



COMMUNICABLE DISEASE THREATS REPORT

CDTR

Week 23, 3-9 June 2018

All users

This weekly bulletin provides updates on threats monitored by ECDC.

Rapid risk assessment: Mass gathering event, 2018 FIFA World Cup in Russia

Before visiting the 2018 FIFA World Cup in Russia, which will be taking place from 14 June to 15 July, visitors should ensure that all their vaccinations are up-to-date in accordance with the recommended immunisation schedule in their country of residence. This is particularly important for protection against diseases such as diphtheria, hepatitis A, hepatitis B, measles, meningococcal infection, mumps, pertussis, poliomyelitis rubella and tetanus.

Visitors of the 2018 FIFA World Cup in Russia may be most at risk of gastrointestinal illness and vaccine-preventable infections.

The risk of gastrointestinal illness can be reduced by employing standard hygiene measures including regular hand washing with soap, drinking safe water (bottled, chlorinated or boiled before consumption); eating thoroughly cooked food, and carefully washing fruit and vegetables with safe drinking water before consumption.

Visitors to the 2018 FIFA World Cup are advised to use condoms with new or casual sexual partners in order to decrease the risk of sexually transmitted infections, including HIV.

Travellers who require hospitalisation in the EU after having been hospitalised in Russia should report their previous hospitalisation so as not to delay the possible ascertainment of recent healthcare-associated infections.

Outbreaks and spread of vaccine-preventable diseases are of particular concern during mass gatherings but there are no indications that the risk is higher than usual. Proper vaccination in advance is an effective way of preventing the contracting and further spread of vaccine-preventable infections. Those planning to attend the World Cup may need to consult their local health service providers to ascertain their vaccination status.

There is a possibility that travellers may import or export communicable diseases. Surveillance for communicable diseases in Russia and EU countries to which travellers and World Cup attendees return should be sensitive enough to detect threats at a stage when interventions are likely to prevent or reduce the impact of outbreaks.

Based on the epidemiological profile for infectious diseases in Russia and the profile of the visiting populations, ECDC will conduct enhanced epidemic intelligence surveillance for communicable diseases from 7 June to 22 July 2018.

I. Executive summary

EU Threats

Dengue – France, Réunion – 2018

Opening date: 13 March 2018

Latest update: 8 June 2018

Since the beginning of 2018, the island of Réunion, a French department in the Indian Ocean, has seen a significant increase in dengue cases.

→Update of the week

Since the previous report on 30 May 2018 and as of 7 June, Réunion has reported 368 dengue cases.

Monitoring environmental suitability of *Vibrio* growth in the Baltic Sea – Summer 2018

Opening date: 24 May 2018

Latest update: 8 June 2018

Elevated sea surface temperatures in marine environments with low salt content offer optimal environmental growth conditions for certain *Vibrio* species. These conditions can be found during the summer months in estuaries and enclosed water bodies with moderate salinity.

ECDC has developed a model to map the environmental suitability for *Vibrio* growth in the Baltic Sea ([ECDC E3 Geoportal](#)). Please note that this model has been calibrated to the Baltic Region in northern Europe and that it might not apply to other settings without further validation.

→Update of the week

As of 8 June 2018, the environmental suitability for *Vibrio* growth in the Baltic Sea for the next five days is considered to be medium to high in some coastal areas of Denmark, Germany, Poland, Lithuania and Kaliningrad (Russia).

Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 8 June 2018

Measles outbreaks continue to occur in a number of EU/EEA countries, with a risk of spread and sustained transmission in areas with susceptible populations.

→Update of the week

Updates are provided for 19 EU/EFTA countries. Outbreaks of measles are ongoing in the Czech Republic, France, Greece, Italy, Romania, Spain and the UK. Updated information on measles cases are available for Austria, Belgium, Bulgaria, Finland, Germany, Hungary, Ireland, Portugal, Poland, Slovakia, Sweden and Switzerland.

Relevant updates outside EU/EFTA countries are provided for Albania, Belarus, Georgia, Russia, Serbia, Turkey, Ukraine and countries in the Region of the Americas. Over 1 100 cases are reported in Russia, the host country of the 2018 FIFA World Cup taking place 14 June-15 July 2018.

Rubella – Multistate (EU) – Monitoring European outbreaks

Opening date: 7 March 2012

Rubella, caused by the rubella virus and commonly known as German measles, is usually a mild and self-limiting disease which often passes unnoticed. The main reason for immunising against rubella is the high risk of congenital malformations associated with rubella infection during pregnancy. All EU Member States recommend vaccination against rubella with at least two doses of vaccine for both boys and girls. The vaccine is given at the same intervals as the measles vaccine as part of the MMR vaccine. No new outbreaks have been detected in the EU since March 2017.

ECDC reports global outbreaks of rubella in the CDTR on a monthly basis or if there is a critical event.

→Update of the week

No outbreaks have been detected in 2018.

Hepatitis A virus genotype IA and IB infections with a link to Morocco - Multistate - 2018

Opening date: 3 May 2018

Latest update: 8 June 2018

On 21 May 2018, ECDC published a [rapid risk assessment \(RRA\)](#) describing an outbreak of cases infected with two distinct hepatitis A virus (HAV) genotype IA strains identified in six European Union (EU) countries. Both outbreak strains were found epidemiologically linked to Morocco. Since 21 May, additional cases infected with these IA strains have been identified. In addition, an outbreak of HAV genotype IB infections with a link to Morocco has also been reported in the Epidemic Intelligence Information System for Food- and Waterborne Diseases (EPIS-FWD) by Germany. The two events are distinct and only overlap in time and because of their link to Morocco. The cases are classified as either autochthonous, i.e. infected in the EU, or with a travel history to Morocco.

→Update of the week

Since the last ECDC RRA on this event, 16 additional hepatitis A cases infected with one of the two HAV IA strains, and 20 cases infected with the same HAV IB strain have been reported.

Non EU Threats

New! Mass gathering monitoring- Russia- FIFA World Football Cup 2018

Opening date: 7 June 2018

Latest update: 8 June 2018

ECDC will be enhancing its epidemiological intelligence surveillance during the 2018 FIFA World Cup (14 June–15 July) in Russia to detect threats to public health that could affect the EU or EU visitors. Routine epidemic intelligence activities will be enhanced by increasing the number of monitored information sources, using a targeted and systematic screening approach and tailored tools (e.g. MediSys).

→Update of the week

No significant events have been detected.

