

I. Executive summary

EU Threats

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

Opening date: 24 May 2018

Latest update: 15 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 15 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).

Dengue – France, Réunion – 2018

Opening date: 13 March 2018

Latest update: 15 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 5 June 2018 and as of 12 June, Réunion has reported 351 dengue cases.

Non EU Threats

New! Rift Valley Fever – Kenya – 2018

Opening date: 12 June 2018

Latest update: 15 June 2018

At the beginning of June 2018, Kenya's Ministry of Health reported an outbreak of Rift Valley Fever (RVF) cases. In addition, local authorities and the World Organisation for Animal Health (OIE) are reporting circulation of RVF among livestock in several areas across the country.

New! Vaccine-derived poliovirus type 3 (cVDPV3) - Venezuela – 2018

Opening date: 10 June 2018

Latest update: 15 June 2018

On 8 June 2018, WHO was notified of a vaccine-derived poliovirus type 3 case in Venezuela.

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

Opening date: 30 May 2018

Latest update: 15 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.

Ebola virus disease - Democratic Republic of the Congo - 2018

Opening date: 8 May 2018

Latest update: 15 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 borders on the Congo River and the Republic of Congo.

→Update of the week

Since the last CDTR published on 8 June 2018, authorities have not reported any confirmed or probable cases. As of 15 June 2018, the [Ministry of Health](#) of DRC has reported 66 cases, including 28 deaths. Of these, 38 cases are confirmed, 14 are probable and 14 are suspected. So far, all cases have been reported from four health zones: Bikoro (22), Iboko (34), Wangata (5) and Ingende (5) in Equateur Province.

Mass gathering monitoring- Russia- FIFA World Football Cup 2018

Opening date: 7 June 2018

Latest update: 15 June 2018

ECDC has enhanced its epidemiological intelligence surveillance during the 2018 FIFA World Cup (14 June–15 July 2018) in Russia to detect threats to public health that could affect the EU/EEA or EU/EEA visitors. Routine epidemic intelligence activities are 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.

[WHO EURO](#) has published travel advice for the FIFA 2018 World Cup.

II. Detailed reports

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

Opening date: 24 May 2018

Latest update: 15 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-toxicogenic *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 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 and reports on increased environmental suitability for the growth of *Vibrio* bacteria.

Dengue – France, Réunion – 2018

Opening date: 13 March 2018

Latest update: 15 June 2018

Epidemiological summary

In 2018 and as of 12 June, authorities reported 4 604 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](#), [Sante publique France](#)

ECDC assessment

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

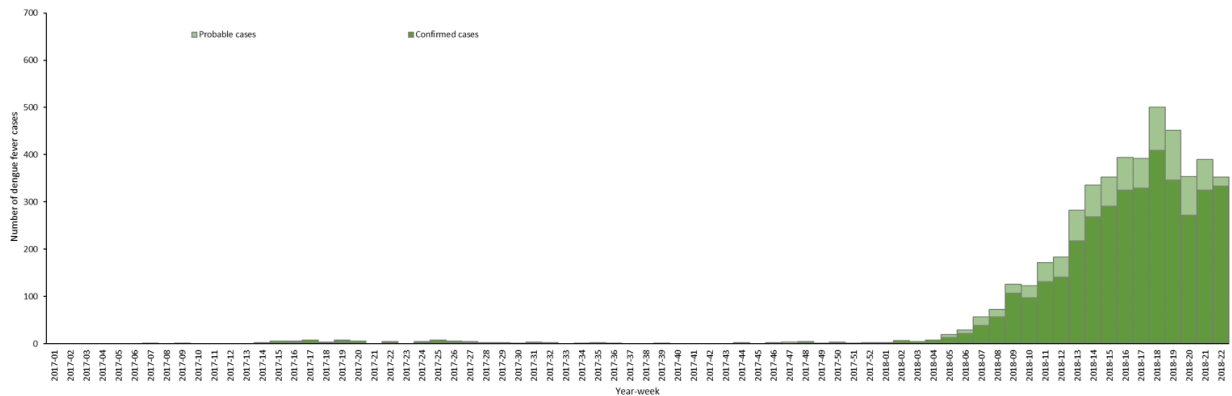
The risk of onward transmission of dengue fever in Europe is linked to importation of virus by viraemic travellers into receptive areas with established and active competent vectors (i.e. *Aedes albopictus* in mainland Europe, primarily around the Mediterranean, and *Aedes aegypti* on Madeira). Environmental conditions in Europe are now favourable for the growth of mosquito populations, and could lead to a high vector abundance.

