that no vaccine was offered, and this is the third most frequent response in a further 13 countries. In all countries, a minority of respondents give this answer, but this ranges from less than one in ten respondents in Finland (5%) and Poland (9%) to over a third in Portugal (36%), where this is the most common response, and four in ten of those surveyed in Greece (40%).

In all but one country less than a fifth (20%) of respondents say that they were not vaccinated because they do not believe vaccines are safe. The exception is France, where over a fifth (22%) give this response. At the other end of the scale, very few people in Denmark (3%) or the United Kingdom (3%) say that they were dissuaded from getting vaccinated because of safety considerations.

There is a similar distribution among those who think vaccines are only necessary for children. In Bulgaria (21%), Poland (21%) and Italy (23%) over a fifth of respondents gave this answer, but in all other countries less than a fifth mention this reason for not being vaccinated, with almost no respondents in Malta (1%) and Sweden (1%) giving this answer.

In all but three cases no more than one in ten (10%) say that they did not get vaccinated because it was too expensive. In Romania, just over one in ten (11%) give this response, while in Lithuania (19%) and Latvia (20%) around a fifth do. In 17 of the 28 Member States less than 5% of respondents mention this reason.

QC4 Why have you not had any vaccination in the last five years? (MULTIPLE ANSWERS POSSIBLE) (%)

	You are still covered by vaccines you received earlier	You do not see the need to be vaccinated	You think that vaccines are not safe and they can have side-effects	Vaccines are only necessary for children	You have not been offered any vaccine by your general practitioner, a doctor, or a paediatrician	lt is expensive	It is complicated and requires a lot of effort	Other (SPONTANEOUS)	No reason (SPONTANEOUS)	Don't Know
EU28	29	34	9	11	22	4	3	4	7	2
BE	38	27	15	13	30	4	8	2	2	0
BG	29	17	8	21	24	5	3	1	10	7
CZ	44	29	9	6	32	10	1	4	1	1
DK	47	55	3	2	13	4	2	4	3	1
DE	45	25	10	3	18	1	2	4	13	1
EE ==	24	26	10	8	19	7	3	12	12	3
IE	21	37	7	9	22	4	2	3	5	4
EL	28	49	12	11	40	1	2	5	2	-
ES 🔼	25	49	4	3	34	1	-	5	3	1
FR	42	26	22	2	18	0	2	6	4	3
HR 🌉	29	45	14	11	22	4	4	3	5	2
IT 🔣	15	29	7	23	25	3	4	2	13	1
CY	27	43	11	9	29	3	1	3	5	1
LV	11	46	15	8	18	20	3	8	4	1
LT 📉	6	56	12	14	13	19	5	7	4	1
LU	43	23	10	4	18	2	3	12	5	2
HU	29	43	10	15	23	8	3	1	9	1
MT	22	54	9	1	14	1	1	6	8	4
NL	53	23	5	3	32	0	1	8	4	1
AT	30	33	13	13	27	10	7	2	10	3
PL	28	34	7	21	9	10	3	4	6	4
PT	25	20	5	4	36	1	-	7	13	2
RO	10	35	14	16	26	11	8	5	9	4
SI ===	17	63	14	6	15	8	1	4	5	0
SK 😃	29 56	35	10	14	26	6	5	5	2	3
FI		24	7	2	5	1	1	9	4	3
SE UK	44	57	14	1 5	18	3	3	5	3	1
UK 1st MOST I	29	38	3		19 REQUENTI	1	3	3 D MOST F	6 REQUENT	5
	NED ITEM		Zr		-REQUENTI NED ITEM	_1	3 K	MENTION		LT
Describer 10	who did o	-4		ostion in	ALD ITEM	·	- (15 156	MENTION		

Base: those who did not receive a vaccination in the last five years (15,156 respondents)

The socio-demographic differences on this question are as follows:

- Younger respondents are more likely not to have had any vaccinations in the last five years because they are still covered by previous vaccinations. Over a third (35%) of those between 15 and 24 give this answer, compared with just under a quarter (24%) of respondents aged 55 or more. There is a similar pattern in the case of those who say they were not offered any vaccines by a medical practitioner (28%, compared with 19%). On the other hand, older respondents are more likely to say that they did not see the need to be vaccinated. Nearly four in ten (38%) of those aged 55 or more give this response, compared with less than a quarter (24%) of those aged between 15 and 24.
- Those who finished their education at the age of 20 or more are more likely than those who finished their education at the age of 15 or less to say they were still covered by previous

- vaccines (36%, compared with 17%), but less likely to say that they did not see the need to be vaccinated (33%, compared with 39%).
- Levels of knowledge and exposure to information about vaccines play an important role. Over a third (36%) of those with high knowledge about vaccines say that they were still covered by vaccines they received earlier, compared with less than a fifth (15%) of those with low knowledge of vaccines. There is a similar pattern in the case of media exposure, with over a third (34%) of those who have heard about vaccines in the media giving this response, compared with less than a quarter (23%) of those who have not heard about them. Respondents with high levels of knowledge about vaccines are also more likely to say that they have not been offered any vaccines by a medical practitioner (25%, compared with 14%). On the other hand, those with low levels of knowledge about vaccines are more likely to say that they have not been vaccinated because they do not see the need to do this (42%, compared with 31%) or because they do not think that vaccines are safe (22%, compared with 3%).

QC4	Why have you not had any vaccination in the last five years? (MULTIPLE ANSWERS POSSIBLE) (% - EU)									
		You are still covered by vaccines you received earlier	You do not see the need to be vaccinated	You think that vaccines are not safe and they can have side-effects	Vaccines are only necessary for children	You have not been offered any vaccine by your general practitioner, a doctor, or a paediatrician	lt is expensive	It is complicated and requires a lot of effort		
EU28		29	34	9	11	22	4	3		
⊞ Age										
15-24		35	24	8	11	28	5	5		
25-39		31	34	11	12	22	4	3		
40-54		32	33	8	10	25	3	2		
55 +		24	38	9	11	19	4	3		
E duca	ition (End of)									
15-		17	39	7	12	20	3	2		
16-19		28	35	10	11	22	5	3		
20+		36	33	10	10	23	3	3		
Still study	ring	38	24	7	10	31	3	4		
Index	Knowledge about	vaccines								
High know	wledge	36	31	3	11	25	3	3		
Medium k	knowledge	27	35	11	11	22	4	3		
Low know	vledge	15	42	22	8	14	4	2		
Heard	l about vaccinatior	n in media								
Yes		34	33	10	12	23	4	3		
No		23	36	8	10	23	4	2		

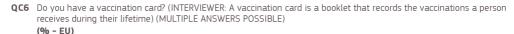
Base: those who did not receive a vaccination in the last five years (15,156 respondents)

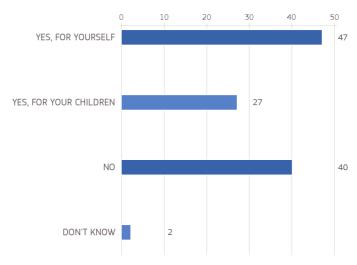
4 Having a vaccination card

All respondents were asked if they had a vaccination card, which is a booklet that records the vaccinations a person receives during their lifetime¹¹.

Nearly half of the Europeans have a vaccination card, but there are very large differences between countries

Nearly half (47%) of the respondents say that they have a vaccination card that records their own details, while just over a quarter (27%) have one for their children's records. Four in ten (40%) respondents do not have a vaccination card at all.



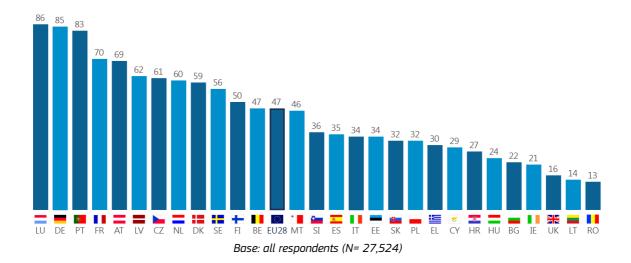


Base: all respondents (N= 27,524)

When looking at those who answered 'Yes, for yourself', there is a very wide country-level spread of responses. The highest proportion of respondents who have a record of their vaccinations is found in Luxembourg, where 86% give this response, closely followed by Germany (85%) and Portugal (83%). In six countries, less than a fifth of respondents say that they have a vaccination card, with the lowest proportions in Romania (13%), Lithuania (14%) and the United Kingdom (16%).

¹¹ Q6. Do you have a vaccination card? MULTIPLE ANSWERS POSSIBLE Yes, for yourself; Yes, for your children; No; Don't know

QC6 Do you have a vaccination card? (% - YES, FOR YOURSELF)



The socio-demographic differences on this question are as follows:

- Women are slightly more likely than men to personally have a vaccination card (49%; compared with 46%)
- The youngest most often have a vaccination card (63%; compared with 41% among those aged 55 years or older)
- Education has a considerable impact on whether respondents have or have not a vaccination card. More than half of those who finished education age 20 or older have a vaccination card (53%), while this is the case for only one third of those who finished education age 15 or below (34%)
- Nearly six in ten (59%) of respondents who were vaccinated during the last five years have a vaccination card, compared with just under a quarter (24%) of those who have not been vaccinated during this period.
- The higher the knowledge about vaccines, the more often respondents have personally a vaccination card (51%; compared with 33% of those with low knowledge)
- Having heard about vaccination in the media also relates to the fact whether respondents have a vaccination card or not (51%, compared with 40%)

QC6 Do you have a vaccination card? (MULTIPLE ANSWERS POSSIBLE) (% - EU)

	Yes, for yourself	Yes, for your children	o Z
EU28	47	27	40
Gender Gender			
Man Woman	46 49	23 30	42 37
🛗 Age			
15-24 25-39 40-54 55 +	63 50 46 41	5 40 48 12	29 30 34 52
Education (End of)			
15- 16-19 20+ Still studying	34 43 53 68	15 29 37 2	56 42 31 25
Vaccinated in past 5 years			
Yes, your self Yes, your children Yes, someone else No	69 55 60 24	27 79 29 10	25 14 32 68
Index Knowledge about va			
High knowledge Medium knowledge Low knowledge	51 47 33	29 26 19	36 40 52
Heard about vaccination in		,	
Yes No	51 40	31 20	35 48

III. KNOWLEDGE ABOUT VACCINATION

The third chapter of this report presents findings concerning how knowledgeable Europeans are about the effects of vaccines. Respondents were asked whether they thought four statements about the effects of vaccines were true or false¹².

1 Knowing about the effects of vaccines

Most Europeans know that vaccines are rigorously tested, but they are less well informed about their effects

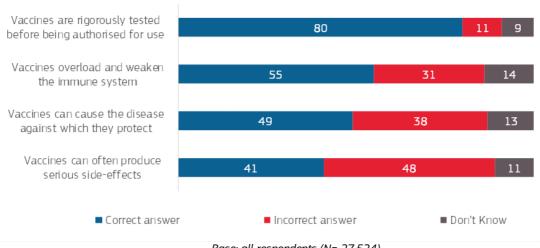
Eight in ten (80%) respondents correctly identify as true the statement that vaccines are rigorously tested before being authorised for use. Just over one in ten (11%) give an incorrect answer, while slightly fewer (9%) say that they do not know.

A small majority (55%) of respondents correctly identify as false the statement that vaccines overload and weaken the immune system. Just under a third (31%) incorrectly think it is false, and over one in ten (14%) say that they do not know whether it is true or false.

Just under half (49%) correctly say that it is false to state that vaccines can cause the disease against which they protect, while just under four in ten (38%) think that this statement is true, and just over one in ten (13%) do not know the answer to this question.

A minority (41%) of respondents correctly say that it is not true that vaccines often produce serious side-effects. A slightly larger proportion give an incorrect answer to this question, at just under half (48%) of those polled. Just over one in ten (11%) do not know what answer to give to this question.





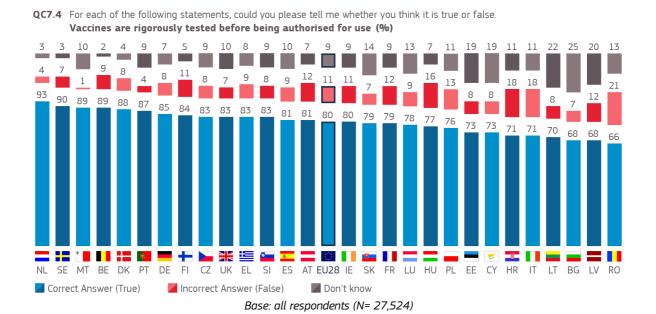
Base: all respondents (N= 27,524)

¹² Q7. For each of the following statements, could you please tell me whether you think it is true or false. Vaccines overload and weaken the immune system; Vaccines can cause the disease against which they protect; Vaccines can often produce serious side-effects; Vaccines are rigorously tested before being authorised for use ONE ANSWER PER LINE True, False, Don't know.

a. Vaccines are rigorously tested

In all countries, at least a majority of respondents give the correct answer to the question of whether vaccines are rigorously tested before being authorised for use. However, there are considerable country-level differences. In Romania, only two thirds (66%) give a correct answer, with relatively low figures also recorded in Latvia (68%) and Bulgaria (68%). At the other end of the scale, at least nine in ten of the respondents in the Netherlands (93%) and Sweden (90%) give the correct answer. Of the 14 Member States where the proportion of respondents is lower than the EU28 average of 80%, ten are countries that joined the European Union in 2004 or after.

Romania has the highest proportion of respondents who give an incorrect answer to this question, with over a fifth (21%) saying that it is false to state that vaccines are rigorously tested before being authorised for use. Nearly a fifth of respondents in Croatia (18%) and Italy (18%) give this answer. There is not a clear relation between the proportions of respondents who give correct answers and the proportions who give an incorrect answer, because in several countries the proportion of those who do not know is considerably higher than the proportion who answer incorrectly. In Bulgaria a quarter (25%) of respondents give this answer, as do just over a fifth (22%) in Lithuania and a fifth (20%) in Latvia.

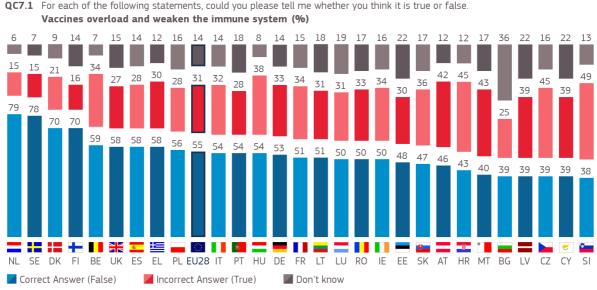


b. Vaccines do not weaken the immune system

There are considerable country-level differences in the proportions of those who correctly state that vaccines do not overload and weaken the immune system. Four countries stand out for particularly large proportions of respondents who answer correctly: in Denmark (70%) and Finland (70%) seven in ten answer correctly, and in Sweden (78%) and the Netherlands (79%) nearly eight in ten do. At the other end of the scale, less than half (50%) of respondents give the correct answer in 10 of the 28 Member States, with nine of these being countries that joined the European Union in 2004 or after. In Bulgaria (39%), Latvia (39%), Czech Republic (39%), Cyprus (39%) and Slovenia (38%) less than four in ten give the correct answer.