New! Carbapenem-resistant Enterobacteriaceae - Multistate EU/EEA - 2018

Opening date: 7 June 2018

Latest update: 8 June 2018

Carbapenem-resistant Enterobacteriaceae (CRE) pose a significant threat to patients and healthcare systems in all EU/EEA countries. CRE infections are associated with high mortality, primarily due to delays in administration of effective treatment and the limited availability of treatment options. New antibiotics capable of replacing carbapenems for their main indications are not likely to become available in the near future. CRE are adapted to spread in healthcare settings as well as in the community, and measures should address both routes of transmission.

→Update of the week

ECDC has published an updated [rapid risk assessment](#) on 4 June 2018.

Ebola virus disease - Democratic Republic of the Congo - 2018

Opening date: 8 May 2018

Latest update: 8 June 2018

On 8 May 2018, the Ministry of Health of the Democratic Republic of the Congo declared an outbreak of Ebola virus disease (EVD) in Bikoro Health Zone, Equateur Province. This is the ninth outbreak of Ebola virus disease over the last four decades in the country, with the most recent one occurring in May 2017. The outbreak is currently affecting three health districts of the Equateur Province which is bordering on the Congo River and the Republic of Congo.

→Update of the week

Since the last CDTR published on 1 June, authorities have reported one confirmed and one probable case in Iboko health zone. As of 7 June 2018, the [Ministry of Health](#) of DRC has reported 62 cases, including 27 deaths. Of these cases, 38 cases are confirmed, 14 are probable cases and 10 are suspected. So far, all cases have been reported from three health zones: Bikoro (23), Iboko (32) and Wangata (7) in Equateur Province.

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

Opening date: 30 May 2018

Latest update: 8 June 2018

During the West Nile virus transmission season (June to November), ECDC monitors the occurrence of cases of West Nile fever in EU/EEA Member States and neighbouring countries on a weekly basis in order to inform blood safety authorities about areas with ongoing virus transmission.

During the 2017 transmission season, 288 human cases were reported in the EU and neighbouring countries. EU Member States reported 127 equine cases.

→Update of the week

No human or equine cases have been reported so far in 2018.

Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 8 June 2018

Global public health efforts are ongoing to eradicate polio by immunising every child until transmission of the virus has completely stopped and the world becomes polio-free. Polio was declared a public health emergency of international concern (PHEIC) by the World Health Organization (WHO) on 5 May 2014 due to concerns regarding the increased circulation and international spread of wild poliovirus during 2014. On 7 February 2018, WHO agreed that the spread of poliovirus remains a public health event of international concern and extended the temporary recommendations for an additional three months. In June 2002, the WHO European Region was officially declared polio-free.

→Update of the week

Since the previous CDTR published on 1 May, and as of 7 June 2018, one new case of wild poliovirus type 1 (WPV1) case was reported respectively from Pakistan and Afghanistan. One vaccine-derived polio viruses type 2 (cVDPV2) was reported from Nigeria.

According to [ProMed report](#) and media quoting health officials, four acute flaccid paralysis (AFP) cases have been identified in Venezuela. As of 7 June, the investigation are ongoing and the authorities have not yet confirmed the cases.

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

Opening date: 24 September 2012

Latest update: 8 June 2018

Since the disease was first identified in Saudi Arabia in September 2012, approximately 2 000 MERS-CoV cases have been detected in over 20 countries. In Europe, eight countries have reported confirmed cases, all with direct or indirect connections to the Middle East. The majority of MERS-CoV cases continue to be reported from the Middle East. The source of the virus remains unknown, but the pattern of transmission and virological studies point towards dromedary camels in the Middle East as being a reservoir from which humans sporadically become infected through zoonotic transmission. Human-to-human transmission is amplified among household contacts and in healthcare settings.

→Update of the week

Since the last update on 5 May 2018, [Saudi Arabia](#) has detected 14 cases. According to [ProMed](#), among the 14 cases, 12 cases belong to a household cluster in Najran. The 12 cases include the index case, who had camel contact.

On 16 May 2018, [the United Arab Emirates](#), reported one laboratory-confirmed case of MERS-CoV infection to WHO. The case is a 78-year-old male who owns a camel farm which he visits frequently.

II. Detailed reports

Dengue – France, Réunion – 2018

Opening date: 13 March 2018

Latest update: 8 June 2018

Epidemiological summary

In 2018 and as of 7 June, authorities reported 4 292 autochthonous cases of dengue on the island. The main affected areas are on the western part of the island. The most prevalent serotype is DENV-2.

The main vector of infection implicated in the outbreak is *Aedes albopictus*.

On 27 March 2018, authorities decided to raise the level of the emergency plan [ORSEC](#) to 3. Control activities are currently in place and include active reinforced vector control, enhanced surveillance, blood safety measures and social mobilisation.

Sources: [ARS](#), [Santé publique France](#)

