

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Dengue – France, Réunion – 2018

Opening date: 13 March 2018

Latest update: 10 August 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

Between 23 and 29 July 2018, Réunion detected 26 cases of dengue fever.

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

Opening date: 24 May 2018

Latest update: 10 August 2018

Elevated sea surface temperatures (SST) 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 Geoportals](#)).

→Update of the week

As of 10 August 2018, environmental suitability for *Vibrio* growth in the Baltic Sea for the next five days is considered to be medium to very high in certain coastal areas of Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Sweden and Russia.

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

Opening date: 30 May 2018

Latest update: 10 August 2018

During the West Nile virus transmission season (expected to be between June and November), ECDC monitors the occurrence of West Nile fever cases in EU/EEA Member States and EU neighbouring countries and publishes weekly epidemiological updates aiming at informing blood safety authorities of areas where there is ongoing virus transmission.

→Update of the week

Between 3 and 9 August 2018, EU Member States reported 120 human cases of West Nile fever: Italy (72), Greece and Romania (16 each), Hungary (13) and France (3). EU neighbouring countries reported 34 cases: Serbia (32) cases and Kosovo* (2).

This week, Serbia reported five deaths, Greece 3 deaths and Italy, Kosovo and Romania one death each.

In three affected areas, no human cases were reported during the previous 10 transmission seasons: two in Serbia and one in Italy. All other human cases were reported from areas that have been affected during previous transmission seasons.

In the same week, 10 outbreaks among equids were reported in Italy and one in Greece.

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

Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 10 August 2018

Measles cases in the EU/EEA primarily occur in unvaccinated populations in both adults and children. Large outbreaks with fatalities are ongoing in countries that had previously eliminated or interrupted endemic transmission.

→Update of the week

Updates are provided for 18 EU/EEA countries: Austria, Bulgaria, Croatia, Estonia, France, Germany, Greece, Hungary, Ireland, Italy, Malta, Poland, Romania, Slovakia, Spain, Sweden, Switzerland, the United Kingdom. In 2018, 31 deaths were reported in EU countries.

Relevant updates outside EU/EEA countries are provided for the former Yugoslav Republic of Macedonia, Russia, Serbia, Ukraine, the Americas and Mauritius.

Rubella – Multistate (EU) – Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 10 August 2018

Rubella, caused by the rubella virus and commonly known as German measles, is usually a mild and self-limiting disease that often passes unnoticed. The main reason for immunising against rubella is the high risk of congenital malformations associated with rubella infection during pregnancy.

→Update of the week

No outbreaks have been detected in 2018.

Non EU Threats

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

Opening date: 24 September 2012

Latest update: 10 August 2018

Since the disease was first identified in Saudi Arabia in September 2012, more than 2 000 Middle East respiratory syndrome coronavirus (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 toward 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

During the month of July, seven cases, including two deaths, of MERS-CoV were reported by [Saudi Arabia](#). All the cases were male. Five cases reported camel contact, one case was due to nosocomial transmission and two cases were community-acquired.

On 8 August 2018, WHO published the "[WHO MERS Global Summary and Assessment of Risk](#)" describing the outbreak in the past year.

[Hajj](#), a religious Muslim pilgrimage, will take place from 19 to 24 August 2018 in Saudi Arabia. According to [media reports](#), camels are not permitted to enter Mecca in order to protect pilgrims from contagious disease. As a precautionary measure, there is a ban on the slaughtering of camels.

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

Opening date: 1 August 2018

Latest update: 10 August 2018

On 1 August 2018, the Ministry of Health of the Democratic Republic of the Congo (MoH DRC) reported four confirmed cases of Ebola virus disease (EVD) in Mangina, North Kivu Province in the northeast of the country, close to the border with Uganda. This is the 10th outbreak of Ebola virus disease in the country over the past four decades, with the most recent one occurring between May and June 2018 in Bikoro health zone, Équateur Province.