Due to the high proportion of "don't know" answers, in all countries less than half of the respondents give an incorrect answer to this question, and in only four cases is the proportion of those who answer incorrectly higher than the proportion of those who answer correctly. However, this varies from only 15% of the respondents in the Netherlands and Sweden to nearly half of the respondents in Slovenia (49%), Croatia (45%) and Czech Republic (45%).

In 23 countries, over one in ten (10%) of respondents do not give an answer to this question. In most cases, no more than a fifth (20%) do not know, but in Estonia (22%), Latvia (22%) and Cyprus (22%) over a fifth say they do not know, while Bulgaria again has the highest proportion of respondents in this category, with over a third (36%) giving this answer.

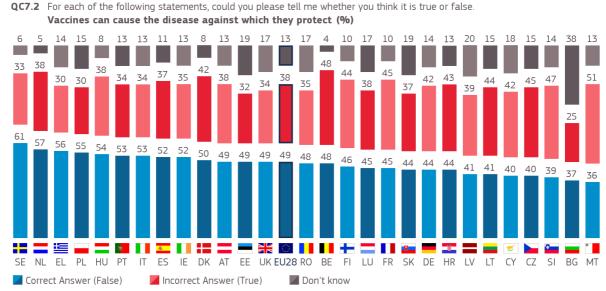


Base: all respondents (N= 27,524)

c. Vaccines do not cause the diseases against which they protect

There is considerable variance between countries in the proportions of respondents who correctly say that vaccines do not cause the disease against which they protect. In 9 of the 28 Member States, over half of the respondents give this answer, ranging from just over half in Ireland (52%) and Spain (52%) to over six in ten (61%) in Sweden. In Denmark, half (50%) of the respondents give this answer. In the remaining countries, less than half do, but in most cases this figure is no lower than four in ten (40%). The exceptions are Slovenia (39%), Bulgaria (37%) and Malta (36%).

In five countries, the proportion of respondents who give an incorrect answer is larger than the proportion who give a correct answer. The largest difference can be seen in Malta, where just over half (51%) of the respondents give an incorrect answer. In all but one country at least three in ten (30%) of the respondents give an incorrect answer. The exception is Bulgaria, where only a quarter (25%) give an incorrect answer; however, this is largely due to the fact that nearly four in ten (38%) of respondents in Bulgaria say that they do not know the answer to this question. In all other countries, no more than a fifth (20%) of respondents give this answer.

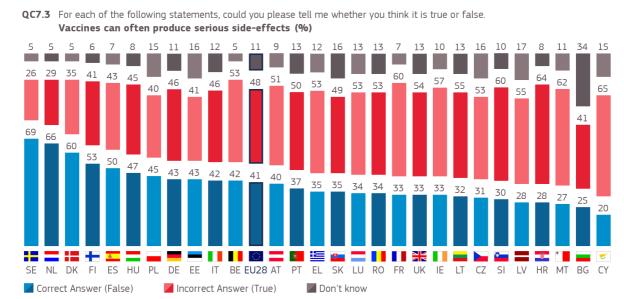


Base: all respondents (N= 27,524)

d. Vaccines do not often produce serious side effects

Only four countries have a majority of respondents who correctly conclude that vaccines don't often produce serious side effects. Again, Sweden (69%) and the Netherlands (66%) have the highest proportions of such respondents, followed by Denmark (60%) and Finland (53%). In Spain (50%) half of the respondents give the correct answer, as do nearly half in Poland (45%) and Hungary (47%). At the other end of the scale, only a fifth (20%) of the respondents in Cyprus and a quarter (25%) of those polled in Bulgaria give the correct answer.

In 20 of the 28 Member States, the proportion of respondents who do not give the correct answer outweighs the proportion of respondents who do. In five cases, at least six in ten (60%) of the respondents give an incorrect answer, with the highest proportions in Cyprus (65%) and Croatia (64%). In all countries, over a quarter (25%) of respondents give an incorrect answer, with the lowest proportion in Sweden (26%). Once again Bulgaria stands out for the high proportion of respondents who do not know whether this statement is true or false, with over a third (34%) of the respondents giving this response.



Base: all respondents (N= 27,524)

There are clear socio-demographic differences on each of the questions. Interestingly, there are no considerable differences between age groups.

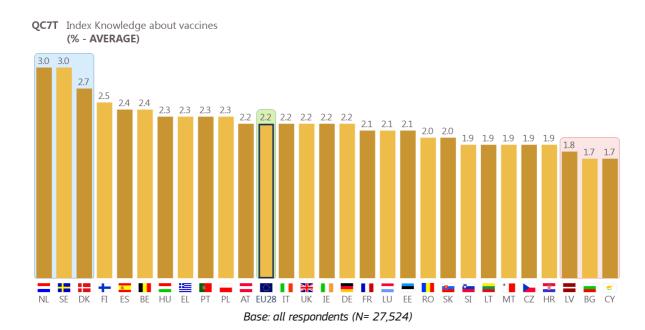
- In the case of whether vaccines are rigorously tested, the groups more likely to give the correct answer are those who finished their education at or after the age of 20 (83%, compared with 77% of those who finished their education at or before the age of 15), the upper middle class (88%, compared with 77% of the working class), and those who have heard about vaccination in the media (82%, compared with 77% of those who have not).
- On the question of whether vaccines weaken the immune system, the groups more likely to give the correct answer are the highly educated (64%, compared with 46% of the least well educated), managers (65%, compared with 50% of manual workers), the upper class (74%, compared with 49% of the working class), and those who have heard about vaccination in the media (59%, compared with 48% of those who have not).
- Level of education also has a considerable relation with the proportion of correct answers to the question of whether vaccines can cause the disease they are supposed to prevent. Over half (55%) of those with the highest levels of education give the correct answer, compared with less than half (44%) of those who finished their education at the age of 15 or less. Over six in ten (62%) of those who say they are upper class give the correct answer, compared with only 44% of the working class. Just over half (52%) of those who have heard about vaccination in the media give the correct answer, compared with 45% of those who have not.
- Education is also of considerable importance in the case of whether vaccines can often produce serious side-effects. Nearly half (48%) of those with the highest level of education correctly answer that vaccines cannot do this, compared with just over a third (34%) of those with the lowest level of education. There are also considerable differences between managers (53%) and manual workers (36%), between the upper middle class (63%) and the working class (34%), and between those who have heard about vaccination in the media (44%) and those who have not (36%).

QC7 For each of the following statements, could you please tell me whether you think it is true or false.
(% - EU)

	Vaccines are rigorously tested before being authorised for use		Vaccines overload and weaken the immune system		disease ag	in cause the ainst which protect	Vaccines can often produce serious side- effects	
	Correct answer (True)	Incorrect answer (False)	Incorrect answer (True)	Correct answer (False)	Incorrect answer (True)	Correct answer (False)	Incorrect answer (True)	Correct answer (False)
EU28	80	11	31	55	38	49	48	41
Education (End of)								
15-	77	10	32	46	36	44	50	34
16-19	79	11	34	51	39	47	51	37
20+	83	10	27	64	37	55	45	48
Still studying	80	11	27	60	35	52	45	45
Consider belonging to			!		}			
The working class	77	10	32	49	38	44	52	34
The lower middle class	78	13	32	54	41	48	52	38
The middle class	82	11	31	58	38	51	47	44
The upper middle class	88	9	22	70	33	61	33	63
The upper class	86	11	17	74	33	62	36	56
Vaccinated in past 5 year	ars							
Yes, yourself	87	7	26	61	35	53	45	45
Yes, your children	83	10	30	60	37	54	45	46
Yes, someone else	83	9	26	62	37	54	43	48
No	73	15	36	47	40	43	52	35
Heard about vaccination	n in media							
Yes	82	10	29	59	38	52	47	44
No	77	11	34	48	37	45	51	36

2 Knowing about the effects of vaccines

When the responses to the above questions are combined into an index, with respondents receiving a score of one for each correct answer, the average score across all EU28 countries is 2.2. In most cases, average scores per country are within 0.3 of the EU28 average, but in Denmark (2.7), Sweden (3.0) and the Netherlands (3.0) the average level of knowledge is somewhat higher, while in Latvia (1.8%), Bulgaria (1.7%) and Cyprus (1.7%) it is somewhat lower.¹³



For the socio-demographic breakdown, respondents are classified into 'high knowledge', 'medium knowledge' and 'low knowledge' respondents, depending on their overall score. We will compare the proportions of respondents in the 'high knowledge' category.

- Over half (54%) of those who left education at or after the age of 20 are classified as having a high level of knowledge about vaccines, compared with less than four in ten (39%) of those who finished their education at or before the age of 15.
- Nearly six in ten (59%) managers have a high level of knowledge, compared with just over four in ten (41%) manual workers or the unemployed.
- There is a considerable difference between subjective social classes: over two thirds (67%) of those who consider themselves members of the upper class have high levels of knowledge about vaccines, compared with less than four in ten (39%) of the working class.
- There is a small but considerable difference in the case of levels of urbanisation: half (50%) of those who live in large towns are very knowledgeable about vaccines, compared with just over four in ten (43%) of those who live in rural villages.
- Half (50%) of those who have heard about vaccination in the media have a high level of knowledge, compared with only four in ten (40%) of those who have not.

¹³ This variable was built based on answers given to the question Q7.1, Q7.2, Q7.3 and Q7.4. Respondents with high knowledge are those who answered correctly to 3-4 question, those with medium knowledge 1-2 questions, and those with low knowledge none of the questions.

QC7T	Index Knowledge about vaccines
	(% - EU)

	High knowledge	Medium knowledge	Low knowledge
EU28	46	43	11
Education (End of)		<u>'</u>	
15-	39	47	14
16-19	42	47	11
20+	54	38	8
Still studying	50	40	10
Socio-professional categ	ory		
Self-employed	49	41	10
Managers	59	36	5
Other white collars	48	44	8
Manual workers	41	47	12
House persons	46	42	12
Unemployed	41	47	12
Retired	45	44	11
Students	50	40	10
🗽 Consider belonging to			
The working class	39	47	14
The lower middle class	44	45	11
The middle class	49	42	9
The upper middle class	64	32	4
The upper class	67	26	7
Subjective urbanisation			
Rural village	43	47	10
Small/ mid size town	46	43	11
Large town	50	39	11
Heard about vaccination	in media		
Yes	50	41	9
No	40	47	13

IV. ATTITUDES TOWARDS VACCINATION

This chapter examines attitudes towards vaccination, including the importance of vaccinations, whether or not avoiding vaccination leads to serious health issues, and who ought to be vaccinated¹⁴.

Most Europeans think that vaccines are important for all, but there is substantial variation between countries regarding the extent of agreement

With the exception of 'vaccines are only important for children', a considerable majority of the respondents agree with the statements. The largest level of interest can be observed in the case of the statement 'vaccines are important to protect not only yourself but also others', with nearly nine in ten (88%) of the respondents expressing some level of agreement. Over half (56%) totally agree with this statement, and nearly a third (32%) tend to agree. Less than one in ten (9%) disagree, with only 2% totally disagreeing.

Nearly as many (87%) agree that vaccination of other people is important, as it protects those who cannot be vaccinated. Over half (53%) totally agree with this statement, compared with just over a third (34%) who tend to agree. Again, less than one in ten (9%) disagree, and only 2% totally disagree.

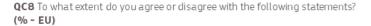
Just over eight in ten (82%) agree that it is important for everybody to have routine vaccinations. Just under half (49%) totally agree with this, while a third (33%) tend to agree. Just over one in ten (11%) tend to disagree, but only 4% totally disagree.

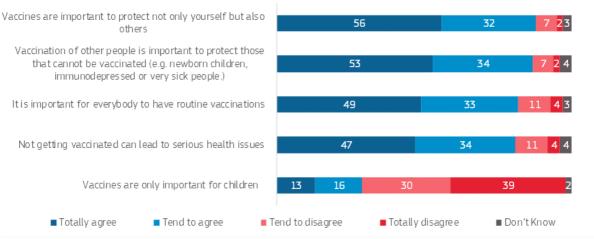
There are very similar proportions in the case of not getting vaccinated: Less than half (47%) totally agree that this can lead to serious health issues, while just over a third (34%) tend to agree, just over one in ten (11%) tend to disagree, and 4% totally disagree.

A majority of the respondents disagree that vaccines are only important for children (69%). However, this means that close to three in ten (29%) agree with the statement that vaccines are only important for children.

In each case, only a small minority (2-4%) do not know whether they agree or disagree with these statements.

¹⁴ Q8. To what extent do you agree or disagree with the following statements? It is important for everyone to have vaccinations, Vaccines are only important for children, Not getting vaccinated can lead to serious health issues, Vaccines are important to protect not only yourself but also others, Vaccination of other people is important to protect those that cannot be vaccinated (e.g. newborn children, immunodepressed or very sick people) ONE ANSWER PER LINE Totally agree, Tend to agree, Tend to disagree, Totally disagree, Don't know.





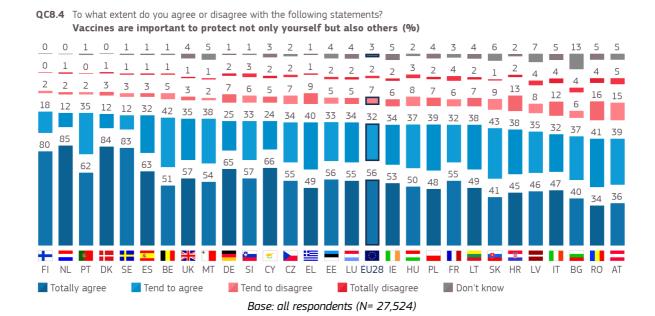
Base: all respondents (N= 27,524)

1 Protection of others

At the country level, at least three quarters (75%) of the respondents in each country agree that vaccines are important for protecting both yourself and others. In Denmark (96%), Netherlands (97%), Portugal (97%) and Finland (98%) nearly all of the respondents agree with this statement.

There is substantial variation in the proportions of respondents who totally agree with this statement. In Romania (34%) and Austria (36%), less than four in ten express total agreement, as do only a minority of the respondents in eight other countries. In most of the remaining cases, between half (50%) and two thirds (66%) of respondents express total agreement, but in Finland (80%), Sweden (83%), Denmark (84%) and the Netherlands (85%) eight in ten or more of those polled give this response. Those four countries stand out for the lowest proportions of respondents who tend to agree (12-18%).

In all but four cases, less than one in ten (10%) of the respondents tend to disagree that vaccines are important to protect not only yourself but also others, and in all cases no more than 5% of respondents totally disagree. In most cases the proportion of respondents who do not know whether they agree or not is minimal in magnitude, but in Bulgaria over one in ten (13%) give this answer.