ECDC assessment

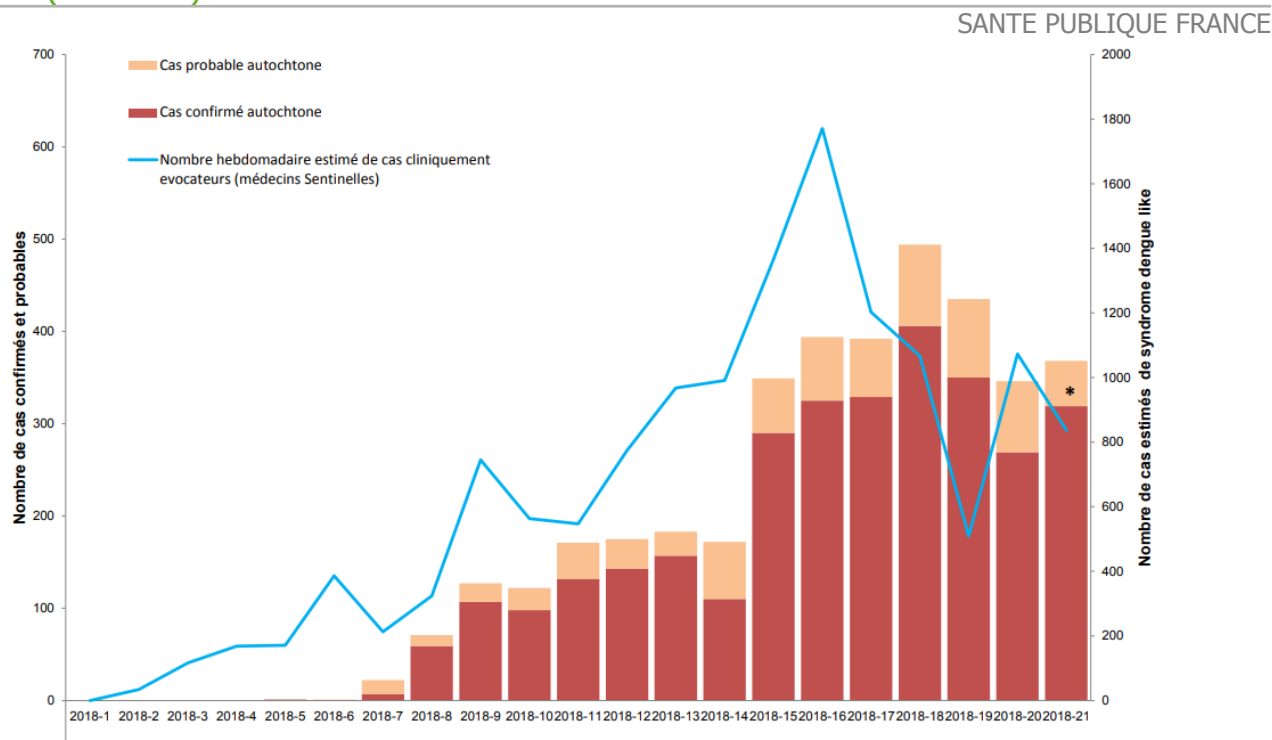
The current outbreak is a significant event as the number of cases already exceeds the yearly number of cases reported since 2010. Based on previous *Aedes* mosquito-borne outbreaks on the island, further transmission is expected up to the beginning of the austral winter (lasting from July to September) when temperatures will be lower.

The risk for onward transmission of dengue fever in Europe is linked to importation of virus by viraemic travellers into receptive areas with established and active competent vectors (i.e. *Aedes albopictus* in mainland Europe, primarily around the Mediterranean, and *Aedes aegypti* on Madeira). Environmental conditions in Europe are now favourable to the growth of mosquito populations, which could lead to a high vector abundance in early summer. Apart from seasonal high vector abundance, there is a low likelihood of sustained autochthonous dengue virus transmission in continental Europe associated with virus introduction by returning travellers from Réunion or other areas with active DENV transmission.

Actions

ECDC is closely monitoring the situation and produced a rapid risk assessment entitled '[Dengue outbreak in Réunion, France](#)', which was published on 16 April 2018. ECDC reports monthly dengue outbreaks detected through epidemic intelligence in the CDTR.

Distribution of Dengue cases, by week of onset, week 2018-01 to week 2018-21, Reunion (n=4 289)



Monitoring environmental suitability of *Vibrio* growth in the Baltic Sea – Summer 2018

Opening date: 24 May 2018

Latest update: 8 June 2018

Epidemiological summary

Sea surface temperatures (SST) in the Baltic Sea: http://www.ospo.noaa.gov/Products/ocean/sst/anomaly/anim_full.html

Vibrio suitability tool available on the E3 Geoportal:

<https://e3geoportal.ecdc.europa.eu/SitePages/Vibrio%20Map%20Viewer.aspx>

Please note that this model has been calibrated to the Baltic Region in northern Europe and might not apply to other settings prior to validation. For the Baltic Sea, the following model parameters should be used in the map: number of colour bands: 20, scale method: linear, legend range: min. value (0) and max. value (28).

ECDC assessment

Elevated sea surface temperatures in marine environments with low salt content offer ideal environmental growth conditions for certain *Vibrio* species. These conditions can be found during the summer months in estuaries and enclosed water bodies with moderate salinity. By contrast, open ocean environments do not offer appropriate growth conditions for these bacteria due to the high salt content, low temperature and limited nutrient content.

These vibrio species can cause vibriosis infections, particularly *V. parahaemolyticus*, *V. vulnificus* and non-toxigenic *V. cholera*. Vibriosis in humans caused by these species in the Baltic region occurred in the past during hot summer months particularly when the sea surface temperatures were elevated (above 20 degrees Celsius). The most common clinical manifestations are gastroenteritis with nausea, vomiting, and diarrhoea, wound infections when a cut has been exposed, infected woundss or abrasions due to contaminated seawater, primary septicaemia, and otitis externa. Risk factors for illness, apart from contact with natural bodies of waters, especially marine or estuarine waters, also include consumption of shellfish, particularly raw oysters.

Actions

ECDC is monitoring this threat on a weekly basis during the summer of 2018 and reports on increased environmental suitability for the growth of *Vibrio* bacteria.

Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 8 June 2018

Epidemiological summary

Updates are provided for 19 EU/EFTA countries. Outbreaks of measles are ongoing in the Czech Republic, France, Greece, Italy, Romania, Spain and the UK. Updated information on measles cases are available for Austria, Belgium, Bulgaria, Finland, Germany, Hungary, Ireland, Portugal, Poland, Slovakia, Sweden and Switzerland.

Relevant updates outside EU/EFTA countries are provided for Albania, Belarus, Georgia, Russia, Serbia, Turkey, Ukraine and countries in the Region of the Americas. Over 1 100 cases are reported in Russia, the host country of 2018 FIFA World Cup on 14 June-15 July 2018.

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

Belgium, according to TESSy reported 29 cases in January-April 2018.

Bulgaria has reported four cases of measles in 2018, as of week 2018-21. There were no new cases reported since 13 May 2018.

Czech Republic since the beginning of the year and until week 2018-21, 25 measles cases have been reported in the Central Bohemian. The cases are three children under 4 years of age, one adolescent and 21 adults. None of the children were vaccinated, the adolescent was vaccinated, four adults were not vaccinated, and two adults were not available for vaccination.

In the capital, **Prague**, from the beginning 2018 and as of 25 May, 83 measles cases have been reported. Of the cases, 25 are children under the age of eighteen and 58 are adults. Of the 25 children none were vaccinated. Five children were younger than the recommended age of thirteen months to be vaccinated, 13 children had postponed or rejected the vaccination, five children were vaccinated in the Ukraine and two children were foreign-born and their vaccination status is unknown.

England and Wales have reported 1 346 suspected and confirmed measles cases in 2018 as of 27 May.

Finland has reported four measles cases in 2018, as of 31 May. This is an increase of one case cases since 17 May 2018.