Actions

ECDC is closely monitoring the situation and has 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 1-2017 to week 22-2018, Réunion

Adapted from the MoH bulletin "Surveillance de la dengue à la Réunion. Point épidémiologique au 12 juin 2018"



New! Rift Valley Fever – Kenya – 2018

Opening date: 12 June 2018

Latest update: 15 June 2018

Epidemiological summary

On 8 June 2018 the Ministry of Health confirmed an outbreak of Rift Valley fever (RVF). On 2 June 2018, an 18-year-old male patient was admitted to a health facility in the north of Kenya with fever, body weakness, bleeding from the gums and mouth and reportedly having consumed meat from a sick animal. He died the same day.

On 4 June 2018, two relatives of the index patient were admitted. One of them was confirmed positive for RVF on 6 June 2018. A further seven suspected cases are under investigation.

In total, 10 cases have been reported, five of whom have died (CFR 50%).

Four counties, Kitui, Wajir, Kadjiado and Marsabit, have been reporting very high numbers of deaths and abortions among livestock including camels and goats. Additionally it had been reported that local populations were consuming meat from dead and sick animals.

According to an OIE report from 8 June, an outbreak of RVF was reported in Wajir province (north of Kenya) at the beginning of June 2018.

Sources: [WHO AFRO](#), [OIE](#)

ECDC links: [Factsheet](#)

ECDC assessment

Outbreaks of RVF are regularly reported in Kenya. Major outbreaks have been described in 2006 (600 cases and 150 deaths) and 2014.

Further cases are likely to occur, due to the combination of significant numbers of reported deaths among livestock and the end

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of Ramadan when there is considerable movement of people and livestock.

The risk to EU travellers remains low if there is no direct contact with blood, abortion products, or any other infected biological material during the viraemic period.

New! Vaccine-derived poliovirus type 3 (cVDPV3) - Venezuela – 2018

Opening date: 10 June 2018

Latest update: 15 June 2018

Epidemiological summary

On 8 June 2018, PAHO/WHO notified of a vaccine-derived poliovirus type 3 case in Venezuela. The case, a 2-year-and-10-month-old child with no history of vaccination, resident of an under-immunised indigenous community in Delta Amacuro, Venezuela. The onset of paralysis was on 29 April 2018. As of 31 May 2018, the flaccid paralysis persisted in a lower limb. A Sabin type 3 vaccine poliovirus was isolated and typed by the national reference laboratory, using the sample from this patient obtained on 30 April 2018. The sample will be sent to a regional reference laboratory for confirmatory testing. Other children from the same community were vaccinated in April 2018 with oral bivalent polio vaccine.

The ongoing field investigation identified an eight-year-old girl, resident of the same community with a vaccine history of at least one dose of trivalent oral polio vaccine (tOPV), who presented flaccidity in a lower limb. No additional acute flaccid paralysis (AFP) cases have been identified to date as a result of an active search for AFP cases carried out in the community.

Source: [WHO PAHO](#)

ECDC assessment

Vaccine-derived polio viruses are genetically mutated OPV strains that have lost key attenuating mutations and resemble WPVs biologically. Circulating VDPVs (cVDPV) are strains that have taken on the neurovirulence and transmissibility of WPV. A cVDPV is associated with person-to-person transmission. The key factors favouring cVDPV emergence and spread are the same as for WPV circulation: low polio vaccine coverage rates or poorly conducted supplementary immunisation activities in areas where OPV use continues.

The risk of a polio outbreak, as well as the risk of outbreaks of other vaccine-preventable diseases, have been very high in Venezuela for several years as routine vaccination coverage has continued to fall short of targets and the susceptible population has continued to grow. In 2016, only 84% of children were fully immunised against polio and other vaccine-preventable diseases. An outbreak of cVDPV is a serious public health event and can be of the same severity as an outbreak of wild polio virus.

Actions

PAHO/WHO is monitoring the situation and has reminded Member States of the importance of reaching and maintaining polio vaccination coverage of more than 95 per cent in each district or municipality, maintaining high quality of epidemiological surveillance, and updating the national poliovirus outbreak response plans.

ECDC is monitoring this event through epidemic intelligence.

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

Opening date: 30 May 2018

Latest update: 15 June 2018

Epidemiological summary

Since the beginning of the 2018 transmission season and as of 14 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.