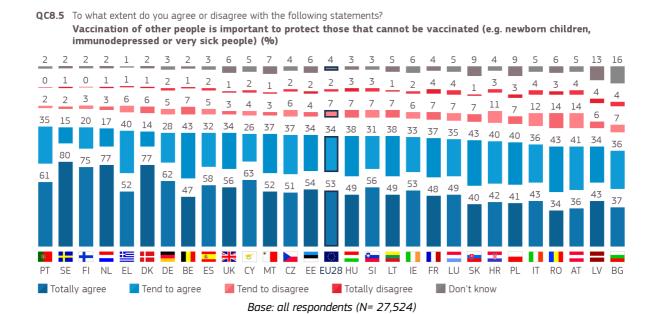


2 Protection of those who cannot be vaccinated

With the exception of Bulgaria (73%), in all countries at least three quarters of respondents express some level of agreement with the statement that vaccination of other people is important to protect those who cannot be vaccinated. In ten cases, at least nine in ten (90%) give this answer, with the highest proportions observed in Portugal (96%), Sweden (95%) and Finland (95%).

Again, Finland (75%), Denmark (77%), the Netherlands (77%) and Sweden (80%) stand out for the particularly high proportion of respondents who totally agree with this statement. Elsewhere, the proportion of respondents varies from just over six in ten of those polled in Portugal (61%), Germany (62%) and Cyprus (63%) to less than four in ten in Romania (34%), Austria (36%) and Bulgaria (37%). The proportion of respondents who tend to agree with the statement varies from less than a fifth in Denmark (14%), Sweden (15%) and the Netherlands (17%) to over four in ten in Austria (41%), Belgium (43%), Romania (43%) and Slovakia (43%).

The proportion of respondents who disagree that vaccination of other people is important varies considerably, although in all cases no more than a fifth of respondents give this answer. The highest proportions are in Croatia (14%), Italy (16%), Romania (17%) and Austria (18%). In 21 of the 28 Member States no more than one in ten (10%) disagree with this statement, and the proportion of those who disagree is particularly low in Portugal (2%), Finland (3%) and Sweden (3%). In all countries no more than 4% of those polled totally disagree with this statement, and in Finland and Portugal no respondents totally disagree. Bulgaria (16%) has the highest proportion of respondents who do not know whether they agree or disagree, followed by Latvia (13%). In all other cases less than one in ten (10%) respondents give this answer.

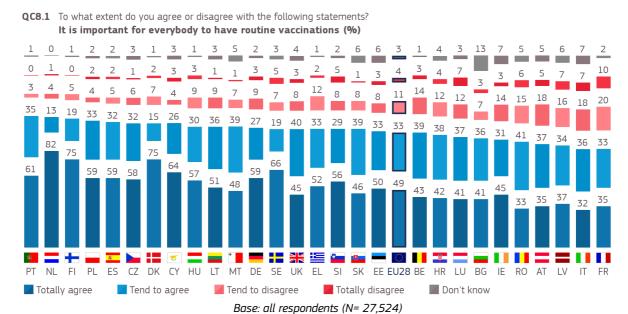


3 Importance of routine vaccination

In all countries, a large majority of the respondents agree that it is important for everybody to have routine vaccinations. This varies from just over two thirds of those polled in France and Italy (both 68%) to well over nine in ten respondents in Finland (94%), the Netherlands (95%) and Portugal (96%).

In 14 Member States, a majority of the respondents totally agree with this statement, ranging from just over half (51%) in Lithuania to three quarters (75%) of those polled in Denmark and Finland and over eight in ten (82%) respondents in the Netherlands. In Italy (32%) and Romania (33%), only around a third totally agree. In all cases a minority tend to agree, but this varies from just over one in ten in the Netherlands (13%) to around four in ten of those polled in the United Kingdom (40%) and Romania (41%).

France stands out for the large minority (30%) of respondents who disagree that routine vaccination is important. A relatively high proportion of respondents in Italy (25%), Austria (23%) and Latvia (23%) give this answer. However, in 23 countries less than a fifth (20%) of respondents disagree, with the lowest proportions in Portugal (3%) Finland (5%) and the Netherlands (5%). In almost all countries the proportion of respondents who totally disagree with this statement is in single figures. The exception is France, where one in ten (10%) of the respondents disagree that routine vaccinations are important. In Finland and Portugal, none of the respondents give this response. Once again, Bulgaria (13%) is the only country with a considerable proportion of respondents who do not know whether they agree or disagree with this question.



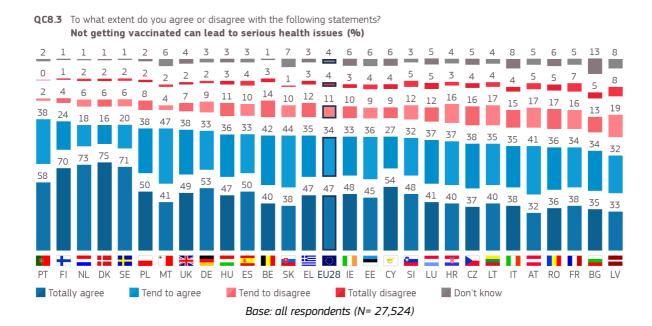
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4 Health issues from not getting vaccinated

In all countries, a majority of respondents agree that not getting vaccinated can lead to serious health issues, but there are considerable differences between countries on this question. In Portugal (96%) and Finland (94%) the vast majority of respondents agree, but in Latvia (65%) and Bulgaria (69%) less than seven in ten do.

Four countries stand out for a particularly high proportion of respondents who totally agree with this statement: as in previous questions these are Finland (70%), Sweden (71%), the Netherlands (73%) and Denmark (75%). In 19 of the 28 Member States, only a minority of respondents give this answer, varying from just under a third (32%) in Austria to nearly half (49%) of those polled in the United Kingdom. There is considerable variety among those who tend to agree: In Denmark (16%) and the Netherlands (18%) less than a fifth give this answer, compared with nearly half of those polled in Malta (47%). However, in 19 of the 28 Member States the proportion who give this answer varies only minimally, between 32% and 38% of those polled.

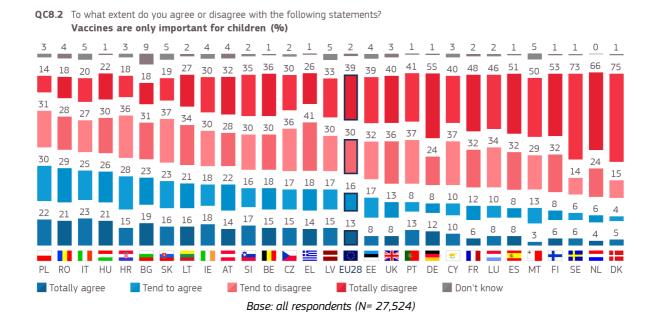
In most countries, no more than a fifth (20%) of respondents disagree with this statement. The biggest outlier is Latvia, where over a quarter (27%) give this answer. Once again Portugal stands out for the small proportion of respondents who disagree, at only 2% of those surveyed. In all countries less than one in ten (10%) of the respondents totally disagree with this statement, with the highest proportions found in France (7%) and Latvia (8%). In Portugal, none of the respondents give this answer.



5 Vaccinations are not only important for children

In 26 of the 28 Member States, a minority of the respondents agree with the statement that vaccines are only important for children. However, there is considerable variation: In Denmark (9%) and the Netherlands (10%), only around one in ten of those polled indicate agreement, compared with nearly half of those surveyed in Hungary (47%) and Italy (48%). In Romania, half (50%) agree, while Poland (52%) is the only country in which a majority do. In most cases, less than a fifth (20%) of the respondents totally agree that vaccines are only important for children, the exceptions being Hungary (21%), Romania (21%), Poland (22%) and Italy (23%). The proportion of respondents who tend to agree varies from only 4% of those polled in Denmark to three in ten (30%) in Poland.

The proportions of respondents who do not know whether they agree or disagree with this statement is very low in most countries; only in Bulgaria (9%) does this exceed 5% of the respondents. There are particularly high levels of total disagreement with this statement in three of the countries where there is high awareness of vaccines and support for their use: Netherlands (66%), Sweden (73%) and Denmark (75%). By contrast, in five countries less than a fifth totally disagree with this statement: these are Poland (14%), Bulgaria (18%), Croatia (18%), Romania (18%) and Slovakia (19%).



For the socio-demographic breakdown, we focus on the proportions of respondents who agree with the statements.

- Concerning the statement that it is important for everyone to have routine vaccinations, there are differences among educational groups (84% of the highest educated, compared with 79% of the least well educated) and socio-professional categories, with 87% of managers agreeing, compared with less than eight in ten manual workers (79%) and unemployed people (77%). The most considerable difference is seen in the case of knowledge about vaccines: over nine in ten (91%) of those who are knowledgeable about vaccines agree with this statement, compared with less than half (48%) of those who are not knowledgeable. However, exposure to media information about vaccines makes no difference.
- There are few differences on the question of whether vaccines are only important for children. Nearly a third (32%) of those with low levels of education agree with this statement, compared with less than a quarter (23%) of those with the highest levels of education. Just under a quarter (23%) of respondents who are well informed about vaccines agree with this statement, compared with over a third (36%) of those with low levels of knowledge.
- Those with higher levels of education are slightly more likely than those with lower levels of education to agree that not getting vaccinated can lead to serious health issues (84%, compared with 79%). The same is true of managers (85%) compared with manual workers (79%) and the unemployed (76%). The most considerable difference is seen in the case of knowledge about vaccines, with nearly nine in ten (89%) of those who have high levels of knowledge agreeing with this statement, compared to only just over half (51%) of those with low levels of knowledge. Those who have heard about vaccinations in the media are slightly more likely to agree with this statement than those who have not (84%, compared with 78%).
- There are very few differences across socio-demographic groups on responses to the statement that vaccines are important to protect not only yourself but also others. However, there is a large difference when it comes to levels of knowledge about vaccines: almost all (95%) of those who have a high level of knowledge give this answer, compared with less than six in ten (57%) of those who have a low level of knowledge.
- There is a very similar pattern in responses to the statement that vaccination of other people is important to protect those who cannot be vaccinated. Over nine in ten (94%) of those with

high levels of knowledge about vaccines agree with this statement, compared with less than six in ten (57%) of those who have low levels of knowledge.

QC8 To what extent do you agree or disagree with the following statements? (% - EU)

	protect not but als	important to only yourself o others	people is ir protect those be vaccir newborn immunode very sick	e that cannot nated (e.g. children, epressed or k people)	everyboo routine va	ortant for dy to have accinations	can lead to s	y vaccinated erious health ues	important	s are only for children
	Total 'Agree'	Total 'Disagree'	Total 'Agree'	Total ' Disagree'	Total 'Agree'	Total 'Disagree'	Total 'Agree'	Total 'Disagree'	Total 'Agree'	Total 'Disagree'
EU28	88	9	87	9	82	15	81	15	29	69
Education (End of)							1			
15-	86	10	85	9	79	15	79	14	32	64
16-19	88	9	86	9	82	15	81	15	31	66
20+	89	9	89	8	84	14	84	14	23	76
Still studying	91	6	88	8	85	13	82	14	26	71
🜃 Socio-professional ca	itegory									
Self-employed	88	10	86	10	82	15	80	17	27	71
Managers	92	7	91	7	87	12	85	13	23	76
Other white collars	87	11	86	11	82	15	82	15	33	65
Manual workers	86	11	85	11	79	18	79	17	30	68
House persons	88	9	87	8	83	13	84	12	29	68
Unemployed	83	12	83	11	77	20	76	19	32	66
Retired	88	8	87	7	82	13	83	12	28	69
Students	91	6	88	8	85	13	82	14	26	71
Vaccinated in past 5 y										
Yes, yourself	95	4	93	4	92	7	89	9	20	79
Yes, your children	92	7	90	8	89	10	86	12	26	73
Yes, someone else	93	6	91	7	86	12	86	12	18	81
No	78	17	78	15	71	24	72	22	39	57
Index Knowledge abo										
High knowledge	95	4	94	5	91	8	89	10	23	77
Medium knowledge	88	10	86	10	80	18	80	16	33	65
Low knowledge	57	27	57	23	48	37	51	29	36	50
Heard about vaccinat										
Yes	90	8	88	9	84	14	84	13	27	72
No	85	10	84	9	80	16	78	16	31	65

6 Vaccination programmes

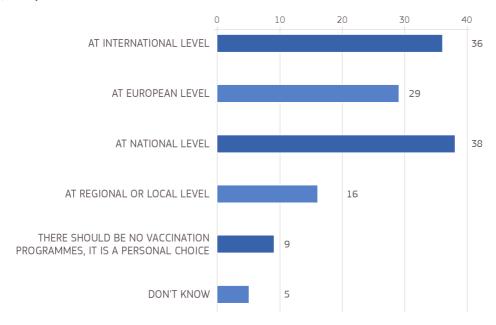
Respondents were asked at what level – international, European, national or regional – they thought vaccination programmes should be coordinated¹⁵. Multiple answers to this question were permitted.

There is no clear consensus over the level at which vaccination programmes should be coordinated

Nearly four in ten (38%) respondents think that vaccination should be coordinated at national level, while nearly as many (36%) think it should be coordinated at international level. Just under three in ten (29%) see it as something that should be coordinated at European level, while less than a fifth (16%) think it should be coordinated at regional or local level. Just under one in ten (9%) say that there should be no vaccination programmes as it is a personal choice, while 5% do not know what level vaccination programmes should be coordinated at.

QC11 A vaccination programme establishes what vaccines a person should receive and at what time in life (like a calendar), as recommended by a health authority. At which level do you think vaccination programmes should be coordinated?

(% - EU)



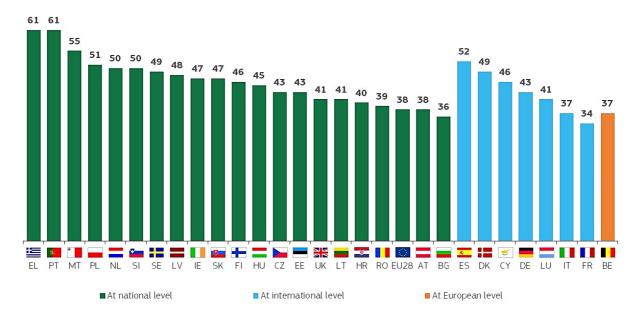
Base: all respondents (N= 27,524)

In six countries, at least half (50%) of respondents think that vaccination programmes should be coordinated at the national level, and this is the most frequent answer in 20 of the 28 Member States. The largest proportions are observed in Greece (61%) and Portugal (61%). In all countries at least a quarter (25%) of respondents give this answer, with the lowest proportions in Germany (27%) and Belgium (29%).

¹⁵ Q11. A vaccination programme establishes what vaccines a person should receive and at what time in life (like a calendar), as recommended by a health authority. At which level do you think vaccination programmes should be coordinated? MULTIPLE ANSWERS POSSIBLE At international level, At European level, At national level, At regional or local level, There should be no vaccination programmes, it is a personal choice, Don't know.

In all but one country, only a minority of respondents think that vaccine programmes should be coordinated at international level, but in seven countries this is the most frequent response. The exception is Spain, where just over half (52%) give this answer. There is considerable variation: in Latvia (17%), Bulgaria (19%) and Lithuania (19%) less than a fifth of respondents give this answer, compared with nearly half of those polled in Cyprus (46%) and Denmark (49%). Eight of the 10 countries with the lowest proportions of respondents who give this answer are countries that joined the European Union in 2004 or after.