France has reported 2 306 cases in 2018 as of 27 May. This is an increase of 133 cases since 13 May 2018. Since the beginning of the outbreak in November 2017 there have been 2 364 cases, including one death, reported across the country. One case was imported from French Guinea. Overall, the outbreak has a decreasing trend across the country and in New Aquitaine region, which previously has reported about the half of the cases. Active measles foci have been reported in Bretagne, Centre Val de Loire, Hauts de France, Normandie, Pays de Loire and Provence-Alpes-Côte d'Azur regions. The highest incidence is in children under one year of age. Among the reported cases, 22% were hospitalised and 88% were not or incompletely vaccinated.

Germany has reported 240 cases of measles in 2018, as of 31 May. This is an increase of 64 cases since the previous report on 21 April.

[Greece](#) has reported 2 097 cases in 2018 as of 7 June, including two deaths. This is an increase of 149 cases since the CDTR published on 18 May. As of 7 June 2018, and since the beginning of the outbreak in May 2017, Greece has reported 3 065 measles cases, of which 1 789 were laboratory confirmed. Among the laboratory-confirmed cases, four deaths were reported. Most of the cases occurred in southern Greece among young Roma children and young Greek adults. However, an increase in measles cases in northern Greece has been notified.

[Hungary](#) reported 16 measles cases in 2018, as of 27 May. There have been no additional cases reported since the last monthly update.

[Ireland](#) has reported 61 measles cases in 2018, as of 26 May 2018. This is a decrease of 11 cases since the previous CDTR published on 18 May.

[Italy](#) has reported 1 258 measles cases between 1 January and 30 April 2018. Of these, 208 cases were reported in January, 289 in February, 356 in March and 405 in April. Four deaths were reported in 2018. The median age of the cases is 24 years. Of the 1 258 cases, 268 are children under the age of 5 years, of these 84 were younger than one year. Of the cases, 91.6% were unvaccinated at the time of infection. Fifty-three cases were reported among health workers. Eighteen of the regions in Italy have reported cases, however 85.5% of the cases have occurred in the following five regions: Sicily (n = 652), Lazio (n = 158), Calabria (n = 114), Campania (n = 77) and Lombardy (n = 74).

[Poland](#) has reported 68 measles cases in 2018, as of 30 May. This is an increase of 24 cases since previous CDTR published on 18 May.

[Portugal](#) has reported 112 confirmed measles cases in 2018, as of 28 May. This is an increase of one case since previous CDTR on 18 May. Additionally 26 cases are pending test results. Of the confirmed cases, 111 are adults and 89 (79%) are healthcare professionals. Most of the cases (107) are reported in the north of the country.

[Romania](#) reported 3 284 measles cases, including 18 deaths, in 2018, as of 11 May. This is an increase of 572 cases and three deaths since previous CDTR on 18 May. Since the beginning of the outbreak in October 2016 and as of 6 April 2018, Romania has reported 13 563 confirmed measles cases, including 55 deaths.

[Slovakia](#) reported that between 7 and 28 May 2018, four cases of measles were detected in Michalovce district, of these cases three were imported from the UK. The cases are between 12 and 19 years of age and were not vaccinated against measles.

[Spain](#) has reported 136 confirmed measles cases in 2018, as of 27 May. Among these, 85 cases were reported from Valencia region and 21 cases from Catalonia. Since previous CDTR on 18 May, this represents an increase of 31 cases across the country, of which 21 cases were in Valencia region.

[Sweden](#) has reported 23 measles cases since the beginning of 2018.

[Switzerland](#) has reported 23 cases in 2018, as of 27 May. This is an increase of three cases since previous CDTR on 18 May.

Relevant epidemiological summary for countries outside EU/EFTA:

[Albania](#) has reported 729 cases in 2018, according to a media report on 2 May. This is an increase of 129 cases since previous CDTR on 18 May. Most of the cases are children and adults born in the 1970's and 1980's and are persons who were not immunised against measles.

[Russia](#) has reported 1 149 measles cases in 2018, as of 30 April. This is an increase of 306 cases since the previous CDTR on 18 May. In 2017, Russia reported 725 cases.

[Serbia](#) has reported 5 402 cases, including 15 deaths, between October 2017 and 29 May 2018. This is an increase of 235 cases and three deaths since the previous CDTR on 13 April. Of the reported cases, 2 752 were confirmed.

[Ukraine](#) has reported 18 144 cases of measles, including eight deaths in 2018, as of 29 May. This is an increase of 2 883 cases since previous report on 15 May. Among the cases, 7 378 were adults and 10 766 were children. Most of the cases are reported from Lviv, Zakarpacie, Ivano-Frankivsk, Odessa, the city of Kiiv and Chernivets regions.

According to [WHO](#), during 2018 and as of 19 May, there were 11 countries that reported 1 194 confirmed cases in the Region of the Americas: Antigua and Barbuda (1 case), Argentina (3 cases), Brazil (173 cases), Canada (11 cases), Colombia (25 cases), Ecuador (7 cases), Guatemala (1 case), Mexico (4 cases), Peru (2 cases), the United States (63 cases), and the Bolivarian Republic of Venezuela (904 cases). This number exceeds what was reported in 2017, when 4 countries in the Region reported 895 confirmed cases: Argentina (3 cases), Canada (45 cases), the United States of America (120 cases), and Venezuela (727 cases).

[Mauritius](#) is experiencing an outbreak of measles with 40 confirmed measles cases reported in 2018 as of 20 May. Most of the cases are reported from northern and north-west parts of the island. Sixty per cent of the cases are children under 15 years of age. There were no deaths reported.

ECDC assessment

Measles outbreaks continue to occur in a number of EU/EEA countries. There is a risk of spread and sustained transmission in areas with susceptible populations. Current outbreaks affect various population groups, including healthcare workers caring for people at risk of severe disease and complications (e.g. infants under one year of age, immunocompromised).

Prompt and targeted outbreak response to break chains of transmission is essential. This includes the isolation of suspected and confirmed cases and the close monitoring of previously unvaccinated contacts. Vaccination with measles-containing vaccines (MCV) is indicated for those not able to show proof of complete vaccination or history of previous infection.

Vaccination with at least two doses of a MCV remains the most effective preventive measure. Every encounter with the healthcare system should be considered an opportunity to ensure that all residents have a documented MCV vaccination status as per national recommendation. If not, additional doses should be administered. Vaccination status of patients needs to be readily available to their healthcare workers in case of exposure or an outbreak. Over 95% of the general population, at national as well as subnational levels, need to be vaccinated with two doses of MCV to ensure that measles circulation is interrupted, and that the introduction of measles cases does not result in secondary cases.