→Update of the week

As of 8 August 2018, the Ministry of Health of the Democratic Republic of the Congo has reported 44 EVD cases, of which 17 have been confirmed and 27 remain probable. Among the 44 cases, 37 cases had a fatal outcome, of which 10 have been confirmed for Ebola virus and 27 remain probable. All samples tested positive for Zaire ebolavirus species, presenting a different strain not linked to the Équateur outbreak strain.

II. Detailed reports

Dengue – France, Réunion – 2018

Opening date: 13 March 2018

Latest update: 10 August 2018

Epidemiological summary

Since the beginning of 2018 and as of 29 July 2018, there have been 6 382 autochthonous cases of dengue in Réunion. The main affected areas are on the western part of the island. The circulating serotype is DENV-2. The main vector of infection implicated in the outbreak is *Aedes albopictus*.

On 10 July 2018, authorities decided to raise the level of the [ORSEC](#) emergency plan to 4. Control activities are currently in place and include active reinforced vector control, enhanced surveillance, blood safety measures and social mobilisation.

Source: [Regional authorities](#)

ECDC assessment

The probability of onward transmission of dengue fever in Europe is associated with potential virus importation by viraemic travellers into receptive areas, defined as a location with established and active competent vectors. *Aedes albopictus* is established in the southern part of the EU and environmental conditions are currently favourable for vector activity. In addition, vector abundance is currently considered sufficient to permit autochthonous transmission of dengue virus and potentially generate local outbreaks.

For a more thorough assessment, refer to the [update](#) of the rapid risk assessment 'Dengue outbreak in Réunion, France', published on 6 July 2018.

Actions

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

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

Opening date: 24 May 2018

Latest update: 10 August 2018

Epidemiological summary

As of 10 August 2018, environmental suitability for *Vibrio* growth in the Baltic Sea for the next five days is considered to be medium to very high in certain coastal areas of Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Sweden and Russia.

SSTs in the Baltic Sea are available [here](#). A *Vibrio* suitability tool is available on the [E3 Geoportal](#). This model has been calibrated to the Baltic region in northern Europe and may 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=minimum value 0, maximum value 28.

Countries reporting *Vibrio* cases

[Norway](#) reported four cases of *Vibrio vulnificus* infection in July 2018. All four are individuals over the age of 65 years who had an injury or were injured while bathing in the Oslo Fjord. All cases were contracted between 17 July and 29 July 2018 and hospitalised with serious infections.

[Germany](#) reported one fatal case associated with the Baltic Sea on late July 2018.

[Denmark](#) has detected several cases during the summer of 2018.

[Finland](#) has also detected several infections this summer, according to local media reports.

ECDC assessment

Elevated SSTs 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. Open ocean environments do not offer appropriate growth conditions for these bacteria due to high salt content, low temperatures and limited nutrient content. These *Vibrio* species can cause vibriosis infections, particularly *V. parahaemolyticus*, *V. vulnificus* and non-toxicogenic *V. cholera*.

Vibriosis in humans caused by these species in the Baltic region has occurred in the past during hot summer months, particularly when SSTs 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 wounds 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.

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

Opening date: 30 May 2018

Latest update: 10 August 2018

Epidemiological summary

Between 3 and 9 August 2018, EU Member States reported 120 human cases of West Nile fever: Italy (72), Greece and Romania (16 each), Hungary (13) and France (3). EU neighbouring countries reported 34 cases; Serbia (32) and Kosovo (2). This week, Serbia reported five deaths, Greece 3 deaths and Italy, Kosovo and Romania one death each.

In three affected areas, no human cases were reported during the previous 10 transmission seasons: two in Serbia and one in Italy. All other human cases were reported from areas that have been affected during previous transmission seasons.

In the same week, 10 outbreaks among equids were reported in Italy and one in Greece.

In 2018, as of 9 August 2018, EU Member States reported 231 human cases: Italy (123), Greece (59), Hungary and Romania (23 each) and France (3). EU neighbouring countries reported 104 human cases: Serbia 102 cases and Kosovo two. To date, a total of 17 deaths due to West Nile fever have been reported by Serbia (9), Italy (3), Greece (3), Kosovo (1) and Romania (1).