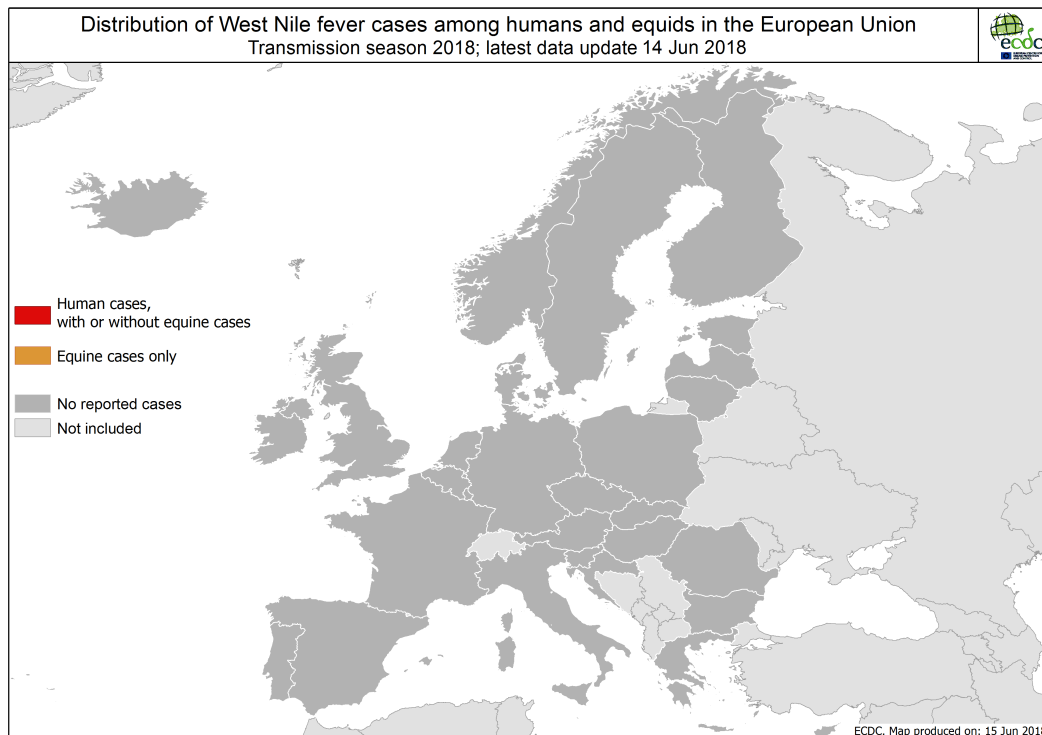
In accordance with [Commission Directive 2014/110/EU](#), prospective donors should be deferred for 28 days after leaving a risk area for locally-acquired West Nile virus unless the results of an individual nucleic acid test (NAT) are negative.

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.

Distribution of West Nile fever cases among humans and equids in the EU as of 14 June

TESSy and ADNS



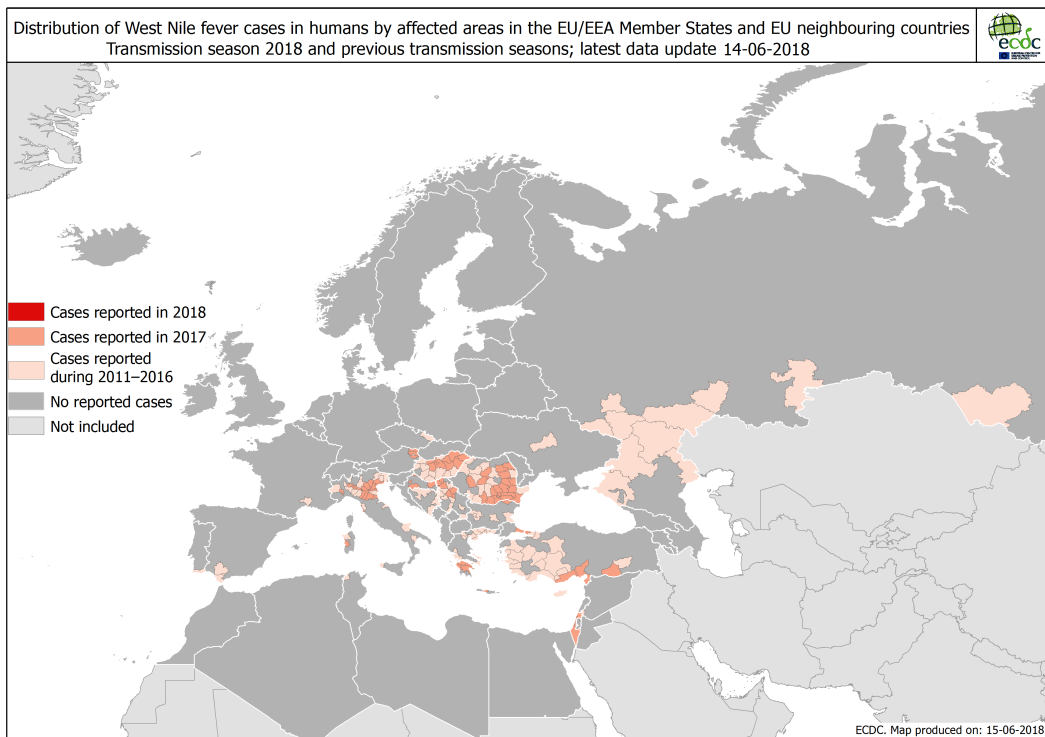
Distribution of West Nile fever cases among equids in the EU as of 14 June