In the EU/EEA, only five countries have reached the target of 95% measles vaccination coverage for both MCV doses necessary to prevent outbreaks and eliminate the disease. The current epidemiological events are putting the elimination status of some countries at stake and will require sustained efforts to increase population immunity to measles and halt transmission.

Actions

All EU/EEA countries report on measles through The European Surveillance System, TESSy on a monthly basis to ECDC; data are published every month. ECDC also monitors EU/EEA outbreaks on a monthly basis through epidemic intelligence activities which are reported through Communicable Disease Threats Report, CDTR.

ECDC published a rapid risk assessment '[Risk of measles transmission in the EU/EEA](#)' on 23 March 2018.

Rubella – Multistate (EU) – Monitoring European outbreaks

Opening date: 7 March 2012

Epidemiological summary

No outbreaks have been detected in the EU in 2018. Sporadic cases are reported across EU/EEA countries.

Web sources: [ECDC measles and rubella monitoring](#) | [ECDC rubella factsheet](#) | [WHO epidemiological brief summary tables](#) | [WHO epidemiological briefs](#) | [Progress report on measles and rubella elimination](#)

ECDC assessment

The World Health Organization (WHO) has targeted the elimination of measles and rubella in the 53 Member States of the WHO European Region. The progress towards elimination of rubella in the WHO European Region is assessed by the European Regional Verification Commission for Measles and Rubella Elimination (RVC). Member States of the WHO European Region are making steady progress towards the elimination of rubella. At the sixth meeting of the RVC for Measles and Rubella in June 2017, of 53 countries in the WHO European Region, 33 (21 of which are in the EU/EEA) were declared to have reached the elimination goal for rubella, and four countries (two in the EU/EEA) were deemed to have interrupted endemic transmission for between 12 and 36 months, meaning they are on their way to achieving the elimination goal. However, seven EU/EEA countries were judged to still have endemic transmission: Belgium, Denmark, France, Germany, Italy, Poland and Romania.

Web source: [European Regional Verification Commission for Measles and Rubella Elimination \(RVC\) \(2017\)](#)

Actions

ECDC monitors rubella transmission in Europe by analysing the cases reported to The European Surveillance System and through

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its epidemic intelligence activities. Twenty-four EU and two EEA countries contribute to the enhanced rubella surveillance. The purpose of the enhanced rubella surveillance is to provide regular and timely updates on the rubella situation in Europe in support of effective disease control, increased public awareness, and achieving the target of rubella and congenital rubella elimination.

Hepatitis A virus genotype IA and IB infections with a link to Morocco - Multistate - 2018

Opening date: 3 May 2018

Latest update: 8 June 2018

Epidemiological summary

Since the last ECDC RRA on this event, 16 additional hepatitis A cases infected with one of the two HAV IA strains, and 20 cases infected with the same HAV IB strain have been reported. Based on the European outbreak case definition, and as of 7 June 2018, ECDC received reports on 58 confirmed outbreak cases infected with two distinct HAV IA strains and 20 outbreak cases infected with the same HAV IB strain.

The countries reporting cases are: Denmark, France, Germany, Ireland, the Netherlands, Spain, Sweden and the United Kingdom.

Among the 58 confirmed cases infected with the IA strains, 55 are classified as autochthonous cases and three have travel history to Morocco during their incubation period.

Most of the 20 confirmed cases infected with the IB strain are classified as infected while travelling to Morocco, but at least five are classified as autochthonous cases. For four of these five autochthonous cases, national investigations identified a link with travellers to Morocco and consumption of food items privately brought back from Morocco. Information on the fifth autochthonous IB case are still pending.

Cases infected with both IA and IB strains have been reported since the beginning of the year, with peaks between March and May 2018.

One of the IA strains has been historically identified in travellers returning from Morocco. The other IA strain was identified in 2018 in a resident of Morocco who did not travel to the EU. The IB strain has not been reported before this event.

ECDC assessment

Cases infected with the IA and IB strains are part of distinct events. The only common characteristics shared by the cases infected with the different strains are the link with Morocco and the time of occurrence. While most cases infected with the IA strains were infected in the EU, most of the cases infected with the IB strain were infected while travelling in Morocco.

Although the definite sources of infection are unknown, EU autochthonous cases are likely to have been infected through foodborne or person-to-person transmission. The relative homogeneity of viral strains associated with outbreak cases indicates that foodborne transmission could be associated with the same food items. While it is not yet clear whether cases infected with the two IA strains are part of the same event, and thus infected by the same or different vehicle, it is most probable that the cases infected with the IB strain were infected by a different vehicle of infection.

On one hand, for the cases infected with the IA strains, it is possible that the vehicle(s) of infection were distributed in different EU countries. On the other hand, the cases infected with the IB strains were likely infected after consumption of items brought from Morocco by other travellers.

Epidemiological investigations are currently ongoing in some of the involved EU countries to test these hypotheses.

Considering that the sources of infection have not been definitively identified, and that new cases have been reported until recently, there is a risk of additional cases occurring as part of these outbreaks. Raising awareness among clinicians of the need for early detection and reporting is likely to help ongoing epidemiological investigations as well as reduce the risks of secondary transmission. Travellers to Morocco should be sensitised about this ongoing risk.

Actions

ECDC is monitoring these events in EPIS-FWD.

New! Mass gathering monitoring- Russia- FIFA World Football Cup 2018

Opening date: 7 June 2018

Latest update: 8 June 2018

Epidemiological summary

Vibrio growth in Baltic Sea

Source: [Vibrio map viewer](#)

This week, as of 8 June 2018, the environmental [suitability for Vibrio growth in the Baltic Sea](#) for the next five days is considered to be medium to high in Kaliningrad, Russia.

Communicable disease surveillance report from Russian Federation

Source: [Russian health authorities](#)

On 5 June 2018, a report on [infectious morbidity in the Russian Federation for January-April 2018](#) was published. According to the report, there is an increasing trend for measles, with the majority of the cases reported in Moscow.

Epizootic situation of rabies in Russia in second half of May 2018

Source: [Russian health authorities](#)

From 16 to 31 May 2018, 98 cases of rabies in animals were recorded in Russia. The greatest number of cases were found in Volgograd, Kursk, Moscow and Belgorod regions. Rabies was detected in foxes (33 cases), in dogs (23 cases), in cats (21 cases).