During the current transmission season, outbreaks among equids have been reported by Italy (11), Hungary (3) and Greece (2).

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

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

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

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

ECDC assessment

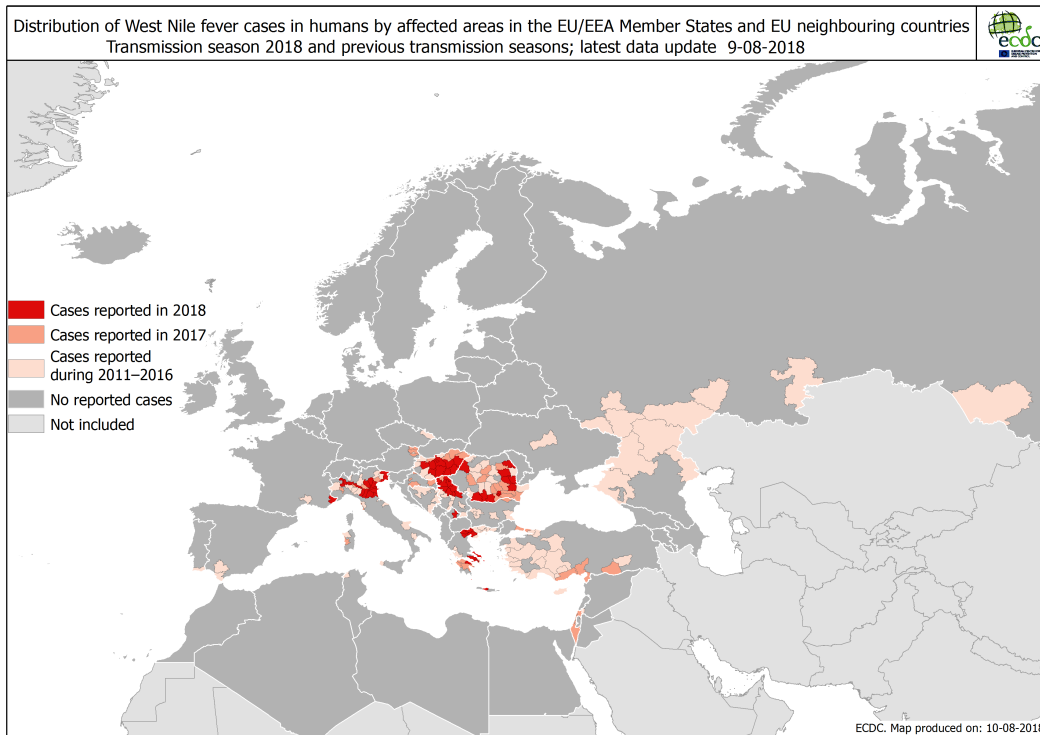
The 2018 the transmission season started earlier than usual and higher case numbers have been reported compared with the same period in the previous years. All human cases reported during the current transmission season were reported in previously affected countries. In accordance with [European Commission Directive 2014/110/EU](#), prospective blood donors should defer for 28 days after leaving an area with evidence among humans of West Nile virus circulation unless the results of an individual nucleic acid test are negative.

Actions

During the transmission season, ECDC publishes [West Nile fever maps](#) together with an epidemiological summary every Friday.