QC11 A vaccination programme establishes what vaccines a person should receive and at what time in life (like a calendar), as recommended by a health authority. At which level do you think vaccination programmes should be coordinated? (MULTIPLE ANSWERS POSSIBLE) (% - THE MOST MENTIONED ANSWER BY COUNTRY)



Base: all respondents (N= 27,524)

In all countries less than half think that vaccine programmes should be coordinated at European level, and it is the most mentioned answer in only one country, Belgium. The lowest proportion of respondents is found in the United Kingdom, where less than a fifth (18%) of those polled give this response, followed by Bulgaria (22%), Estonia (22%) and Latvia (22%). Of the ten countries with proportions of respondents below the EU28 average of 29%, seven are countries that joined the European Union in 2004 or after. At the other end of the scale, four in ten or more of those polled in Greece (40%), Cyprus (41%) and Slovenia (42%) say that vaccine programmes should be coordinated at European level.

In most countries, less than a fifth (20%) of the respondents think that vaccination programmes should be coordinated at the regional or local level, with the lowest proportion of those giving this answer observed in Luxembourg (7%). In five countries, a somewhat larger minority express agreement: these are Poland (23%), Slovenia (24%), Ireland (25%), Romania (27%) and Portugal (29%).

Austria (22%) is the only country in which more than a fifth of respondents think that there should be no coordination of vaccination programmes and that the decision of whether to vaccinate and what to vaccinate against should be left to personal choice. In Romania, just under a fifth (18%) give this answer. In 14 countries less than one in ten (10%) think that vaccination should be left to personal choice, with figures particularly low in Finland (1%) and Portugal (1%).

As with previous questions, Bulgaria (18%) stands out for a particularly high proportion of respondents who do not know what answer to give to this question.

QC11 A vaccination programme establishes what vaccines a person should receive and at what time in life (like a calendar), as recommended by a health authority. At which level do you think vaccination programmes should be coordinated? (MULTIPLE ANSWERS POSSIBLE)

(%)

(%)						
	At international level	At European level	At national level	At regional or local level	There should be no vaccination programmes, it is a personal choice	Don't Know
EU28	36	29	38	16	9	5
BE	35	37	29	12	6	1
BG	19	22	36	16	10	18
cz	26	28	43	18	12	7
DK	49	38	38	13	10	2
DE	43	31	27	15	10	4
EE	26	22	43	12	11	8
IE 🚺	31	28	47	25	9	4
EL 🛅	28	40	61	18	11	2
ES 🧸	52	29	31	12	3	5
FR	34	31	31	11	15	4
HR 🔻	28	30	40	17	15	3
IT	37	27	34	16	11	6
CY	46	41	36	10	3	2
LV	17	22	48	18	15	4
LT 🚃	19	28	41	12	13	6
LU	41	36	30	7	14	3
HU	31	34	45	12	5	4
MT *	35	30	55	11	3	7
NL	32	35	50	14	3	1
AT	24	31	38	16	22	3
PL	22	28	51	23	7	8
PT 👳	39	39	61	29	1	5
RM	27	28	39	27	18	5
SI 🔤	44	42	50	24	8	4
SK	22	33	47	18	6	6
FI 🛨	45	34	46	18	1	1
SE	39	37	49	11	3	1
UK	35	18	41	15	6	8
Highest pe	rcentage	per cour	ntry	Lowest p	ercentage	per country
Highest	percentage	e per item		Lowest p	ercentage	per item

Base: all respondents (N= 27,524)

Socio-demographic differences on this question are as follows:

- Respondents with the highest levels of education are more likely than those with the lowest levels of education to think that vaccination programmes should be coordinated at European level (34%, compared with 23%) or at international level (38%, compared with 33%).
- Nearly four in ten (39%) of who classify themselves as belonging to the upper class think that vaccination programmes should be coordinated at the European level, compared with a quarter (25%) of those who classify themselves as working class.
- Respondents with high levels of knowledge about vaccines are more likely than those with low levels of knowledge to prefer coordination of vaccination at any of the specified levels. On the other hand, over a quarter (27%) of those with low levels of knowledge about vaccines say that vaccination should be a matter of personal choice, compared with only 4% of those with high levels of knowledge.

A vaccination programme establishes what vaccines a person should receive and at what time in life (like a calendar), as recommended by a health authority. At which level do you think vaccination programmes should be coordinated? (MULTIPLE ANSWERS POSSIBLE) (% - EU)

	At international level	At European level	At national level	At regional or local level	There should be no vaccination programmes, it is a personal choice
EU28	36	29	38	16	9
Education (End of)					
15-	33	23	38	16	10
16-19	35	28	38	17	10
20+	38	34	39	15	8
Still studying	39	30	32	12	7
Consider belonging to					
The working class	35	25	38	15	10
The lower middle class	35	30	37	17	10
The middle class	37	31	37	15	9
The upper middle class	41	37	40	17	6
The upper class	39	39	48	16	12
Index Knowledge about v	/accines				
High knowledge	40	33	42	16	4
Medium knowledge	35	28	36	17	10
Low knowledge	21	16	23	9	27

Base: all respondents (N= 27,524)

V. INFORMATION ON VACCINATION AND THE MEDIA

This final chapter examines the extent to which Europeans are exposed to information about vaccination, including the sources they get their information from, the extent to which they trust those sources, and which media sources they get information from.

1 Use of sources for information

Respondents were asked which sources of information they would consult if they were looking for information about vaccination, up to a maximum of three sources¹⁶.

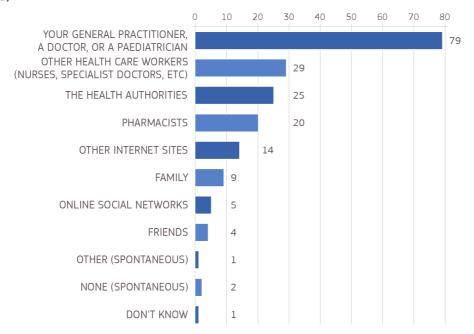
Nearly eight in ten Europeans would consult a medical professional if they were looking for information about vaccination

By far the most relevant source of information is a general practitioner, doctor or paediatrician. Nearly eight in ten (79%) of the respondents say that they would consult one of these medical practitioners about vaccination. Only a minority of the respondents mention the other sources of information. Other health care workers such as nurses or specialist doctors are mentioned by just under three in ten (29%) of the respondents, while a quarter (25%) would consult the health authorities and a fifth (20%) would consult a pharmacist. Just over one in ten (14%) of the respondents would look on internet sites for information about vaccination, while just under one in ten (9%) would consult with their family. A small minority would seek this information on social networks (5%) or from friends (4%), while very few would look for information elsewhere (1%) or would not seek any information about vaccines (2%).

¹⁶ Q9. If you were looking for information about vaccination, which of the following sources would you consult? MAX. 3 ANSWERS Family, Friends, Your general practitioner, a doctor, or a paediatrician, Other health care workers (nurses, specialist doctors etc), Pharmacists, Online social networks, Other Internet sites, The health authorities, Other, None, Don't know.

QC9 If you were looking for information about vaccination, which of the following sources would you consult? (MAX. 3 ANSWERS)





Base: all respondents (N= 27,524)

In all but one country, the source of information most frequently mentioned by respondents is a general practitioner, doctor or physician. The proportion of respondents who mention this source of information ranges from six in ten (60%) of those polled in Finland, where this is the second most frequently mentioned source, to over nine in ten respondents in Germany (92%) and Greece (94%).

In 17 countries, the second most frequently mentioned source of information is other health care workers such as nurses and specialist doctors. This source of information is the third most popular source of information in a further nine countries. In most cases only a minority of respondents mention other health care workers as a source of information about vaccines, ranging from just over four in ten of the respondents in Spain (41%) and Denmark (42%) to less than a fifth (18%) in Germany. However, three countries stand out for a particularly large proportion of respondents who give this answer: in Finland (58%) and Portugal (59%) just under six in ten of those polled mention other health care workers, as do 55% in Sweden.

In eight countries, the second most frequently mentioned source of information is the health authorities, and this is the third most frequently mentioned source of information in a further 14 countries. This source of information is mentioned by a majority of respondents in the Netherlands (53%), Denmark (54%) and Sweden (60%), and in Finland (61%), where it is the most frequently mentioned source of information. In all other countries only a minority of respondents mention it, ranging from just over a third of those polled in Greece (34%), Malta (34%) and Italy (35%) to a little over one in ten of those surveyed in Bulgaria (14%) and Poland (14%).

In France (35%), Belgium (31%) and the United Kingdom (31%), over three in ten of the respondents would consult a pharmacist, and in France and Belgium, this is the second most frequently mentioned source of information. In other countries, the proportion mentioning this source of information varies between just over a quarter of those polled in Ireland (26%), Malta (26%) and Austria (27%) and just under one in ten respondents in Lithuania (9%) and Latvia (9%).

Nearly four in ten (37%) of respondents in the Netherlands would consult other internet sites for information about vaccinations, and this is the third most frequently mentioned source in this country.

In all other countries, less than a quarter (25%) mention internet sites, with particularly low proportions of respondents in Portugal (3%) and Romania (5%) mentioning this source of information.

In all countries, no more than a fifth (20%) of respondents would consult family members, with the highest proportion of those who give this answer observed in Austria (19%), and the lowest in Malta (3%) and Portugal (4%). In all but one case, Estonia (11%), no more than one in ten would consult online social networks about vaccinations, and only in Austria (11%) would more than one in ten consult friends. Very few respondents in any of the countries surveyed mention other sources of information.

QC9 If you were looking for information about vaccination, which of the following sources would you consult? (MAX. 3 ANSWERS) (%)

COTISULL! (MAX. 5 ANSWERS) (40)								
	Your general practitioner, a doctor, or a paediatrician	Other health care workers (nurses, specialist doctors, etc)	The health authorities	Pharmacists	Other Internet sites	Family	Online social networks	Friends
EU28	79	29	25	20	14	9	5	4
BE	87	26	19	31	13	10	7	4
	73	29	14	12	8	10	6	9
CZ	80	29	19	11	14	12	5	5
BG CZ DK DE	88	42	54	11	19	8	8	4
DE	92	18	20	16	15	11	6	4
EE =	78	28	27	14	19	11	11	4
IE III	75	30	28	26	14	11	5	4
EL 🖺	94	28	34	25	6	9	6	4
EL ES FR HR IT CY LV LT LU HU MT NL AT PL PT ES FR II	85	41	22	15	10	5	3	0
FR	83	31	18	35	20	8	4	3
HR 🌉	78	34	23	19	6	8	7	4
IT	68	30	35	12	10	9	5	4
CY	85	25	25	15	6	8	8	2
LV	79	21	19	9	17	11	9	6
LT 🚃	77	36	20	9	12	16	9	6
LU	87	32	17	14	18	7	4	4
HU	71	26	16	20	14	16	7	8
MT *	82	30	34	26	10	3	7	1
NL	85	23	53	21	37	10	10	3
AT	75	28	27	27	13	19	8	11
PL	66	25	14	11	7	12	5	8
	90	59	20	22	3	4	1	1
RO	64	25	20	19	5	14	5	8
SI 🔤	80	34	24	12	7	11	6	6
SK 😃	77	24	21	18	16	13	5	10
FI 🛨	60	58	61	11	23	5	7	3
SE	71	55	60	16	20	12	4	6
UK 🕌	79	25	29	31	19	7	4	4
1st MOST FREQU		2nd MC		JENTLY		OST FREQU		
MENTIONED I	TEM	MEN	NTIONED I	IEM	MEN	ITIONED I	IEM	

Base: all respondents (N= 27,524)

There are several socio-demographic differences.

- Respondents aged between 15 and 24 are more likely than those aged 55 or more to consult with family (19%, compared with 7%), other internet sites (19%, compared with 9%) and the health authorities (28%, compared with 22%) while the oldest respondents are more likely than the youngest ones to consult a general practitioner, doctor or paediatrician (81%, compared with 75%).
- Respondents who completed their education at or after the age of 20 are considerably more likely than those who completed their education at or before the age of 15 to consult other internet sites (20%, compared with 4%) or the health authorities (33%, compared with 17%).
- There are some differences between subjective social classes: a quarter (25%) of those who consider themselves to belong to the upper class mention other internet sites, compared with only one in ten (10%) of the working class. Nearly four in ten (37%) of the upper class would consult with the health authorities, compared with a fifth (20%) of the working class.

QC9	If you were looking for information about vaccination, which of the following sources would you consult?
	(MAX. 3 ANSWERS)

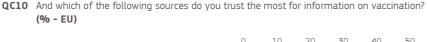
(IVIAA. J AIVSWEIT	Family	Friends	Your general practitioner, a doctor, or a paediatrician	Other health care workers (nurses, specialist doctors, etc)	Pharmacists	Online social networks	Other Internet sites	The health authorities
EU28	9	4	79	29	20	5	14	25
⊞ Age								
15-24	19	4	75	31	20	9	19	28
25-39	10	5	78	32	20	6	18	29
40-54	7	4	80	29	22	6	16	27
55 +	7	4	81	26	20	3	9	22
Education (End of)								
15-	7	3	81	25	20	2	4	17
16-19	9	5	80	26	21	5	12	22
20+	8	4	80	32	20	5	20	33
Still studying	20	4	74	33	18	9	22	30
Consider belonging to								
The working class	8	4	80	29	23	4	10	20
The lower middle class	8	5	79	30	21	4	14	23
The middle class	10	4	79	28	19	6	15	28
The upper middle class	12	3	80	34	19	6	23	40
The upper class	19	3	73	21	22	5	25	37

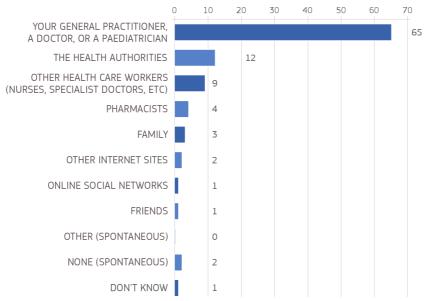
2 Most trustworthy sources of information

Respondents were then asked which of the aforementioned sources of information about vaccines they considered the most trustworthy¹⁷.

A considerable majority of Europeans see medical professionals as the most trustworthy source of information about vaccines

Nearly two thirds (65%) of those polled say that a general practitioner, doctor or paediatrician is the most trustworthy source of information about vaccines. Other sources are mentioned by only a small minority of respondents: Just over one in ten (12%) say that the most trustworthy source of information is health authorities, and just under one in ten (9%) say this of health workers, while very few respondents mention pharmacists (4%), family (3%), other internet sites (2%), online social networks (1%), or friends (1%).





Base: all respondents (N= 27,524)

In 25 of the 28 Member States, a majority of the respondents say that the most trustworthy source of information is a general practitioner, doctor or paediatrician, ranging from less than six in ten of those polled in the Netherlands (56%) and Romania (56%) to eight in ten (80%) of those polled in Portugal. In Italy, just under half (47%) of the respondents give this answer. The only two countries in which this is not the most frequently mentioned item are Finland (36%) and Sweden (38%), where less than four in ten give this response.