Meningococcal infection outbreak in Kazakhstan

Source: [health authorities in Kazakhstan](#)

Since the beginning of 2018, 58 cases of meningococcal infection have been registered in the Republic of Kazakhstan, including 21 cases among children under 14 years of age. Thirteen of these cases were with a fatal outcome: Almaty city (6 cases), Almaty region (4 cases), South Kazakhstan (2 cases) and Kyzylorda (1 case).

Of the 58 confirmed cases, 32 occurred in the city of Almaty.

ECDC monthly measles monitoring report

Source: [ECDC](#)

There are several countries reporting measles cases during May 2018.

MERS-CoV cluster of cases in Saudi Arabia

Source: [ProMed](#)

According to ProMed, Saudi Arabia is reporting a household cluster of MERS-CoV.

ECDC assessment

EU citizens visiting the 2018 World Cup in Russia are most at risk of gastrointestinal illness and vaccine-preventable infections. It is recommended that travellers to Russia should pay attention to standard hygienic measures in order to reduce the risk of gastrointestinal illness and get vaccinated prior to their travel.

Actions

ECDC published a [risk assessment on 28 May 2018](#). ECDC shares information regarding this event with relevant public health partners.

New! Carbapenem-resistant Enterobacteriaceae - Multistate EU/EEA - 2018

Opening date: 7 June 2018

Latest update: 8 June 2018

Epidemiological summary

Current situation of CRE in EU/EEA countries

Percentage of invasive isolates of Enterobacteriaceae (*K. pneumoniae* and *E. coli*) resistant to carbapenems

For *K. pneumoniae*, data from the European Antimicrobial Resistance Surveillance Network (EARS-Net,

<https://ecdc.europa.eu/en/about-us/networks/disease-networks-and-laboratory-networks/ears-net-about>) for 2016 show large differences in the national percentages of carbapenem resistance in invasive (i.e. mostly from bloodstream infections) isolates, ranging from 0% to 66.9%, depending on the country. The population-weighted mean percentage for the EU/EEA fluctuated between 8.2% (2013) and 6.1% (2016) (no statistically significant trend). Increasing trends in carbapenem resistance in *K. pneumoniae* for the period 2013–2016 were observed for Greece and Portugal, while there was a decreasing trend in the Czech Republic, Estonia and Hungary.

For *E. coli*, EARS-Net data for 2016 show a different epidemiological situation, with a much lower EU/EEA population-weighted mean percentage (0.1%) of carbapenem resistance in invasive isolates, and national percentages ranging from 0% to 1%. Between 2013 and 2016, a slightly decreasing trend from 0.2% to 0.1% was observed for the EU/EEA population-weighted mean of national percentages.

An estimate of the burden caused by CRE and other multidrug-resistant organisms in the EU/EEA based on data from EARS-Net and the ECDC point prevalence surveys is under development. An ECDC network for genomicbased surveillance of multidrug-resistant bacteria has been established (European Antimicrobial Resistance Genes Surveillance Network - EURGen-Net) and a survey of the prevalence and distribution of carbapenem- and/or colistin-resistant Enterobacteriaceae is planned for 37 EU/EEA and enlargement countries in 2019, including whole genome sequencing of collected isolates.

ECDC assessment

An update of a previous rapid risk assessment on the topic was published on 4 June 2018: [Carbapenem-resistant Enterobacteriaceae - first update](#).

Actions

ECDC monitors this event continuously.

Ebola virus disease - Democratic Republic of the Congo - 2018

Opening date: 8 May 2018

Latest update: 8 June 2018

Epidemiological summary

Since the last CDTR published on 1 June, authorities have reported one confirmed and one probable case in Iboko health zone. As of 7 June 2018, the Ministry of Health of DRC has reported 62 cases, including 27 deaths. Of these cases, 38 cases are confirmed, 14 are probable cases and 10 are suspected. So far, all cases have been reported from three health zones: Bikoro (23), Iboko (32) and Wangata (7) in Equateur Province.

Response activities

Under the coordination of the DRC ministry of health, an EVD outbreak response was implemented, with the support from UN agencies and international partners. The European Union Civil Protection Mechanism was activated, following a request for assistance received from WHO.

The main strategic activities for the prevention and control of this EVD outbreak include: coordination of the response, enhanced epidemiological surveillance for early case detection and contact tracing, increased laboratory capacity, appropriate case management, reinforcement of infection prevention and control (IPC), ensuring safe and dignified burials, social mobilisation and community engagement. WHO also supports Ebola vaccination of high-risk populations in the DRC. Health workers operating in affected areas are being vaccinated, and community outreach programmes were initiated to prepare for ring vaccinations.

A mobile laboratory was deployed to the Bikoro reference hospital on 12 May 2018 (operational on 16 May 2018) and a second mobile laboratory was deployed in Mbandaka port city. Médecins Sans Frontières set up two Ebola Treatment Centres (ETCs) in Mbandaka and Bikoro, with 20 beds each. In addition, more than 7 500 doses of the rVSV-ZEBOV Ebola vaccine have been deployed to support the ring vaccination strategy that are part of the EVD outbreak responses activities.

According to the Emergency Committee under the International Health Regulation (2005) (IHR) held on 18 May 2018, this event does not meet the criteria of a public health event of international concern.

ECDC assessment

The identification of EVD cases in the urban area of Mbandaka city and around Tumba Lake (both areas are connected to the Congo River) increases the risk of regional spread to other provinces of DRC and neighbouring countries (namely the Republic of the Congo and the Central African Republic). According to WHO's third external situation report dated 18 May 2018 and based on the latest WHO risk assessment, the public health risk associated with this event is estimated to be **very high at the national level, high at regional level, and low at the international level**.

Visitors and residents in EVD-affected areas face a **low risk** of becoming infected in the community if the following precautions are strictly followed:

- avoiding contact with symptomatic patients and their bodily fluids;

- avoiding contact with corpses and/or bodily fluids from deceased patients;
- avoiding contact with wild animals (including primates, forest antelopes, rodents and bats), both alive and dead, and avoiding consumption of 'bush meat';
- washing hands regularly with soap or antiseptics.

In addition, the following generic precautions are advisable:

- wash and peel fruit and vegetables before consumption;
- practice 'safe sex'.