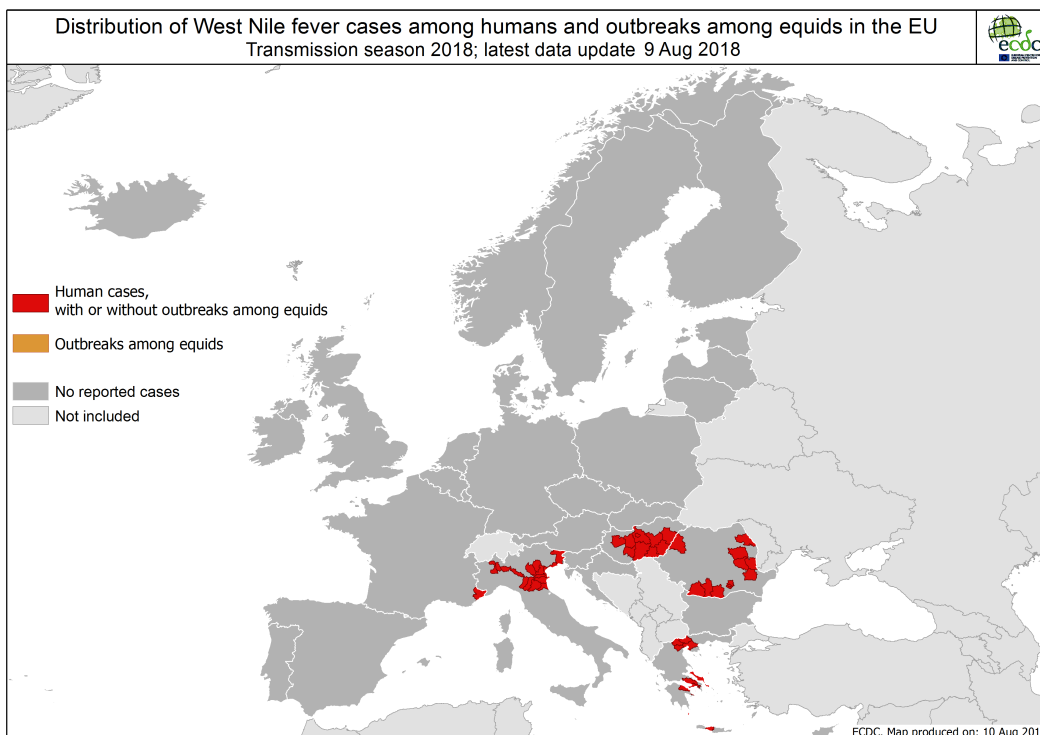
Distribution of human West Nile fever cases by affected areas as of 9 August 2018.

ECDC



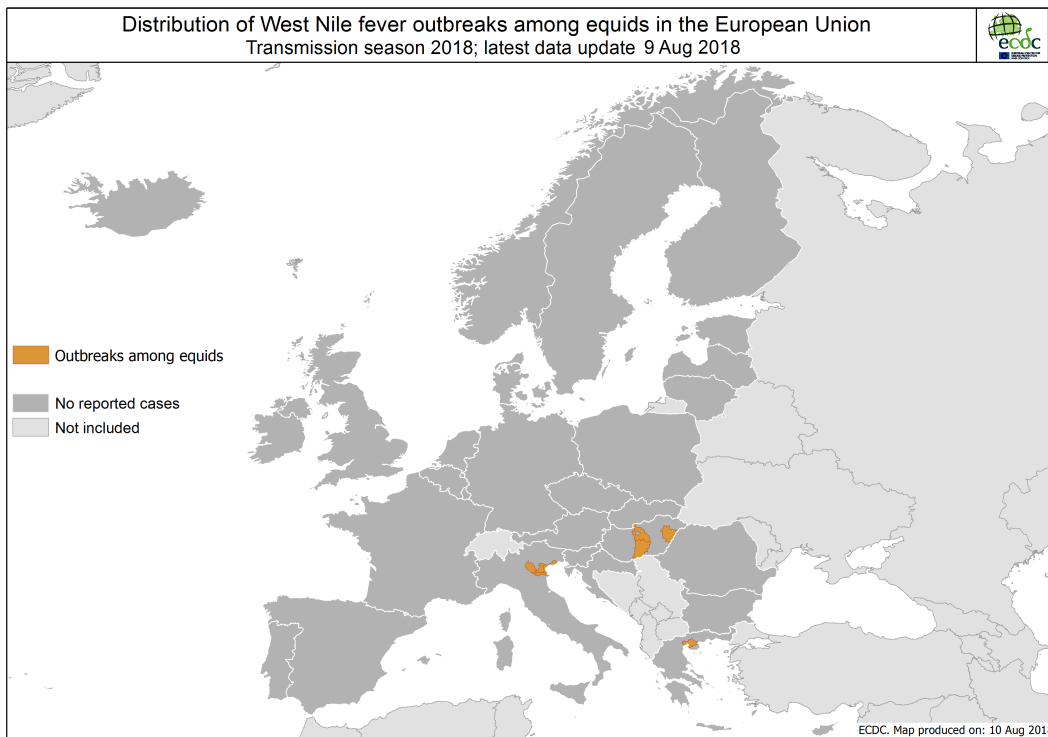
Distribution of West Nile fever cases among humans and outbreaks among equids in the EU as of 9 August 2018.