ADNS



Distribution of human West Nile fever cases by affected areas as of 14 June

ECDC



Ebola virus disease - Democratic Republic of the Congo - 2018

Opening date: 8 May 2018

Latest update: 15 June 2018

Epidemiological summary

Since the last CDTR published on 8 June 2018, authorities have not reported any confirmed or probable cases. As of 15 June 2018, the Ministry of Health of DRC has reported 66 cases, including 28 deaths. Of these cases, 38 are confirmed, 14 are probable and 14 are suspected. So far, all cases have been reported from three health zones: Bikoro (22), Iboko (34), Wangata (5) and Ingende (5) 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 is part of the EVD outbreak responses activities.

According to the Emergency Committee meeting held on 18 May 2018 in accordance with the International Health Regulation (2005) (IHR), 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'.

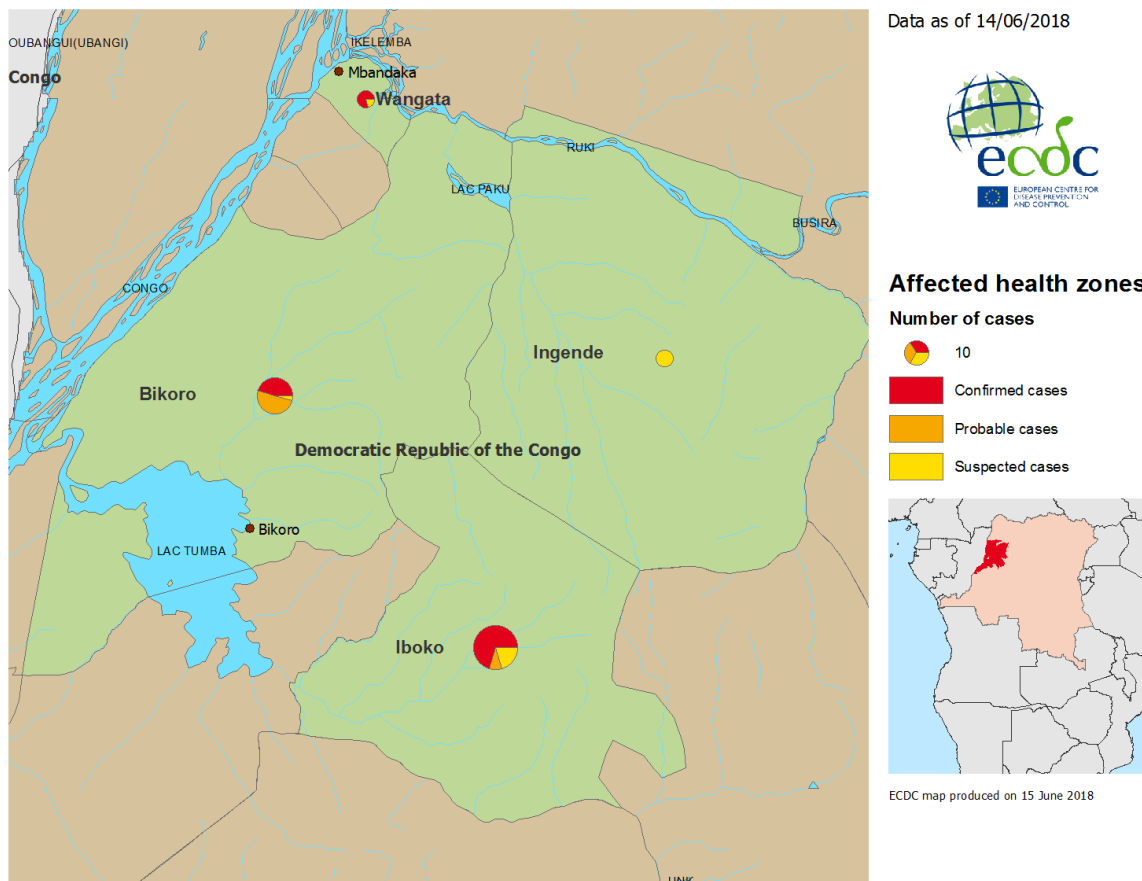
For the European Union/European Economic Area (EU/EEA) citizens living in, or travelling through, areas of DRC not known to have EVD cases, the **risk of exposure is very low**, provided they adhere to the recommended precautions. **The overall risk of introduction and further spread of Ebola virus within 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 15 June 2018