Instead, the source of information mentioned by the largest proportion of respondents in Finland (40%) and Sweden (42%) is the health authorities. While in nine countries this is the second most

¹⁷ Q10. If you were looking for information about vaccination, which of the following sources would you consult? ONE ANSWER ONLY Family, Friends, Your general practitioner, a doctor, or a paediatrician, Other health care workers (nurses, specialist doctors etc), Pharmacists, Online social networks, Other Internet sites, The health authorities, Other, None, Don't know.

frequently mentioned source of information, and in 16 others the third most important source, it is mentioned by less than one in ten (10%) respondents in 19 countries, although a considerable minority of the respondents in Denmark (30%) and the Netherlands (32%) give this answer.

Less than one in ten (10%) respondents mention any of the other sources. In Ireland, nearly one in ten (9%) of those polled mention pharmacists, and this is the third most frequently mentioned option in this country. In six countries, the third most frequently mentioned source of information is family.

QC10 And which of the following sources do you trust the most for information on vaccination? **(%)**

	Your general practitioner, a doctor, or a paediatrician	The health authorities	Other health care workers (nurses, specialist doctors, etc)	Pharmacists	Family	Other internet sites	Friends	Online social networks
EU28	65	12	9	4	3	2	1	1
BE	72	7	9	6	2	1	1	2
BG	59	6	13	2	5	2	2	1
C7	71	8	9	1	4	3	1	1
DK E	57	30	8	1	2	1	-	-
DE	79	6	3	3	3	2	-	1
EE 💻	65	10	9	2	6	2	1	1
IE 🔣	60	9	13	9	3	2	1	1
EL 🔛	78	8	3	2	3	1	1	1
ES 🐁	72	8	15	1	1	1	-	1
FR	69	8	9	5	2	2	-	-
HR 🌉	60	9	13	5	4	2	2	2
IT 🔣	47	21	14	4	3	4	1	1 2
CY	77	5	5	2	4	1	1	
LV	68	8	8	3	4	2	2	1
LT	61	10	13	3	5	2	1	2
LU	70	8	11	2	3 5	3	1	1
HU	60	8	10	4		3	3	2
MT *	64	10	14	4	1	2	1	2
EE EL ES FR HR IT CY LV LT LU HU MT NL AT PL PT RO	56 62	32 7	4 8	3 4	1 5	3 3	- 7	- 2
AI					6	3	3 3	
PL PT	60 80	5 3	10 13	3 2	-	-	5	1
RO	56	7	10	6	7	1	3	1
SI	63	9	12	2	5	1	2	_
SK 😃	61	8	9	4	5	5	4	_
FI T	36	40	16	2	2	3	_	_
CE .	38	42	12	2	2	2	_	1
UK	64	13	8	6	3	2	1	1
1st MOST F				OST FREQU			DST FREQU	
	NED ITEM			NTIONED I			NTIONED I	

Base: all respondents (N= 27,524)

There are not many socio-demographic differences on this question.

- The older the respondents, the more likely they are to mention a general practitioner, doctor or paediatrician as the source of information they most trust. Nearly seven in ten (69%) of those aged 55 or more trust this source, compared with less than six in ten (57%) of respondents aged between 15 and 24.
- Those who finished their education at or before the age of 15 are more likely than those who finished their education to mention a general practitioner, doctor or paediatrician as the source of information they most trust (71%, compared with 62%), but less likely to mention the health authorities (7%, compared with 16%).
- Respondents with high levels of knowledge about vaccines are more likely than those with low levels of knowledge to mention a general practitioner, doctor or paediatrician (67%, compared with 51%) or the health authorities (14%, compared with 7%) as the source of information they most trust.

QC10	And which of the following sources do you trust the	most for information on vaccir	nation?
	(% - EU)		
	<u>_</u>		

(10 20)	Family	Friends	Your general practitioner, a doctor, or a paediatrician	Other health care workers (nurses, specialist doctors, etc)	Pharmacists	Online social networks	Other internet sites	The health authorities
EU28	3	1	65	9	4	1	2	12
🗎 Age								
15-24	6	1	57	10	5	1	3	14
25-39	4	1	62	10	3	1	3	13
40-54	2	1	64	9	4	1	3	12
55 +	3	1	69	8	4	1	1	9
Education (End of)								
15-	4	1	71	8	3	1	1	7
16-19	3	1	67	9	4	1	2	9
20+	2	1	62	9	3	1	3	16
Still studying	6	1	54	11	4	1	4	16
Index Knowledge about	vaccines							
High knowledge	2	1	67	8	3	1	2	14
Medium knowledge	4	1	66	10	4	1	2	9
Low knowledge	5	2	51	12	3	1	4	7

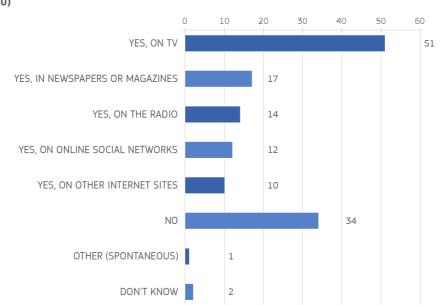
3 Having heard about vaccination in the media

Finally, respondents were asked whether, during the last six months, they had seen, read or heard any information on vaccination in the media, and if so, from which sources¹⁸. Respondents could mention as many sources as necessary.

Europeans are most likely to have heard about vaccines via the television, but a third have not heard about them from any media sources

Just over half (51%) of the respondents say that they heard about vaccination on TV. Considerably fewer mention newspapers or magazines (17%), the radio (14%), online social networks (12%) or other internet sites (10%). Just over a third (34%) of respondents have not heard anything about vaccinations via any media sources.





Base: all respondents (N= 27,524)

There is substantial country-level variation in the proportion of respondents who report having heard about vaccination via the TV. In 18 of the 28 Member States, at least half of the respondents give this answer, but this varies from half (50%) of the respondents in Austria to over eight in ten (83%) of the respondents in Lithuania, with large proportions also noted in Slovenia (70%), Romania (71%), Denmark (72%), Greece (73%) and Cyprus (74%). At the other end of the scale, in Hungary (26%) and the United Kingdom (30%) less than a third have heard about vaccinations via the TV.

There are substantial differences in the case of newspapers and magazines. In seven countries, more than a third (33%) of the respondents have read about vaccinations in these outlets, and in Finland a majority (52%) of respondents give this answer, as do well over four in ten of those polled in

¹⁸ Q12. In the past six months, have you seen, read or heard any information on vaccination in the media? MULTIPLE ANSWERS POSSIBLE No; Yes, on TV; Yes, on the radio; Yes, in newspapers or magazines; Yes, on online social networks; Yes, on other internet sites; Other; Don't know.

Sweden (44%) and the Netherlands (46%). However, in 18 countries less than a fifth (20%) have read about vaccinations in newspapers and magazines, with a particularly low proportion noted in Portugal (3%), Bulgaria (5%) and Cyprus (5%).

There are also substantial differences when it comes to radio. In Denmark, four in ten (40%) of those polled have heard about vaccines via this source, as have a third (33%) of respondents in Luxembourg and Slovenia. However, in Portugal only 3% of respondents have heard of vaccines on the radio.

Denmark also stands out for the large minority of respondents who have heard about vaccines via online social networks, with a third (33%) of those polled giving this answer. In seven other cases, at least a fifth (20%) of respondents have heard about vaccines via this source, ranging from just over a fifth (21%) in Slovenia to just over a quarter (27%) in Sweden. The lowest proportions of respondents who give this answer are found in Spain (5%) and Portugal (5%).

In Lithuania and the Netherlands, a fifth (20%) of respondents mention other internet sites as sources of information about vaccinations, as do just under a fifth (18%) in Finland and Latvia. On the other hand, very few of those polled in Portugal (2%) and Romania (3%) mention this source.

In Spain (53%), Portugal (56%) and Hungary (61%) a majority of those polled have not heard about vaccinations via media sources. In all other countries only a minority of respondents give this answer, but the proportions vary from nearly half of those polled in the United Kingdom (49%) to less than one in ten (8%) in Lithuania.

QC12 In the past six months, have you seen, read or heard any information on vaccination in the media?

(MUI TIPLE ANSWERS POSSIBLE) (%)

(MULTIPLE ANSWERS POSSIBLE) (%)										
	Yes, on TV	Yes, in newspapers or magazines	Yes, on the radio	Yes, on online social networks	Yes, on other Internet sites	NO	Other (SPONTANEOUS)	Don't Know	Total 'Yes'	
EU28	51	17	14	12	10	34	1	2	65	
BE	43	18	14	7	6	41	2	0	59	
BG	52	5	5	9	5	36	1	5	59	
CZ	61	18	12	11	11	26	0	3	71	
DK	72	35	40	33	17	11	2	1	87	
DE	48	26	16	8	11	33	1	1	66	
EE	60	34	28	26	17	20	2	2	78	
IE 📗	36	16	21	13	7	45	1	2	53	
EL	73	9	8	15	12	22	2	-	78	
ES 🌯	38	6	6	5	5	53	1	0	47	
FR	60	15	25	12	9	25	1	2	74	
HR 🌋	63	22	13	17	13	26	1	1	73	
IT	60	19	9	15	11	26	1	3	71	
CY	74	5	12	13	5	20	1	1	79	
LV	51	12	11	16	18	26	2	1	72	
LT	83	14	23	24	20	8	1	1	91	
LU	48	32	33	15	16	24	2	2	74	
HU	26	6	5	7	6	61	1	2	37	
MT	48	7	17	23	17	28	2	6	66	
NL	63	46	27	24	20	14	2	0	85	
AT	50	37	20	13	11	28	2	6	66	
PL	51	8	11	10	10	37	3	1	63	
PT ®	41	3	3	5	2	56	1	0	44	
RO	71	7	10	9	3	18	1	3	79	
SI	70	34	33	21	16	19	1	0	80	
SK 😃	60	15	20	13	12	24	3	4	71	
FI	56	52	22	25	18	18	1	2	81	
SE	47	44	24	27	16	22	3	1	77	
UK		12	7	12	9	49	1	3	48	
	st percent				Lowest percentage per country					
Highest percentage per item						Lowest percentage per item				

Base: all respondents (N= 27,524)

For the socio-demographic breakdown we look at differences in the proportions of respondents who mention at least one of these sources, and at the proportions who mention specific sources.

- Women (66%) are slightly more likely than men (62%) to mention hearing about vaccinations from media sources, and more likely to have heard about them via the TV (53%, compared with 48%).
- There is no considerable age difference in the overall proportions of respondents who have heard of vaccinations via media sources, but reliance on traditional media sources is more common among older respondents. Those who are aged 55 or more are more likely than those aged between 15 and 24 to have heard of vaccinations on TV (55%, compared with 41%), on the radio (15%, compared with 8%) or in newspapers or magazines (20%, compared with 10%). On the other hand, the youngest respondents are more likely than the oldest respondents to

get their information from online social networks (24%, compared with 4%) or from other internet sites (15%, compared with 4%).

- Three quarters (75%) of those who finished their education at or after the age of 20 say they have heard about vaccinations via the media, compared with just over half (51%) of those who finished their education at the age of 15 or less. The proportion of respondents who mention a specific media source is greater in each case among those with higher levels of education.
- Low levels of knowledge about vaccines are associated with a lower propensity to have heard about these vaccines via the media. However, it is notable that there is not much difference in the proportions of high-knowledge respondents and low-knowledge respondents who have heard about vaccines via online social networks (14%, compared with 10%) or other internet sites (12%, compared with 10%), suggesting that the quality of information available via these sources may be lower than in other forms of media.

QC12 In the past six months, have you seen, read or heard any information on vaccination in the media? (MULTIPLE ANSWERS POSSIBLE) (% - EU)

	o Z	Yes, on TV	Yes, on the radio	Yes, in newspapers or magazines	Yes, on online social networks	Yes, on other Internet sites
EU28	34	51	14	17	12	10
🖳 Gender						
Man	36	48	14	17	11	10
Woman	32	53	13	18	12	9
🖼 Age						
15-24	38	41	8	10	24	15
25-39	34	47	13	17	17	14
40-54	31	52	16	18	13	11
55 +	34	55	15	20	4	4
Education (End of)						
15-	47	44	7	9	3	1
16-19	35	53	12	15	8	7
20+	24	55	20	26	17	16
Still studying	37	40	9	13	25	15
Index Knowledge about v	accines					
High knowledge	29	54	16	21	14	12
Medium knowledge	37	49	12	15	9	8
Low knowledge	41	42	8	10	10	10

VI. CONCLUSIONS

The overall attitudes of Europeans towards vaccination is positive, with more than four in five thinking that vaccines can be effective in preventing infectious diseases. However, knowledge about infectious diseases and vaccines varies considerably. Around half of Europeans are aware that the flu and meningitis are still causing deaths in the European Union, while fewer think this of hepatitis, measles and tetanus. In the case of the flu, meningitis and measles, there are considerable country-level differences in awareness. While there is a high level of awareness that vaccines are rigorously tested before being authorised for use, Europeans are significantly less well informed about the *effects* of vaccines: nearly half think vaccines can often produce serious side effects and close to four in ten that vaccines can cause the disease they are intended to protect against,

The country-level differences in knowledge are particularly striking: While in Sweden and the Netherlands, levels of knowledge are persistently high, levels of knowledge about vaccines are substantially lower in several Eastern Member States. There is also a certain socio-demographic pattern: Knowledge is notably higher among those with higher levels of education, managers, those who belong to higher social classes, those who live in large towns, and those who have heard about vaccination in the media. These findings suggest that the attitudinal differences highlighted in the State of Vaccine Confidence in the EU 2018 report are rooted in considerable differences of knowledge that have both a geographical and socio-demographic basis.

As far as attitudes towards vaccines are concerned, while a clear majority of Europeans think that vaccines are effective, and around half definitely agree with this claim. There is substantial country-level variation on this question. The same is true of attitudes oriented towards behaviour: large majorities of respondents agree that it is necessary to vaccinate to protect yourself and others, and that not doing so can lead to significant health issues, but while Portugal, Finland and the Netherlands stand out for particularly high levels of agreement on these questions, there is a lower level of agreement in Austria, Latvia, Romania and Bulgaria. Further, while a relatively small minority of respondents at the European level think that vaccines are only important for children, in Hungary, Italy, Poland and Romania around half of respondents hold this view.

These differences in attitudes and knowledge are also reflected in certain patterns of behaviour. While nearly half of the Europeans have been vaccinated during the last five years, there are significant differences between countries. Particularly notable here is the lower than average uptake of vaccination in countries that joined the European Union in 2004 or after. Looking at sociodemographic differences, there is a higher than average uptake among younger and better educated Europeans. Some of these patterns occur as well when those who were not vaccinated are asked about their reasons for not having had a vaccination. While no single response dominates, a third of the unvaccinated do not see the need for vaccination, while slightly fewer state that they are still covered by previous vaccines. Well educated respondents and those from countries where awareness of vaccines is high are more likely to say they have not had vaccines recently because they were already covered.

