



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 27, 1-7 July 2018

All users

This weekly bulletin provides updates on threats monitored by ECDC.

NEWS

Europe is free of polio, but risk of importation remains

The WHO European Region is polio-free, says <u>European Regional Certification Commission (RCC)</u>. Three countries (Bosnia and Herzegovina, Romania and Ukraine) remain of special concern to the RCC expert panel due to suboptimal immunisation coverage, weakness in surveillance, vaccine shortages and other vulnerabilities.

The circulation of wild poliovirus in countries outside <u>Europe</u> shows that there is a continued risk for the disease being imported into the Region. Outbreaks of vaccine-derived poliovirus types 2 and 3 in several African countries and in Syria show the potential risk for further international spread. Such outbreaks can only occur when the population is insufficiently immunised.

Efforts are underway throughout the Region to comply with WHO recommendations on containment of all polioviruses currently held in laboratories or vaccine manufacturing facilities. Countries are expected to either destroy potentially infectious poliovirus materials or ensure they are securely stored in a WHO-certified poliovirus essential facility.

For options for intervention available to EU/EEA Member States, see the <u>ECDC risk assessment</u>. An update of the current global polio situation can be found below.

I. Executive summary

EU Threats

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

Opening date: 24 May 2018

Latest update: 6 July 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 might not apply to other settings without further validation.

→Update of the week

As of 5 July 2018, the environmental suitability for Vibrio growth in the Baltic Sea for the next five days is considered to be medium in some coastal areas of Estonia, Denmark, Germany, Poland and Sweden.

Dengue – France, Réunion – 2018

Opening date: 13 March 2018 Latest update: 6 July 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 18 June and 24 June 2018, Réunion reported 259 cases of dengue fever.

Non EU Threats

Ebola virus disease - Democratic Republic of the Congo - 2018 Latest update: 6 July 2018

Opening date: 8 May 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 Equateur Province which borders on the Congo River and the Republic of Congo.

\rightarrow Update of the week

Since the last CDTR was published on 29 June 2018, authorities have not reported any new confirmed or probable cases. As of 6 July 2018, the Ministry of Health of DRC has reported 53 cases, including 29 deaths. Of these, 38 cases are confirmed and 15 are probable. The last confirmed case had onset of symptoms on 2 June.

This week, WHO has revised its risk assessment. The risk is considered moderate at the national level, and low at the regional and global levels.

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

Opening date: 30 May 2018

Latest update: 6 July 2018

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

During the 2017 transmission season, 288 human cases were reported in the EU and from neighbouring countries. No cases were reported from EEA countries. EU Member States reported 127 equine cases.

→Update of the week

Between 29 June and 5 July 2018, four cases of human West Nile fever were reported in the EU. Greece reported two confirmed cases in Dytiki Attiki in the Attiki Region and one probable case in Voiotia. No cases have previously been reported in Voiotia. Austria reported one confirmed case in Wiener Umland/Nordteil, a region affected in previous transmission seasons. Serbia reported two confirmed human cases in regions that were affected in previous transmission seasons.

This week, Hungary reported the first outbreak among equids in this transmission season.

Mass gathering monitoring- Russia- FIFA World Football Cup 2018

Opening date: 7 June 2018

Latest update: 6 July 2018

ECDC has enhanced its epidemiological intelligence surveillance during the 2018 FIFA Men's 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.

Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

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 11 May 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 9 June, Pakistan reported one new case of wild poliovirus type 1, and three countries detected circulating vaccine-derived polio viruses type 2 (cVDPV2): the Democratic Republic of Congo, Somalia, and Papua New Guinea.

II. Detailed reports

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

Opening date: 24 May 2018

Latest update: 6 July 2018

Epidemiological summary

Sea surface temperatures (SST) in the Baltic Sea are available <u>here</u>. A *Vibrio* suitability tool is available on the <u>E3 Geoportal</u>. 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 has 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: 6 July 2018

Epidemiological summary

In 2018 and as of 24 June, authorities reported 5 747 autochthonous cases of dengue on the island. 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 27 March 2018, authorities decided to raise the level of the emergency plan <u>ORSEC</u> 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 a significant event because the number of cases already exceeds the yearly number of cases reported since 2010. With the arrival of the southern-hemisphere winter in July, and based on the observed pattern of previous outbreaks in the island, this outbreak is expected to weaken in intensity as the climatic conditions will become less favourable for mosquito activity. However, no marked decline has been observed yet.

Control activities are currently in place and include reinforced vector control, enhanced surveillance, blood safety measures and social mobilisation.