ECDC



Mass gathering monitoring- Russia- FIFA World Football Cup 2018

Opening date: 7 June 2018

Latest update: 15 June 2018

Epidemiological summary

The list below refers to events with potential risks to the FIFA 2018 World Cup hosting and participating countries.

Vibrio growth in the Baltic Sea

Source: [Vibrio map viewer](#)

This week, as of 15 June 2018, the environmental [suitability for Vibrio growth in the Baltic Sea](#) over the next five days is considered to be medium-to-high in Kaliningrad, Russia.

Measles in Russia

Source: [Local health authorities](#)

Between January and April 2018, Russia detected 1 149 measles cases. Of these 671 (58.4%) were in children, and 478 were in adults (41.6%).

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Measles in the Americas**Source:** [WHO](#)

Between epidemiological week (EW) 1 and EW 22 of 2018, 11 countries reported 1 685 confirmed cases of measles in the Region of the Americas: Antigua and Barbuda (1 case), Argentina (3 cases), Brazil (114 cases), Canada (11 cases), Colombia (26 cases), Ecuador (12 cases), Guatemala (1 case), Mexico (4 cases), Peru (2 cases), the United States (84 cases), and Venezuela (1 427 cases). This number exceeds that reported in 2017, when four 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).

Measles in Brazil**Source:** [WHO](#)

In Brazil, there is an ongoing measles outbreak. From 1 January through 23 May 2018, there were 995 reported cases (611 cases in Amazonas State, and 384 in Roraima State). Of these cases, 114 have been laboratory confirmed (30 in Amazonas and 84 in Roraima), including two deaths. Eighty three cases were discarded and 798 remain under investigation.

Rabies in Moscow, Russia**Source:** [Media](#)

In the territory of the metropolitan area Nekrasovka of the South-Eastern Administrative District of Moscow, a quarantine for rabies was introduced until 11 August. The measures were taken after the detection of a case of rabies in a pet.

ECDC monthly measles monitoring report**Source:** [ECDC](#)

There are several countries reporting measles cases during May 2018.

MERS-CoV update May 2018**Source:** [WHO](#)

At the end of May 2018, 2 220 laboratory-confirmed cases including 790 associated deaths (case-fatality rate: 35.6%) were reported globally. The majority of these cases were reported from Saudi Arabia (1 844 cases, including 716 related deaths with a case-fatality rate of 38.8%). During the month of May 2018, 12 laboratory-confirmed cases of MERS-CoV were reported globally: 11 cases in Saudi Arabia, including one associated death and one case reported in the United Arab Emirates.

Haemorrhagic fever with renal syndrome in Kazan, the Republic of Tatarstan, Russia**Source:** [Local health authority](#)

According to the weekly report of Rospotrebnadzor, between 31 May and 6 June 2018, there were six cases of haemorrhagic fever with renal syndrome reported in the Republic of Tatarstan. Three of these cases are from Kazan, one of the hosting cities for 2018 FIFA World Cup. The disease is prevalent in the European part of Russia, with almost 8 300 cases reported in 2017 and over 6 000 cases reported in 2016.

ECDC assessment

EU/EEA 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 apply standard hygienic measures in order to reduce the risk of gastrointestinal illness and ensure that they are vaccinated prior to travel.

Actions

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

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