In general, this Special Eurobarometer bears out a broad picture: While in general Europeans have a reasonably high level of awareness and a generally positive attitudes towards vaccination, there is considerable variation in knowledge and behaviour across countries and between socio-demographic groups. The survey also provides evidence to support and further inform the initiatives already being undertaken by the EU with respect to vaccines. The high level of trust in medical professionals as a source of information about vaccines might confirm the wisdom of setting up the Coalition of Health Workers for vaccination and investing in improving the knowledge, attitudes, behaviour and communication skills of medical professionals with respect to vaccination. Contrary to popular belief, social media seems to have less impact than other media in disseminating messages about vaccination, indicating that resources are likely to be more effectively targeted towards traditional media to achieve the goals of raising awareness of vaccines and promoting their use.

TECHNICAL SPECIFICATIONS

Between the 15^{th} and 29^{th} of March 2019, Kantar carried out the wave 91.2 of the EUROBAROMETER survey, on request of the EUROPEAN COMMISSION, Directorate-General for Communication, "Media monitoring and Eurobarometer" Unit.

The wave 91.2 covers the population of the respective nationalities of the European Union Member States, resident in each of the 28 Member States and aged 15 years and over.

COUNTRIES	INSTITUTES	N° INTERVIEWS		TES WORK	POPULATION 15+	PROPORTION EU28
Belgium	Kantar Belgium (Kantar TNS)	1,041	15/03/2019	15/03/2019 26/03/2019		2.25%
Bulgaria	Kantar TNS BBSS	1,026	15/03/2019	25/03/2019	6,537,535	1.52%
Czech Rep.	Kantar CZ	1,068	15/03/2019	26/03/2019	9,238,431	2.14%
Denmark	Kantar Gallup	1,017	15/03/2019	26/03/2019	4,838,729	1.12%
Germany	Kantar Deutschland	1,507	15/03/2019	29/03/2019	70,160,634	16.26%
Estonia	Kantar Emor	1,005	15/03/2019	26/03/2019	1,160,064	0.27%
Ireland	Behaviour & Attitudes	1,078	15/03/2019	26/03/2019	3,592,162	0.83%
Greece	Taylor Nelson Sofres Market Research	1,014	15/03/2019	24/03/2019	9,937,810	2.30%
Spain	TNS Investigación de Mercados y Opinión	1,014	15/03/2019	25/03/2019	39,445,245	9.14%
France	Kantar Public France	1,013	15/03/2019	25/03/2019	54,097,255	12.54%
Croatia	Hendal	1,010	15/03/2019	25/03/2019	3,796,476	0.88%
Italy	Kantar Italia	1,021	15/03/2019	25/03/2019	52,334,536	12.13%
Rep. Of Cyprus	CYMAR Market Research	505	25/03/2019	26/03/2019	741,308	0.17%
Latvia	Kantar TNS Latvia	1,012	15/03/2019	26/03/2019	1,707,082	0.40%
Lithuania	TNS LT	1,004	15/03/2019	25/03/2019	2,513,384	0.58%
Luxembourg	ILReS	512	15/03/2019	26/03/2019	457,127	0.11%
Hungary	Kantar Hoffmann	1,030	15/03/2019	26/03/2019	8,781,161	2.04%
Malta	MISCO International	497	15/03/2019	27/03/2019	364,171	0.08%
Netherlands	TNS NIPO	1,017	15/03/2019	26/03/2019	13,979,215	3.24%
Austria	Das Österreichische Gallup Institut	1,006	15/03/2019	25/03/2019	7,554,711	1.75%
Poland	Kantar Polska	1,011	15/03/2019	26/03/2019	33,444,171	7.75%
Portugal	Marktest – Marketing, Organização e Formação	1,013	15/03/2019	25/03/2019	8,480,126	1.97%
Romania	Centrul Pentru Studierea Opiniei si Pietei (CSOP)	1,025	15/03/2019	25/03/2019	16,852,701	3.91%
Slovenia	Mediana DOO	1,016	15/03/2019	24/03/2019	1,760,032	0.41%
Slovakia	Kantar Slovakia	1,020	15/03/2019	24/03/2019	4,586,024	1.06%
Finland	Kantar TNS Oy	1,000	15/03/2019	26/03/2019	4,747,810	1.10%
Sweden	Kantar Sifo	1,021	15/03/2019	26/03/2019	7,998,763	1.85%
United Kingdom	Kantar UK Limited	1,021	15/03/2019	26/03/2019	52,651,777	12.20%
	TOTAL EU28	27,524	15/03/2019	29/03/2019	431,452,219	100%*

The basic sample design applied in all states is a multi-stage, random (probability) one. In each country, a number of sampling points was drawn with probability proportional to population size (for a total coverage of the country) and to population density.

In order to do so, the sampling points were drawn systematically from each of the "administrative regional units", after stratification by individual unit and type of area. They thus represent the whole territory of the countries surveyed according to the EUROSTAT NUTS II¹ (or equivalent) and according to the distribution of the resident population of the respective nationalities in terms of metropolitan, urban and rural areas.

In each of the selected sampling points, a starting address was drawn, at random. Further addresses (every Nth address) were selected by standard "random route" procedures, from the initial address. In each household, the respondent was drawn, at random (following the "closest birthday rule"). All interviews were conducted face-to-face in people's homes and in the appropriate national language. As far as the data capture is concerned, CAPI (*Computer Assisted Personal Interview*) was used in those countries where this technique was available.

For each country a comparison between the sample and the universe was carried out. The Universe description was derived from Eurostat population data or from national statistics offices. For all countries surveyed, a national weighting procedure, using marginal and intercellular weighting, was carried out based on this Universe description. In all countries, gender, age, region and size of locality were introduced in the iteration procedure. For international weighting (i.e. EU averages), Kantar Public applies the official population figures as provided by EUROSTAT or national statistic offices. The total population figures for input in this post-weighting procedure are listed here.

Readers are reminded that survey results are <u>estimations</u>, the accuracy of which, everything being equal, rests upon the sample size and upon the observed percentage. With samples of about 1,000 interviews, the real percentages vary within the following confidence limits:

Statistical	Margins due to the sampling process
(at	the 95% level of confidence)

various sample sizes are in rows various observed results are in column										e in columns	
	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	
	95%	90%	85%	80%	75%	70%	65%	60%	55%	50%	
N=50	6.0	8.3	9.9	11.1	12.0	12.7	13.2	13.6	13.8	13.9	N=50
N=500	1.9	2.6	3.1	3.5	3.8	4.0	4.2	4.3	4.4	4.4	N=500
N=1000	1.4	1.9	2.2	2.5	2.7	2.8	3.0	3.0	3.1	3.1	N=1000
N=1500	1.1	1.5	1.8	2.0	2.2	2.3	2.4	2.5	2.5	2.5	N=1500
N=2000	1.0	1.3	1.6	1.8	1.9	2.0	2.1	2.1	2.2	2.2	N=2000
N=3000	0.8	1.1	1.3	1.4	1.5	1.6	1.7	1.8	1.8	1.8	N=3000
N=4000	0.7	0.9	1.1	1.2	1.3	1.4	1.5	1.5	1.5	1.5	N=4000
N=5000	0.6	0.8	1.0	1.1	1.2	1.3	1.3	1.4	1.4	1.4	N=5000
N=6000	0.6	0.8	0.9	1.0	1.1	1.2	1.2	1.2	1.3	1.3	N=6000
N=7000	0.5	0.7	0.8	0.9	1.0	1.1	1.1	1.1	1.2	1.2	N=7000
N=7500	0.5	0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.1	1.1	N=7500
N=8000	0.5	0.7	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.1	N=8000
N=9000	0.5	0.6	0.7	0.8	0.9	0.9	1.0	1.0	1.0	1.0	N=9000
N=10000	0.4	0.6	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0	N=10000
N=11000	0.4	0.6	0.7	0.7	0.8	0.9	0.9	0.9	0.9	0.9	N=11000
N=12000	0.4	0.5	0.6	0.7	0.8	0.8	0.9	0.9	0.9	0.9	N=12000
N=13000	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9	N=13000
N=14000	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	N=14000
N=15000	0.3	0.5	0.6	0.6	0.7	0.7	0.8	0.8	8.0	0.8	N=15000
	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	
	95%	90%	85%	80%	75%	70%	65%	60%	55%	50%	

2

 $^{^{\}mathrm{1}}$ Figures updated in August 2015

QUESTIONNAIRE

QC1 In your opinion, which of the following diseases are still causing deaths in the European Union nowadays?

(READ OUT – ROTATE EXCEPT CODE 7 - MULTIPLE ANSWERS POSSIBLE EXCEPT CODES 7 AND 8 SINGLE CODES)

Flu	1,
Measles	2,
Polio	3,
Hepatitis	4,
Meningitis	5,
Tetanus	6,
None of them	7
DK	8
	NEW

QC2 All the diseases mentioned earlier are infectious diseases and can be prevented. Do you think that vaccines can be effective in preventing them?

(READ OUT – ONE ANSWER ONLY)

Yes, definitely	1
Yes, probably	2
No, probably not	3
No, not at all	4
It depends on the disease (SPONTANEOUS)	5
DK	6

NEW

QC3 Have you or has someone in your family had any vaccinations in the last five years?

(READ OUT – MULTIPLE ANSWERS POSSIBLE EXCEPT CODES 4 AND 5 SINGLE CODES)

1,
2,
3,
4
5

ASK Q4 TO THOSE WHO HAVE NOT HAD ANY VACCINE IN THE LAST 5 YEARS - NO CODE 1 IN Q3

QC4 Why have you not had any vaccination in the last five years?

(READ OUT – ROTATE - MULTIPLE ANSWERS POSSIBLE EXCEPT CODES 9 AND 10 SINGLE CODES)

You are still covered by vaccines you received earlier	1,	
You do not see the need to be vaccinated	2,	
You think that vaccines are not safe and they can have side-effects	3,	
Vaccines are only necessary for children	4,	
You have not been offered any vaccine by your general practitioner, a	5,	
doctor, or a paediatrician		
It is expensive	6,	
It is complicated and requires a lot of effort	7,	
Other (SPONTANEOUS)	8,	
No reason (SPONTANEOUS)	9	
DK	10	
		NEW

ASK Q5 TO THOSE WHO HAVE RECEIVED A VACCINE IN THE LAST 5 YEARS – CODE 1 IN Q3

QC5 Thinking about the last vaccination you had, did you have it for any of the following reasons?

(READ OUT – ROTATE - MULTIPLE ANSWERS POSSIBLE EXCEPT CODES 7 AND 8 SINGLE CODES)

It was recommended by the health authorities	1,
It was mandatory under (NATIONALITY) law	2,
You needed it to travel abroad	3,
It was recommended by your general practitioner, a doctor, or a	4,
paediatrician	
It was recommended by your family and friends	5,
Other (SPONTANEOUS)	6,
None (SPONTANEOUS)	7
DK	8

QC6 Do you have a vaccination card? (INT.: A vaccination card is a booklet that records the vaccinations a person receives during their lifetime)

(READ OUT – MULTIPLE ANSWERS POSSIBLE EXCEPT CODES 3 AND 4 SINGLE CODES)

Yes, for yourself	1,
Yes, for your children	2,
No	3
DK	4

NEW

QC7 For each of the following statements, could you please tell me whether you think it is true or false.

(SHOW SCREEN – READ OUT – ROTATE – ONE ANSWER PER LINE)

		True	False	DK/NA
1	Vaccines overload and weaken the immune system	1	2	3
2	Vaccines can cause the disease against which they protect	1	2	3
3	Vaccines can often produce serious side-effects	1	2	3
4	Vaccines are rigorously tested before being authorised for use	1	2	3

NEW

QC8 To what extent do you agree or disagree with the following statements?

(READ OUT – ROTATE – ONE ANSWER PER LINE)

		Totally agree	Tend to agree	Tend to disagree	Totally disagree	DK/NA
1	It is important for everybody to have routine vaccinations	1	2	3	4	5
2	Vaccines are only important for children	1	2	3	4	5
3	Not getting vaccinated can lead to serious health issues	1	2	3	4	5
4	Vaccines are important to protect not only yourself but also others	1	2	3	4	5
5	Vaccination of other people is important to protect those that cannot be vaccinated (e.g. newborn children, immunodepressed or very sick people.)	1	2	3	4	5

QC9 If you were looking for information about vaccination, which of the following sources would you consult?

(READ OUT - ROTATE - MAX. 3 ANSWERS - EXCEPT CODES 10 AND 11 SINGLE CODES)

Family	1,
Friends	2,
Your general practitioner, a doctor, or a paediatrician	3,
Other health care workers (nurses, specialist doctors, etc)	4,
Pharmacists	5,
Online social networks	6,
Other Internet sites	7,
The health authorities	8,
Other (SPONTANEOUS)	9,
None (SPONTANEOUS)	10
DK	11

NEW

QC10 And which of the following sources do you trust the most for information on vaccination?

(READ OUT – ROTATE – ONE ANSWER ONLY)

Family	1
Friends	2
Your general practitioner, a doctor, or a paediatrician	3
Other health care workers (nurses, specialist doctors, etc)	4
Pharmacists	5
Online social networks	6
Other internet sites	7
The health authorities	8
Other (SPONTANEOUS)	9
None (SPONTANEOUS)	10
DK	11

QC11 A vaccination programme establishes what vaccines a person should receive and at what time in life (like a calendar), as recommended by a health authority. At which level do you think vaccination programmes should be coordinated?

(READ OUT – MULTIPLE ANSWERS POSSIBLE EXCEPT CODES 5 AND 6 SINGLE CODES)

At international level	1,
At European level	2,
At national level	3,
At regional or local level	4,
There should be no vaccination programmes, it is a personal choice	5
DK	6

NEW

QC12 In the past six months, have you seen, read or heard any information on vaccination in the media?