TESSy and ADNS



Distribution of West Nile fever cases among equids in the EU as of 9 August 2018.

ADNS



Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 10 August 2018

Epidemiological summary

Data for measles presented in the CDTR may differ from data provided by national authorities to TESSy. In the CDTR, up-to-date information is provided through national authority websites and media reports.

Since the previous monthly report on 13 July 2018, updates are provided for 18 EU/EEA countries: Austria, Bulgaria, Croatia, Estonia, France, Germany, Greece, Hungary, Ireland, Italy, Malta, Poland, Romania, Slovakia, Spain, Sweden, Switzerland, the United Kingdom. In 2018, 31 deaths were reported in EU countries.

Relevant updates outside EU/EEA countries are provided for the former Yugoslav Republic of Macedonia, Russia, Serbia, Ukraine, the Americas and Mauritius.

In 2018 and as of 6 August, most of the cases in the EU were reported from Romania (4 575), France (2 683), Greece (2 269) and Italy (2 029). Thirty-one deaths have been reported in 2018 from Romania (22), Italy (4), France (3) and Greece (2).

Outside EU/EEA countries, Ukraine is experiencing the continuation of the largest outbreak with over 27 500 cases reported in 2018, including 13 deaths. A large ongoing outbreak has also been reported in Serbia with 5 710 cases and 15 deaths. Ongoing outbreaks are also reported in Russia, the Americas and Mauritius.

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

[Austria](#) reported 62 measles cases in 2018 as of 20 July 2018. This is an increase of one case since the CDTR on 13 July 2018.

[Bulgaria](#) reported seven cases of measles in 2018 as of 29 July 2018. This is an increase of two cases since the previous CDTR on 13 July 2018.

[Croatia](#) reported 17 cases of measles in 2018 as of 5 July in Dubrovnik-Neretva County. Among these cases, 16 are confirmed. One case was presumably imported from France and one from Kosovo (this designation is without prejudice to positions on status, and is in line with UNSCR 1244/99 and the ICJ Opinion on the Kosovo Declaration of Independence). Croatia has reported 19 cases overall in 2018.

[Estonia](#) reported 10 cases detected in 2018 as of 30 June 2018, an increase of one case since the previous CDTR on 13 July 2018.

[France](#) reported 2 683 cases in 2018 as of 29 July 2018, including three deaths. This is an increase of 95 cases since 8 July 2018. Since the beginning of the outbreak in November 2017, there have been 2 741 cases, including three deaths, reported across the country. The highest incidence is in children under one year of age. Of the reported cases, 22% were hospitalised and 89% were unvaccinated or incompletely vaccinated. The outbreak has a decreasing trend across the country.

[Germany](#) reported 430 cases of measles in 2018 as of 15 July 2018. This is an increase of 73 cases since the CDTR on 13 July 2018. About 43% of the cases are reported from North Rhine-Westphalia.

[Greece](#) reported 2 280 cases in 2018 as of 9 August 2018, including two deaths. This is an increase of 42 cases since the CDTR published on 13 July 2018. As of 9 August 2018 and since the beginning of the outbreak in May 2017, Greece has reported 3 248 measles cases, of which 1 879 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 observed.

[Hungary](#) reported 17 cases of measles in 2018 as of 22 July 2018. No new cases have been reported since the CDTR on 13 July 2018.