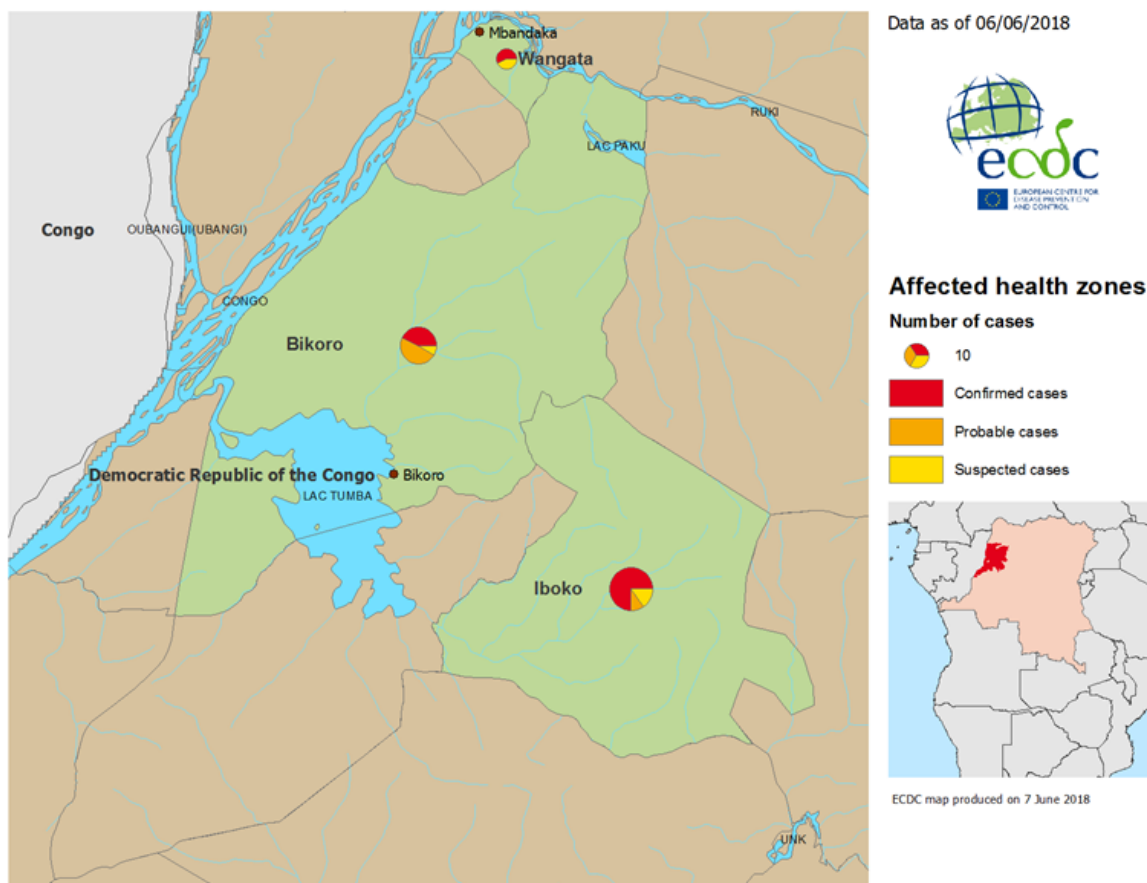
For the European Union/European Economic Area (EU/EEA) citizens living in, or travelling through, areas of DRC not known to have EVD cases, the **risk of exposure is very low**, provided they adhere to the recommended precautions. **The overall risk of introduction and further spread of Ebola virus within the EU/EEA is currently considered to be very low.**

Actions

ECDC published an updated version of its [rapid risk assessment](#) on 25 May 2018.

Geographical distribution of confirmed, probable and suspected cases of Ebola virus disease, Equateur Province, The Republic Democratic of Congo, as of 7 June 2018

ECDC



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

Opening date: 30 May 2018

Latest update: 8 June 2018

Epidemiological summary

Since the beginning of the 2018 transmission season and as of 7 June 2018, no human or equine cases of West Nile fever have been reported in EU Member States and neighbouring countries.

ECDC link: [ECDC West Nile fever web page](#) | [ECDC: equine West Nile fever web page](#) | [ECDC atlas](#)

Sources: [TESSy](#) and [ADNS](#)

ECDC assessment

No human cases have been notified at this early stage of the transmission season.

In accordance with [Commission Directive 2014/110/EU](#), prospective donors should be deferred for 28 days after leaving a risk area for locally-acquired West Nile virus unless the results of an individual nucleic acid test (NAT) are negative.

Actions

During the transmission season, ECDC published three types of West Nile fever maps: 1) human West Nile fever cases, 2) equine West Nile fever cases, 3) combined human and equine West Nile fever cases. Human cases are collected through The European Surveillance System (TESSy), while equine cases are collected through the Animal Disease Notification System (ADNS) of the European Commission. Reporting of human cases covers EU/EEA countries and neighbouring countries; reporting of equine cases covers only EU/EEA countries. Following a One Health approach, the maps aim to highlight areas (at the NUTS3 level) where West Nile virus circulates in incidental hosts. Currently, deferral or testing of prospective donors applies to blood donors for 28 days after leaving areas with one or more autochthonous human West Nile virus cases. This set of maps aims to provide better information for EU Member States so they can implement preventive measures.

Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 8 June 2018

Epidemiological summary

Since the beginning of 2018, two countries have recorded cases of wild polio virus type 1 (WPV1): Afghanistan (eight cases) and Pakistan (two cases). For the same period in 2017, five cases had been reported.

Since the beginning of 2018, four vaccine-derived polio viruses type 2 (cVDPV2) cases have been reported from the Democratic Republic of Congo and one from Nigeria. For the same period in 2017, six cVDPV2 had been reported.

ECDC links: [ECDC poliomyelitis web page](#) | [Information to travellers to polio-infected countries](#)

Sources: [WHO IHR Emergency Committee](#) | [Polio eradication: weekly update](#)

ECDC assessment

The last locally-acquired wild polio cases within the current EU borders were reported from Bulgaria in 2001. The most recent wild polio outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases. Importation of the infection as well as of polio cases to the EU remains possible.

ECDC links: [Rapid Risk Assessment on suspected polio cases in Syria and the risk to the EU/EEA](#) | [ECDC poliomyelitis web page](#)

Actions

ECDC provides updates on the polio situation on a monthly basis. ECDC monitors reports of polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identify events that increase the risk of wild poliovirus being reintroduced into the EU. Following the declaration of polio as a PHEIC, ECDC updated its [risk assessment](#).