(READ OUT – MULTIPLE ANSWERS POSSIBLE EXCEPT CODES 1 AND 8 SINGLE CODES)

No	1
Yes, on TV	2,
Yes, on the radio	3,
Yes, in newspapers or magazines	4,
Yes, on online social networks	5,
Yes, on other Internet sites	6,
Other (SPONTANEOUS)	7,
DK	8

TABLES OF RESULTS

QC1 In your opinion, which of the following diseases are still causing deaths in the European Union nowadays? (MULTIPLE ANSWERS POSSIBLE) (%)

		Flu	Measles	Polio	Hepatitis	Meningitis	Tetanus	None of them	Don't know	All of them	At least five	At least three	At least one
EU28	$\langle \langle \rangle \rangle$	56	37	17	40	53	22	9	7	7	12	40	84
BE		64	37	15	45	52	22	10	1	7	11	41	89
BG		50	44	17	34	45	20	7	18	8	11	38	76
CZ		63	36	19	37	55	38	7	5	10	14	46	88
DK		54	53	14	49	63	19	10	5	7	14	48	85
DE		70	52	21	42	55	29	4	5	10	18	50	91
EE		73	42	18	36	32	24	5	8	10	14	34	87
ΙE		54	43	15	41	66	17	9	6	7	14	43	85
EL		87	24	24	47	57	15	2	2	5	11	46	96
ES	- iii	46	9	5	39	40	7	17	8	1	2	18	75
FR		85	47	12	42	53	22	2	4	7	12	48	94
HR	***	60	24	14	30	29	14	19	3	4	5	27	79
ΙΤ		15	29	18	33	63	25	15	7	4	7	30	78
CY	<u> </u>	84	12	10	38	35	5	5	4	2	3	26	91
LV		76	16	13	50	33	19	6	5	7	10	29	89
LT		74	44	22	44	58	32	5	3	15	22	45	92
LU		75	39	15	50	52	32	6	5	10	16	50	89
HU	4	30	30	16	39	53	19	19	7	6	8	30	75
MT	*	40	11	4	23	58	6	4	15	2	2	13	80
NL		74	45	25	51	82	28	4	2	13	23	59	94
AT		49	37	16	35	54	28	13	6	4	9	42	81
PL		44	32	9	28	26	14	13	19	4	5	23	68
PT	***	56	39	33	62	61	34	7	12	23	28	51	81
RO	P	58	34	21	38	33	18	10	11	10	13	31	79
SI		64	41	13	34	32	18	16	5	8	12	31	79
SK		59	42	21	30	34	30	10	4	5	8	38	86
FI		44	50	20	43	68 71	27	5	3	9	13	45	92
SE UK		68	61 34	16 19	53 47	63	30	5 6	11	9	20 14	61 45	92
UK		55	54	פו	47	03	22	U	11	9	14	43	83

QC2 All the diseases mentioned earlier are infectious diseases and can be prevented.

Do you think that vaccines can be effective in preventing them? (%)

		Yes, definitely	Yes, probably	No, probably not	No, not at all	It depends on the disease (SPONTANEOUS)	Don't know	Total 'Yes'	Total 'No'
EU28	\bigcirc	52	33	6	3	4	2	85	9
BE		45	36	12	4	3	0	81	16
BG		36	34	4	3	11	12	70	7
CZ		52	38	5	2	2	1	90	7
DK		81	13	2	0	3	1	94	2
DE		54	33	6	1	4	2	87	7
EE		46	39	6	2	4	3	85	8
ΙE		51	36	4	3	3	3	87	7
EL		54	36	3	3	4	0	90	6
ES	iñ a —	69	26	2	2	1	0	95	4
FR		48	35	8	5	2	2	83	13
HR		36	44	9	5	4	2	80	14
ΙΤ	.	49	29	7	4	9	2	78	11
CY	<u> </u>	42	40	6	4	5	3	82	10
LV		24	44	18	8	2	4	68	26
LT		46	37	10	4	2	1	83	14
LU		53	34	8	2	2	1	87	10
HU	3 6	44	36	7	7	4	2	80	14
MT	*	54	41	1	0	1	3	95	1
NL		76	21	2	1	0	0	97	3
AT		32	42	11	6	8	1	74	17
PL		42	39	5	5	4	5	81	10
PT		53	39	2	1	3	2	92	3
RO		36	36	10	8	6	4	72	18
SI	_	47	37	7	4	4	3	84	11
SK FI	#	48 61	36 36	5 3	3	5	0	84 97	3
SE	-	70	25	3	1	1	0	95	4
UK		53	37	5	2	1	2	90	7
OK		55	31	,	~		_	30	

QC3 Have you or has someone in your family had any vaccinations in the last five years? (MULTIPLE ANSWERS POSSIBLE) (%)

		Yes, yourself	Yes, your children	Yes, someone else	o N	Don't know	Total 'Yes'
EU28		45	27	20	33	1	66
BE		52	26	24	27	0	72
BG		25	27	10	46	8	46
CZ		43	24	14	36	2	62
DK	ⅲ	51	32	25	23	1	76
DE		69	32	24	19	1	80
EE		41	32	19	35	1	64
ΙE		42	32	16	33	1	66
EL		37	21	24	38	0	62
ES	*** *********************************	40	24	20	32	0	68
FR		54	31	27	19	1	80
HR	***	25	23	16	46	1	53
ΙΤ		29	21	8	53	1	46
CY	"	29	30	14	40	1	59
LV		44	31	18	34	1	65
LT		30	22	17	46	1	53
LU		62	40	29	15	1	83
HU		19	21	12	56	1	43
MT	**	48	28	15	33	2	66
NL		51	37	36	17	0	82
AT		49	22	20	36	2	63
PL		20	24	12	52	1	47
PT	(3)	67	33	25	21	1	79
RO	520	17	18	13	59	1	39
SI		33	24	13	45	0	54
SK		41	25	14	36	3	61
FI		72	29	27	16	1	84
SE		65	31	38	16	1	83
UK		47	27	19	29	2	69

QC4 Why have you not had any vaccination in the last five years? (MULTIPLE ANSWERS POSSIBLE) (%)

		You are still covered by vaccines you received earlier	You do not see the need to be vaccinated	You think that vaccines are not safe and they can have side-effects	Vaccines are only necessary for children	You have not been offered any vaccine by your general practitioner, a doctor, or a paediatrician	It is expensive	It is complicated and requires a lot of effort	Other (SPONTANEOUS)	No reason (SPONTANEOUS)	Don't know
EU28		29	34	9	11	22	4	3	4	7	2
BE		38	27	15	13	30	4	8	2	2	0
BG		29	17	8	21	24	5	3	1	10	7
CZ		44	29	9	6	32	10	1	4	1	1
DK		47	55	3	2	13	4	2	4	3	1
DE		45	25	10	3	18	1	2	4	13	1
EE		24	26	10	8	19	7	3	12	12	3
ΙE		21	37	7	9	22	4	2	3	5	
EL		28	49	12	11	40	1	2	5	2	0
ES	alli la	25	49	4	3	34	1	0	5	3	1
FR		42	26	22		18	0	2	6	4	3
HR		29	45	14	11	22	4	3	3	5	2
IT		15	29	7	23	25	3	4	2	13	1
CY LV	"	27	43	11	9	29	3	1	3	5	1
LV	₹	11	46	15	8	18	20	3	8	4	1
LT		6	56	12	14	13	19	5	7	4	1
LU		43	23	10	4	18	2	3	12	5	2
HU		29	43	10	15	23	8	3	1	9	1
MT	90	22	54	9	1	14	1	1	6	8	4
NL		53	23	5	3	32	0	1	8	4	1
AT		30	33	13	13	27	10	7	2	10	3
PL		28	34	7	21	9	10	3	4	6	4
PT		25	20	5	4	36	1	0	7	13	2
RO		10	35	14	16	26	11	8	5	9	4
SI	-	17	63	14	6	15	8	1	4	5	0
SK	#	29	35	10	14	26	6	5	5	2	3
FI		56	24	7	2	5	1	1	9	4	3
SE		44	57	14	1	18	3	3	5	3	1
UK		29	38	3	5	19	1	3	3	6	5

QC5 Thinking about the last vaccination you had, did you have it for any of the following reasons? (MULTIPLE ANSWERS POSSIBLE) (%)

		It was recommended by the health authorities	It was mandatory under (NATIONALITY) law	You needed it to travel abroad	It was recommended by your general practitioner, a doctor, or a paediatrician	It was recommended by your family and friends	Other (SPONTANEOUS)	None (SPONTANEOUS)	Don't know
EU28		24	13	17	63	9	4	2	0
BE		22	13	22	68	7	4	1	0
BG		9	37	7	65	10	0	1	2
CZ		12	23	14	64	12	4	2	0
DK		40	9	36	48	13	7	0	0
DE		10	7	17	79	11	4	4	0
EE		26	6	11	40	21	20	6	1
ΙE		34	5	19	63	12	1	0	0
EL		22	8	6	86	13	8	1	0
ES	**************************************	24	9	7	71	7 6	4	1	0
FR	ш.	32	22	14	56		5	2	0
HR		34	24	4	67	16	1	2	0
IT	Ш,	25	21	18	61	14	0	1	0
CY	<u> </u>	18	13	5	59	7	9	3	0
LV		18	23	6	56	12	13	2	1
LT		17	11	10	58	21	11	4	0
LU		24	18	28	65	8	4	1	0
HU		10	15	8	78	8	3	1	0
MT	**	47	11	9	54	8	3	0	7
NL		41	4	37	47	5	1	1	0
AT		29	6	24	63	14	6	2	0
PL		22	24	8	53	12	3	3	0
PT		17	40	4	58	4	2	0	0
RO		27	15	5	70	21	4	1	0
SI		28	19	6	53	17	11	2	0
SK	#	10	28	8	78	9	2	0	0
FI	±	50	10	29	25	8	7	2	0
SE		52	5	38	25	15	8	1	0
UK		32	7	20	54	4	2	1	1

QC6 Do you have a vaccination card? (INTERVIEWER: A vaccination card is a booklet that records the vaccinations a person receives during their lifetime)

(MULTIPLE ANSWERS POSS	IBLE)) (%)
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		Yes, for yourself	Yes, for your children	o Z	Don't know	Total 'Yes'
EU28	$\langle \langle \rangle \rangle$	47	27	40	2	58
BE		47	22	43	1	56
BG		22	25	44	18	38
CZ		61	28	27	2	72
DK		59	30	30	2	68
DE		85	32	12	1	87
EE		34	21	49	6	45
ΙE		21	22	60	2	39
EL		30	29	51	0	49
ES	- (1)	35	28	45	1	54
FR		70	32	23	1	76
HR		27	25	54	2	45
IT		34	27	48	3	50
CY	5	29	31	47	1	52
LV		62	26	30	3	67
LT		14	16	72	1	27
LU		86	41	8	1	91
HU	*	24	22	58	3	40
MT	*	46	28	40	2	59
NL		60	33	27	3	70
AT		69	22	24	2	74
PL		32	32	45	2	53
PT		83	35	12	1	87
RO		13	18	71	2	27
SI		36	24	49	1	50
SK	(*)	32	19	54	4	42
FI		50	22	40	1	58
SE		56	22	36	2	62
UK		16	13	71	4	25

QC7.1 For each of the following statements, could you please tell me whether you think it is true or false.

Vaccines overload and weaken the immune system (%)

		True.	False.	Don't know
EU28	$\langle \rangle$	31	55	14
BE		34	59	7
BG		25	39	36
CZ		45	39	16
DK		21	70	9
DE		33	53	14
EE		30	48	22
ΙE		34	50	16
EL	\$	30	58	12
ES	iiii	28	58	14
FR		34	51	15
HR		45	43	12
IT		32	54	14
CY	www.	39	39	22
LV		39	39	22
LT		31	51	18
LU		31	50	19
HU		38	54	8
MT	*	43	40	17
NL		15	79	6
AT		42	46	12
PL		28	56	16
PT	(1)	28	54	18
RO		33	50	17
SI		49	38	13
SK	#	36	47	17
FI		16	70	14
SE		15	78	7
UK		27	58	15

QC7.2 For each of the following statements, could you please tell me whether you think it is true or false.

Vaccines can cause the disease against which they protect (%)

		True.	False.	Don't know
EU28	\Diamond	38	49	13
BE		48	48	4
BG		25	37	38
CZ		45	40	15
DK		42	50	8
DE		42	44	14
EE		32	49	19
ΙE		35	52	13
EL		30	56	14
ES	- 100s	37	52	11
FR		45	45	10
HR		43	44	13
ΙΤ		34	53	13
CY	8	42	40	18
LV		39	41	20
LT		44	41	15
LU		38	45	17
HU		38	54	8
MT	*	51	36	13
NL		38	57	5
AT		38	49	13
PL		30	55	15
PT	(1)	34	53	13
RO		35	48	17
SI	-	47	39	14
SK	#	37	44	19
FI		44	46	10
SE		33	61	6
UK		34	49	17

QC7.3 For each of the following statements, could you please tell me whether you think it is true or false.

Vaccines can often produce serious side-effects (%)

		True.	False.	Don't know
EU28		48	41	11
BE		53	42	5
BG		41	25	34
CZ		53	31	16
DK		35	60	5
DE		46	43	11
EE		41	43	16
ΙE		57	33	10
EL		53	35	12
ES	\$	43	50	7
FR	Ш	60	33	7
HR	- 10	64	28	8
IT		46	42	12
CY	<u> </u>	65	20	15
LV		55	28	17
LT		55	32	13
LU		53	34	13
HU	ab e	45	47	8
MT		62	27	11
NL		29	66	5
AT		51	40	9
PL		40	45	15
PT	***	50	37	13
RO SI	₹	53 60	34 30	13 10
SK	#	49	35	16
FI		49	53	6
SE		26	69	5
UK		54	33	13
OK		J-T	33	13

QC7.4 For each of the following statements, could you please tell me whether you think it is true or false.

Vaccines are rigorously tested before being authorised for use (%)

		True.	False.	Don't know
EU28		80	11	9
BE		89	9	2
BG		68	7	25
CZ		83	8	9
DK		88	8	4
DE		85	8	7
EE		73	8	19
ΙE		80	11	9
EL		83	9	8
ES	- 	81	9	10
FR	*	79	12	9
HR		71	18	11
IT		71	18	11
CY	<u> </u>	73	8	19
LV		68	12	20
LT		70	8	22
LU		78	9	13
HU		77	16	7
MT	**	89	1	10
NL		93	4	3
AT		81	12	7
PL		76	13	11
PT	e	87	4	9
RO		66	21	13
SI	-	83	8	9
SK		79	7	14
FI		84	11	5
SE		90	7	3
UK		83	7	10

QC7T Index Knowledge about vaccines (%)

		High knowledge	Medium knowledge	Low knowledge	Average
EU28	(3)	46	43	11	2
BE		49	47	4	2
BG		30	46	24	2
CZ		32	58	10	2
DK		61	36	3	3
DE		43	49	8	2
EE		44	37	19	2
ΙE		44	44	12	2
EL		50	39	11	2
ES	- iii	53	39	8	2
FR		39	49	12	2
HR		36	47	17	2
IT		46	39	15	2
CY	$\overline{\Box}$	28	54	18	2
LV		32	47	21	2
LT		37	47	16	2
LU		41	48	11	2
HU		49	44	7	2
MT	*	31	61	8	2
NL		70	27	3	3
AT		41	52	7	2
PL		49	40	11	2
PT	(1)	47	45	8	2
RO		37	49	14	2
SI	2	34	56	10	2
SK	#	39	47	14	2
FI		55	39	6	3
SE	-	71	25	4	3
UK		47	42	11	2

QC8.1 To what extent do you agree or disagree with the following statements?