[Ireland](#) reported 60 cases of measles in 2018 as of 28 July 2018. This is an increase of one case since the CDTR on 13 July 2018.

[Italy](#) reported 2 029 measles cases, including four deaths, between 1 January and 30 June 2018. This is an increase of 313 cases since the previous CDTR on 13 July 2018. The median age of the cases is 25 years. Of the cases, 91.3% were unvaccinated at the time of infection. Eighty-seven cases were reported among health workers. Cases were reported from all 20 regions, but 83% of the cases were from Sicily (1066), Lazio (204), Calabria (144), Campania (128) and Lombardy (131).

[Malta](#) reported five imported cases in 2018, according to media quoting healthcare authorities on 2 August 2018. Health authorities are alerting about a possible measles outbreak and urge people to get vaccinated.

[Poland](#) reported 90 cases of measles in 2018 as of 31 July 2018. This is an increase of 13 cases since the previous CDTR on 13 July 2018.

[Romania](#) reported 4 575 measles cases, including 22 deaths, in 2018 as of 3 August 2018. This is an increase of 258 cases since the previous CDTR on 13 July 2018. Since the beginning of the outbreak in October 2016 and as of 3 August 2018, Romania has reported 14 854 confirmed measles cases, including 59 deaths.

[Slovakia](#) reported 330 cases of measles between 7 May and 31 July 2018, of which 176 were confirmed and 149 probable. The majority of the cases, 321, were from Michalovce District and nine from Sobrance District. The age range of the cases is between zero to 54 years.

[Spain](#) reported 191 confirmed measles cases in 2018 as of 22 July. Among the cases, 130 were reported from Valencia region and 24 cases from Catalonia. Since the previous CDTR on 13 July 2018, this represents an increase of 23 cases across the country.

[Sweden](#) reported 32 cases of measles since the beginning of 2018 as of 3 August 2018. An additional case of measles has been confirmed in [Stockholm](#) on 2 August 2018.

[Switzerland](#) reported 26 cases as of 31 July 2018. This is an increase of two cases since the CDTR on 13 July 2018.

The United Kingdom ([England and Wales](#)) reported 738 laboratory confirmed measles cases in England, between 1 January 2018 and 2 July 2018. Cases were reported in most areas with London (262), the South East (154), South West (109), West Midlands (84) and Yorkshire and the Humber (76) reporting the most cases based on provisional figures.

Relevant epidemiological summary for countries outside EU/EEA

[Russia](#) reported 1 717 cases of measles in January to June 2018. This is an increase of 568 cases since the previous CDTR on 13 July 2018.

[Serbia](#) reported 5 710 cases, including 15 deaths, between October 2017 and 3 August 2018. This is an increase of 44 cases since the CDTR on 13 July 2018. Of the reported cases, 2 872 were confirmed.

[Ukraine](#) reported 27 502 cases of measles, including 13 deaths in 2018, as of 31 July 2018. This is an increase of 2 494 cases and one death since the CDTR on 13 July 2018. Among the cases, 11 142 were adults and 16 360 were children. Most of the cases were reported from Lviv, Zakarpacie, Ivano-Frankivsk, Odessa, the city of Kiev and the Ternopil region.

As of 27 July 2018, media reported 24 cases in Debar, bordering Albania, in the [former Yugoslav Republic of Macedonia](#).

According to [WHO](#), during 2018 and as of 21 July 2018, 11 countries reported 2 787 confirmed cases in the Americas: Antigua and Barbuda (1), Argentina (6), Venezuela (1 842 cases), Brazil (742 cases), Canada (19), Colombia (44 cases), Ecuador (17), Guatemala (1), Mexico (5), Peru (3) and the United States (107).

[Mauritius](#) reported 466 confirmed cases of measles as of 15 July 2018, including three deaths. This is an increase of 253 cases and two deaths since the CDTR on 13 July 2018. The most affected districts are Point Louis and Plaines Wilhems.