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

Opening date: 24 September 2012

Latest update: 8 June 2018

Epidemiological summary

Since April 2012 and as of 7 June 2018, 2 243 cases of MERS-CoV, including 837 deaths, have been reported by health authorities worldwide.

Web sources: [ECDC's latest rapid risk assessment](#) | [ECDC novel coronavirus webpage](#) | [WHO](#) | [WHO MERS updates](#) | [Saudi Arabia MoH](#) | [ECDC factsheet for professionals](#)

ECDC assessment

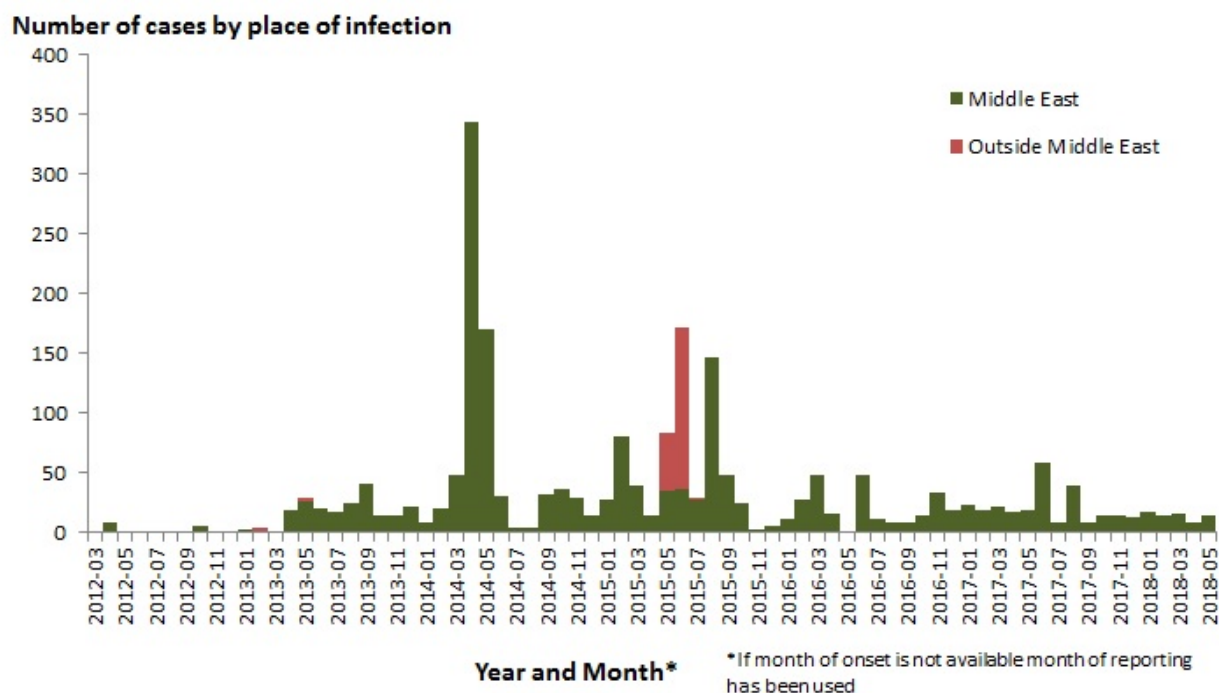
The risk of sustained human-to-human transmission in Europe remains very low. ECDC's conclusion continues to be that the MERS-CoV outbreak poses a low risk to the EU, as stated in a [rapid risk assessment](#) published on 21 October 2015, which also provides details on the last case reported in Europe.

Actions

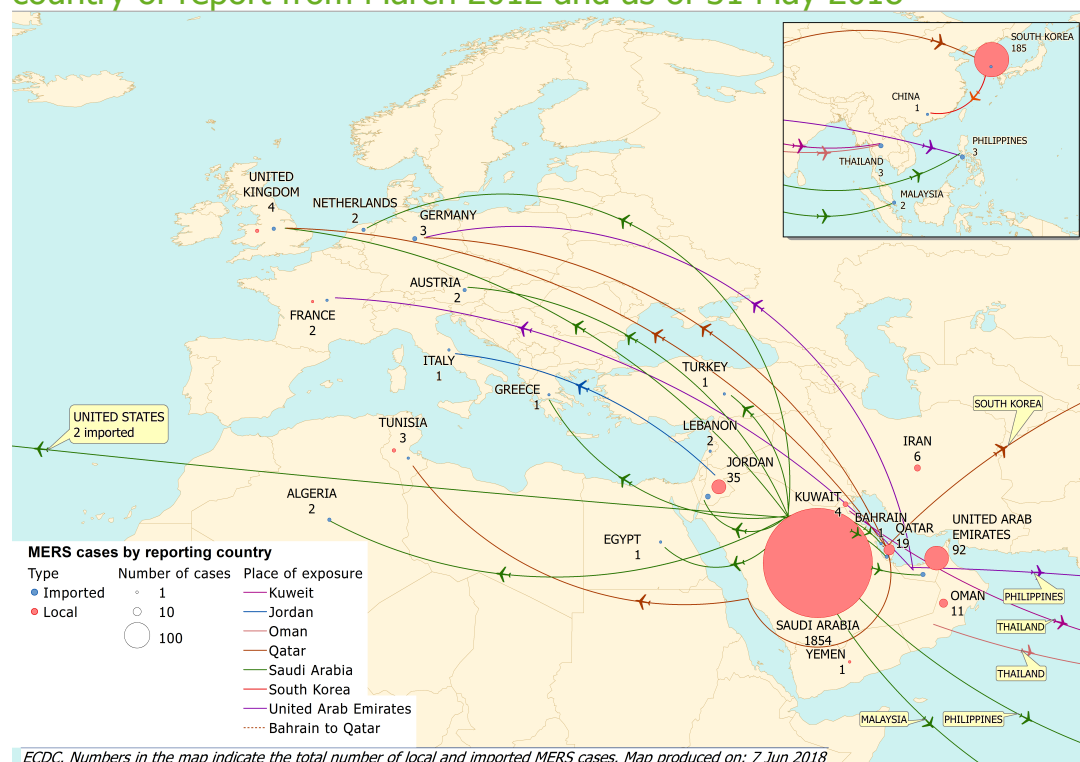
ECDC published the 21st update of its MERS-CoV [rapid risk assessment](#) on 21 October 2015.

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

ECDC, ProMed



Distribution of confirmed cases of MERS-CoV by country of probable infection and country of report from March 2012 and as of 31 May 2018



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