It is important for everybody to have routine vaccinations (%)

		Totally agree	Tend to agree	Tend to disagree	Totally disagree	Don't know	Total 'Agree'	Total 'Disagree'
EU28	\Diamond	49	33	11	4	3	82	15
BE		43	39	14	3	1	82	17
BG		41	36	7	3	13	77	10
CZ		58	32	6	1	3	90	7
DK		75	15	7	2	1	90	9
DE		59	27	9	3	2	86	12
EE		50	33	8	3	6	83	11
ΙE		45	31	14	3	7	76	17
EL		52	33	12	2	1	85	14
ES	燕	59	32	5	2	2	91	7
FR		35	33	20	10	2	68	30
HR		42	38	12	4	4	80	16
ΙΤ		32	36	18	7	7	68	25
CY	<u>**</u>	64	26	4	3	3	90	7
LV		37	34	16	7	6	71	23
LT		51	36	9	1	3	87	10
LU		41	37	12	7	3	78	19
HU	*	57	30	9	3	1	87	12
MT	*	48	39	7	1	5	87	8
NL	= .	82	13	4	1	0	95	5
AT		35	37	18	5	5	72	23
PL		59	33	4	2	2	92	6
PT	(8)	61	35	3	0	1	96	3
RO		33	41	15	6	5	74	21
SI		56	29	8	5	2	85	13
SK	#	46	39	8	1	6	85	9
FI		75	19	5	0	1	94	5
SE		66	19	7	5	3	85	12
UK		45	40	8	3	4	85	11

QC8.2 To what extent do you agree or disagree with the following statements?

Vaccines are only important for children (%)

		Totally agree	Tend to agree	Tend to disagree	Totally disagree	Don't know	Total 'Agree'	Total 'Disagree'
			Ter	Tenc	Tota	۵	OT	Tota
EU28		13	16	30	39	2	29	69
BE		15	18	30	36	1	33	66
BG		19	23	31	18	9	42	49
CZ		15	17	36	30	2	32	66
DK		5	4	15	75	1	9	90
DE		12	8	24	55	1	20	79
EE		8	17	32	39	4	25	71
ΙE		18	18	30	30	4	36	60
EL		14	18	41	26	1	32	67
ES	- Miles	8	8	32	51	1	16	83
FR		6	12	32	48	2	18	80
HR	() ·	15	28	36	18	3	43	54
ΙΤ		23	25	27	20	5	48	47
CY		10	10	37	40	3	20	77
LV		15	17	30	33	5	32	63
LT		16	21	34	27	2	37	61
LU		8	10	34	46	2	18	80
HU		21	26	30	22	1	47	52
MT	•	3	13	29	50	5	16	79
NL		4	6	24	66	0	10	90
AT		14	22	28	32	4	36	60
PL		22	30	31	14	3	52	45
PT	***	13	8	37	41	1	21	78
RO		21	29	28	18	4	50	46
SI		17	16	30	35	2	33	65
SK	#	16	23	37	19	5	39	56
FI		6	8	32	53	1	14	85
SE		6	6	14	73	1	12	87
UK		8	13	36	40	3	21	76

QC8.3 To what extent do you agree or disagree with the following statements?

Not getting vaccinated can lead to serious health issues (%)

		Totally agree	Tend to agree	Tend to disagree	Totally disagree	Don't know	Total 'Agree'	Total 'Disagree'
EU28		47	34	11	4	4	81	15
BE		40	42	14	3	1	82	17
BG		35	34	13	5	13	69	18
CZ		37	38	16	4	5	75	20
DK		75	16	6	2	1	91	8
DE		53	33	9	2	3	86	11
EE		45	36	9	4	6	81	13
ΙE		48	33	10	3	6	81	13
EL	**	47	35	12	3	3	82	15
ES	iii a	50	33	10	4	3	83	14
FR		38	34	16	7	5	72	23
HR		40	37	16	3	4	77	19
IT	₹	38	35	15	4	8	73	19
CY	5	54	27	9	4	6	81	13
LV		33	32	19	8	8	65	27
LT	20 M	40	35	17	4	4	75	21
LU		41	37	12	5	5	78	17
HU		47	36	11	3	3	83	14
MT	*	41	47	4	2	6	88	6
NL		73	18	6	2	1	91	8
AT		32	41	17	5	5	73	22
PL		50	38	8	2	2	88	10
PT	(8)	58	38	2	0	2	96	2
RO		36	36	17	5	6	72	22
SI	-	48	32	12	5	3	80	17
SK	#	38	44	10	1	7	82	11
FI		70	24	4	1	1	94	5
SE		71	20	6	2	1	91	8
UK		49	38	7	2	4	87	9

QC8.4 To what extent do you agree or disagree with the following statements?

Vaccines are important to protect not only yourself but also others (%)

			-					
		Totally agree	Tend to agree	Tend to disagree	Totally disagree	Don't know	Total 'Agree'	Total 'Disagree'
EU28	\bigcirc	56	32	7	2	3	88	9
BE		51	42	5	1	1	93	6
BG		40	37	6	4	13	77	10
CZ		55	34	7	2	2	89	9
DK	噩	84	12	3	1	0	96	4
DE		65	25	7	2	1	90	9
EE		56	33	5	2	4	89	7
ΙE		53	34	6	2	5	87	8
EL		49	40	9	1	1	89	10
ES	illia.	63	32	3	1	1	95	4
FR		55	32	6	4	3	87	10
HR		45	38	13	2	2	83	15
ΙΤ		47	32	12	4	5	79	16
CY	www.	66	24	5	2	3	90	7
LV		46	35	8	4	7	81	12
LT		49	38	7	2	4	87	9
LU		55	34	5	2	4	89	7
HU		50	37	8	3	2	87	11
MT	*	54	38	2	1	5	92	3
NL		85	12	2	1	0	97	3
AT		36	39	15	5	5	75	20
PL		48	39	7	2	4	87	9
PT	(8)	62	35	2	0	1	97	2
RO		34	41	16	4	5	75	20
SI	-	57	33	6	3	1	90	9
SK		41	43	9	1	6	84	10
FI		80	18	2	0	0	98	2
SE		83	12	3	1	1	95	4
UK		57	35	3	1	4	92	4

QC8.5 To what extent do you agree or disagree with the following statements?

Vaccination of other people is important to protect those that cannot be vaccinated (e.g. newborn children, immunodepressed or very sick people) (%)

		gree	gree	agree	agree	WOI	ree'	igree'
		Totally agree	Tend to agree	Tend to disagree	Totally disagree	Don't know	Total 'Agree'	Total 'Disagree'
EU28	\bigcirc	53	34	7	2	4	87	9
BE		47	43	7	1	2	90	8
BG		37	36	7	4	16	73	11
CZ		51	37	6	2	4	88	8
DK		77	14	6	1	2	91	7
DE		62	28	5	2	3	90	7
EE		54	34	4	2	6	88	6
ΙE		53	33	6	2	6	86	8
EL		52	40	6	1	1	92	7
ES	illia I	58	32	5	2	3	90	7
FR		48	37	7	4	4	85	11
HR	(0 a	42	40	11	3	4	82	14
ΙΤ		43	36	12	4	5	79	16
CY	www.	63	26	4	2	5	89	6
LV		43	34	6	4	13	77	10
LT		49	38	7	1	5	87	8
LU		49	35	7	4	5	84	11
HU		49	38	7	3	3	87	10
MT	*	52	37	3	1	7	89	4
NL		77	17	3	1	2	94	4
AT		36	41	14	4	5	77	18
PL		41	40	7	3	9	81	10
PT	(1)	61	35	2	0	2	96	2
RO		34	43	14	3	6	77	17
SI	3	56	31	7	3	3	87	10
SK	#	40	43	7	1	9	83	8
FI		75	20	3	0	2	95	3
SE		80	15	2	1	2	95	3
UK		56	34	3	1	6	90	4

QC9 If you were looking for information about vaccination, which of the following sources would you consult?

(MAX. 3 ANSWERS) (%)

		Family	Friends	Your general practitioner, a doctor, or a paediatrician	Other health care workers (nurses, specialist doctors, etc)	Pharmacists	Online social networks	Other Internet sites	The health authorities	Other (SPONTANEOUS)	None (SPONTANEOUS)	Don't know
EU28		9	4	79	29	20	5	14	25	1	2	1
BE		10	4	87	26	31	7	13	19	0	0	0
BG		10	9	73	29	12	6	8	14	1	2	5 1
CZ		12	5	80	29	11	5	14	19	1	1	
DK		8	4	88	42	11	8	19	54	1	0	0
DE		11	4	92	18	16	6	15	20	1	0	1
EE		11	4	78	28	14	11	19	27	2	3	
ΙE		11	4	75	30	26	5	14	28	0	0	0
EL		9	4	94	28	25	6	6	34	1	2	0
ES	* 	5	0	85	41	15	3	10	22	1	1	0
FR		8	3	83	31	35	4	20	18	2	3	1
HR		8	4	79	34	19	6	6	23	1	1	1
IT		9	4	68	30	12	5	10	35	0	4	1
CY	www.	8	2	85	25	15	8	6	25	1	3	0
LV		11	6	79	21	9	9	17	19	2	3	2
LT		16	6	77	36	9	9	12	20	1	2	0
LU		7	4	87	32	14	4	18	17	1	1	0
HU	#	16	8	71	26	20	7	14	16	0	4	1
MT	*	3	1	82	30	26	7	10	34	1	1	1
NL		10	3	85	23	21	10	37	53	1	0	0
AT	Ē	19	11	75	28	27	8	13	27	3	3	1
PL		12	8	66	25	11	5	7	14	3	7	4
PT		4	1	90	59	22	1	3	20	0	1	0
RO		14	8	64	25	19	5	5	20	1	5	3
SI	3	11	6	80	34	12	6	7	24	1	1	0
SK	#	13	10	77	24	18	5	16	21	1	2	1
FI		5	3	60	58	11	7	23	61	1	0	1
SE		12	6	71	55	16	4	20	60	1	0	0
UK		7	4	79	25	31	4	19	29	0	0	1

QC10 And which of the following sources do you trust the most for information on vaccination? **(%)**

		Family	Friends	Your general practitioner, a doctor, or a paediatrician	Other health care workers (nurses, specialist doctors, etc)	Pharmacists	Online social networks	Other internet sites	The health authorities	Other (SPONTANEOUS)	None (SPONTANEOUS)	Don't know
EU28	\bigcirc	3	1	65	9	4	1	2	12	0	2	1
BE		2	1	72	9	6	2	1	7	0	0	0
BG		5	2	59	13	2	1	2	6	0	3	7
CZ		4	1	71	9	1	1	3	8	0	1	7
DK		2	0	57	8	1	0	1	30	0	0	1
DE		3	0	79	3	3	1	2	6	0	2	1
EE		6	1	65	9	2	1	2	10	0	3	1
ΙE		3	1	60	13	9	1	2	9	0	1	1
EL		3	1	78	3	2	1	1	8	0	3	0
ES		1	0	72	15	1	1	1	8	0	1	0
FR		2	0	69	9	5	0	2	8	1	3	1 1
HR		4	1	61	13	5	2	2	9	0	2	
IT		3	1	47	14	4	1	4	21	0	4	1
IT CY LV	www.	4	1	77	5	2	2	1	5	0	3	0
LV		4	2	68	8	3	1	2	8	0	2	2
LT		5	1	61	13	3	2	2	10	0	2	1
LU		3	1	70	11	2	1	3	8	0	1	0
HU	*	5	3	60	10	4	2	3	8	0	3	2
MT	#	1	1	64	14	4	2	2	10	0	1	1
NL		1	0	56	4	3	0	3	32	0	1	0
AT		5	3	62	8	4	2	3	7	0	4	2
PL		6	3	60	10	3	1	3	5	0	4	5
PT	(8)	0	0	80	13	2	0	0	3	0	1	1
RO		7	3	56	10	6	1	1	7	1	5	3
SI	8	5	2	63	12	2	0	1	9	1	4	1
SK	#	5	4	61	9	4	0	5	8	0	3	1
FI	-	2	0	36	16	2	0	3	40	0	0	1
SE	-	2	0	38	12	2	1	2	42	0	1	0
UK		3	1	64	8	6	1	2	13	0	1	1

QC11 A vaccination programme establishes what vaccines a person should receive and at what time in life (like a calendar), as recommended by a health authority. At which level do you think vaccination programmes should be coordinated? (%)

		At international level	At European level	At national level	At regional or local level	There should be no vaccination programmes, it is a personal choice	Don't know
EU28	$ \bigcirc $	36	29	38	16	9	5
BE		35	37	29	12	6	1
BG		19	22	36	16	10	18
CZ		26	28	43	18	12	7
DK		49	38	38	13	10	2
DE		43	31	27	15	10	4
EE		26	22	43	12	11	8
ΙE		31	28	47	25	9	4
EL		28	40	61	18	11	2
ES	卷	52	29	31	12	3	5
FR		34	31	31	11	15	4
HR		28	30	40	17	15	3
IT		37	27	34	16	11	6
CY	www.	46	41	36	10	3	2
LV		17	22	48	18	15	4
LT		19	28	41	12	13	6
LU		41	36	30	7	14	3
HU		31	34	45	12	5	4
MT	*	35	30	55	11	3	7
NL		32	35	50	14	3	1
AT		24	31	38	16	22	3
PL		22	28	51	23	7	8
PT		39	39	61	29	1	5
RO		27	28	39	27	18	5
SI	2	44	42	50	24	8	4
SK	#	22	33	47	18	6	6
FI	+	45	34	46	18	1	1
SE		39	37	49	11	3	1
UK		35	18	41	15	6	8

QC12 In the past six months, have you seen, read or heard any information on vaccination in the media? (MULTIPLE ANSWERS POSSIBLE) (%)

		ON	Yes, on TV	Yes, on the radio	Yes, in newspapers or magazines	Yes, on online social networks	Yes, on other Internet sites	Other (SPONTANEOUS)	Don't know	Total 'Yes'
EU28	(3)	34	51	14	17	12	10	1	2	65
BE		41	43	14	18	7	6	2	0	59
BG		36	52	5	5	9	5	1	5	59
CZ		26	61	12	18	11	11	0	3	71
DK	==	11	72	40	35	33	17	2	1	87
DE		33	48	16	26	8	11	1	1	66
EE		20	60	28	34	26	17	2	2	78
ΙE		45	36	21	16	13	7	1	2	53
EL		22	73	8	9	15	12	2	0	78
ES	iii a	53	38	6	6	5	5	1	0	47
FR		25	60	25	15	12	9	1	2	74
HR		26	63	13	22	17	14	1	1	73
ΙΤ		26	60	9	19	15	11	1	3	71
CY	<u> </u>	20	74	12	5	13	5	1	1	79
LV		26	51	11	12	16	18	2	1	72
LT	= .	8	83	23	14	24	20	1	1	91
LU		24	48	33	32	15	16	2	2	74
HU		61	26	5	6	7	6	1	2	37
MT		28	48	17	7	23	17	2	6	66
NL		14	63	27	46	24	20	2	0	85
AT	= .	28	50	20	37	13	11	2	6	66
PL		37	51	11	8	10	10	3	1	63
PT		56	41	3	3	5	2	1	0	44
RO		18	71	10	7	9	3	1	3	79
SI		19	70	33	34	21	16	1	0	80
SK		24	60	20	15	13	12	3	4	71
FI		18	56	22	52	25	18	1	2	81
SE		22	47	24	44	27	16	3	1	77
UK		49	30	7	12	12	9	1	3	48