ECDC assessment

Given the current extent of measles circulation in the EU/EEA, the trend in recent years and the fact that vaccination coverage for the first and second dose is suboptimal, there is a high risk of continued measles transmission with mutual exportation and importation between EU/EEA Member States and third countries. For a more complete assessment, see ECDC's [Risk of measles transmission in the EU/EEA](#) published on 23 March 2018.

Actions

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

Rubella – Multistate (EU) – Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 10 August 2018

Epidemiological summary

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

Sources: [ECDC measles and rubella monitoring](#) | [ECDC rubella fact sheet](#) | [WHO rubella page](#) | [WHO global measles and rubella strategic plan](#)

ECDC assessment

The World Health Organization has targeted the elimination of measles and rubella in the 53 Member States of the WHO European Region. Member States of the WHO European Region are making steady progress towards the elimination of rubella. At the sixth meeting of the European Regional Verification Commission for Measles and Rubella Elimination (RVC) in June 2017, seven EU/EEA countries were judged to still have endemic transmission: Belgium, Denmark, France, Germany, Italy, Poland and Romania.

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

Actions

ECDC monitors situation with rubella and reports on a monthly basis.

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

Opening date: 24 September 2012

Latest update: 10 August 2018

Epidemiological summary

Since April 2012 and as of 31 July 2018, 2 249 cases of MERS-CoV, including 840 deaths, have been reported by health authorities worldwide.

Sources: [ECDC novel coronavirus webpage](#) | [WHO](#) | [WHO MERS updates](#) | [Saudi Arabia MoH](#) | [ECDC fact sheet for professionals](#)

ECDC assessment

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

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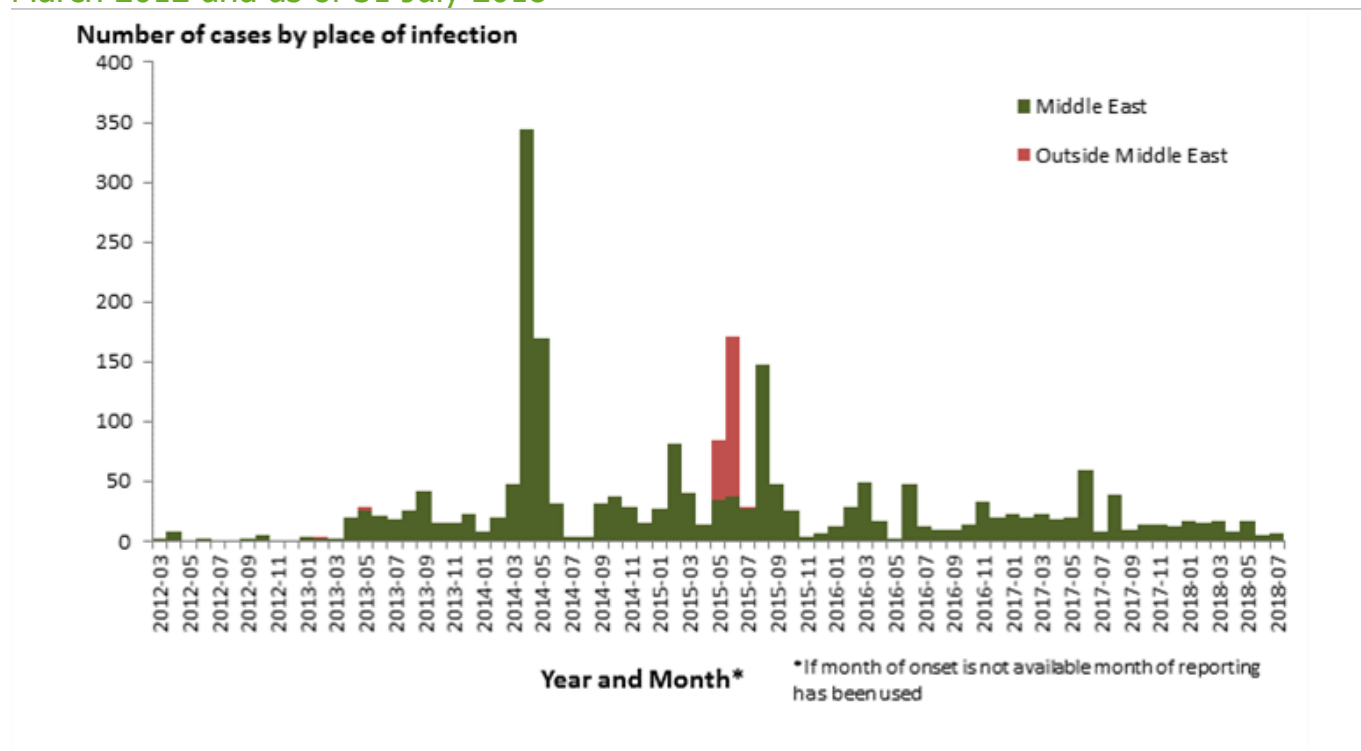
provides details on the last case reported in Europe.

On 2 August 2018, ECDC published a [risk assessment regarding public health risks related to communicable diseases during the 2018 Hajj, Saudi Arabia, 19–24 August 2018](#) where MERS-CoV is discussed.

Actions

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

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



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

Opening date: 1 August 2018

Latest update: 10 August 2018

Epidemiological summary

As of 8 August 2018, the Ministry of Health of the Democratic Republic of the Congo reported 44 EVD cases (17 confirmed and 27 probable), including 37 deaths (10 confirmed and 27 probable).

Two healthcare workers have been affected, of which one died. An additional 54 suspected cases are currently being investigated.

Six health zones in two provinces have reported confirmed and probable EVD cases, including Mabalako, Beni, Butembo, Oicha and Musienene health zones in North Kivu Province and Mangina health zone in Ituri Province.

According to the MoH DRC, suspected cases in Goma and Haut-Uele province tested negative for Ebola virus.

As of 7 August 2018 and according to a European Civil Protection and Humanitarian Aid Operations (ECHO) report, 519 contacts have been identified: 382 in Mabalako, 98 in Beni and 39 in Mandima. Ninety-five percent (492/519) of contacts are being followed up. As of 9 August 2018, all the cases "suspected and confirmed" both in Mangina and Beni come from Mangina health

area in Mabalako health district.

Response activities: On 3 August 2018, a mobile laboratory with two GeneXpert machines was established in Beni. Establishment of additional laboratory facilities elsewhere are being explored, including additional GeneXpert machines in Mangina, Goma and other areas as needed.

The Mangina Reference Health Center, supported by Médecins Sans Frontières (MSF), is at full capacity and will be operational by the end of the week. In Beni, the Ebola Treatment Centre (ETC) that will be managed by The Alliance for International Medical Action (ALIMA) will be fully functional in the coming days.

[Vaccination activities](#) started on 8 August 2018.

Travel: [Uganda](#), [Zimbabwe](#), [Rwanda](#) and [Burundi](#) have started entry screening.

In EU/EEA countries, [Belgium](#) and [Germany](#) have issued travel restrictions to North Kivu Province due to the Ebola outbreak. In addition, on 8 August 2018, the [CDC](#) issued travel advice (watch level 1, practice usual precautions).

Source: [Ministry of Health DRC](#) | [WHO](#)

ECDC assessment

Due to the security situation and humanitarian crisis in North Kivu Province, implementation of outbreak control measures may be challenging. The risk of introduction of the virus via an infected traveller to the EU/EEA is considered very low at this stage.

According to WHO, the large number of internally displaced people and the influx of Congolese refugees in neighbouring countries (Uganda, Burundi and Tanzania) pose a risk factor for transmission of the virus at national and regional level.

ECDC published a [rapid risk assessment](#) on 9 August 2018 regarding the 10th outbreak of Ebola virus disease in North Kivu and Ituri Provinces, DRC.

Actions

ECDC will monitor this threat through epidemic intelligence.

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