The probability of onward transmission of dengue fever in Europe is associated with the importation of virus by viraemic travellers into receptive areas, defined as a location with established and active competent vectors. Environmental conditions in summer in southern EU are currently favourable to allow a vector abundance sufficient which permits autochthonous transmission of dengue

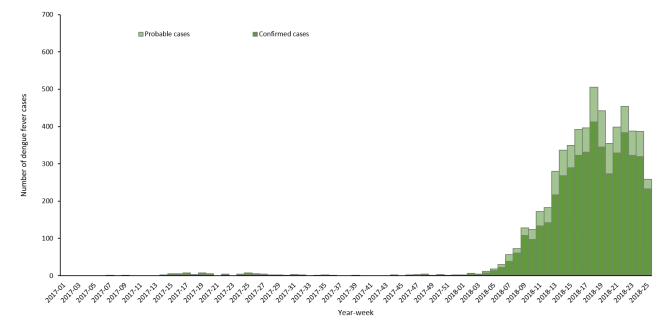
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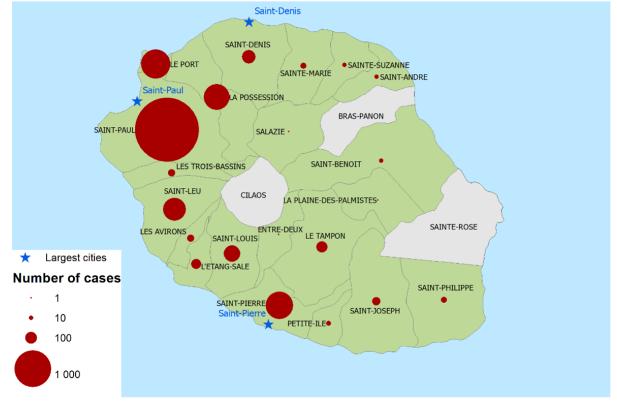
virus and could potentially cause local outbreaks.

Actions

ECDC is closely monitoring the situation and produced an update of the rapid risk assessment 'Dengue outbreak in Réunion, France'. 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 24-2018, Réunion Adapted from the MoH bulletin "Surveillance de la dengue à la Réunion. Point épidémiologique au 03 juillet 2018"





Geographical distribution of dengue cases, Réunion, data as of 24 June 2018

Adapted from the MoH bulletin "Surveillance de la dengue à la Réunion. Point épidémiologique au 03 juillet 2018"

Ebola virus disease - Democratic Republic of the Congo - 2018

Opening date: 8 May 2018

Latest update: 6 July 2018

Epidemiological summary

Since the last CDTR was published on 29 June 2018, authorities have not reported any new confirmed or probable cases. As of 6 July 2018, the Ministry of Health of DRC has reported 53 cases, including 29 deaths. Of these, 38 cases are confirmed and 15 are probable. The last confirmed case had onset of symptoms on 2 June.

Response activities

Under the coordination of the DRC Ministry of Health, an EVD outbreak response was implemented, with 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.

According to the Emergency Committee meeting held on 18 May 2018 in accordance with the International Health Regulations (2005) (IHR), this event does not meet the criteria of a public heath event of international concern.

SOURCE: WHO

ECDC LINK: Rapid risk assessment

ECDC assessment

WHO has revised its risk assessment after a follow-up of all identified contacts was conducted on 27 June (after the mandatory 21-day follow-up period). The risk is now considered moderate at the national level, and low at the regional and global levels.

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:

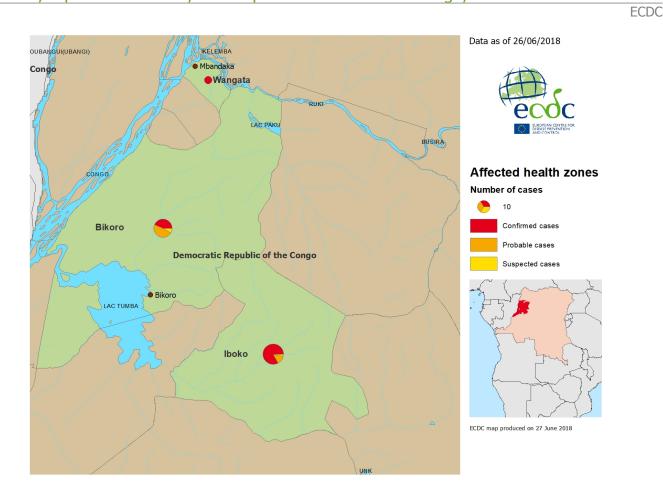
- wash and peel fruit and vegetables before consumption;

- 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 27 June 2018

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

Opening date: 30 May 2018

Latest update: 6 July 2018

Epidemiological summary

Between 29 June and 5 July 2018, four cases of human West Nile fever were reported in the EU. Greece reported two confirmed cases in Dytiki Attiki in the Attiki Region and one probable case in Voiotia. No cases have previously been reported in Voiotia. Austria reported one confirmed case in Wiener Umland/Nordteil, a region affected in previous transmission seasons. Serbia reported two confirmed human cases in regions that were affected in previous transmission seasons.

This week, Hungary reported the first outbreak among equids in this transmission season.

Since the beginning of the 2018 transmission season and as of 5 July 2018, nine human cases have been reported in EU/ EEA Member States by Greece (7), Italy (1) and Austria (1); two human cases were reported in neighbouring countries, both by Serbia.

ECDC link: <u>ECDC West Nile fever web page</u> | <u>ECDC</u>: equine West Nile fever web page | <u>ECDC atlas</u> **Sources**: <u>TESSy</u> and <u>ADNS</u>

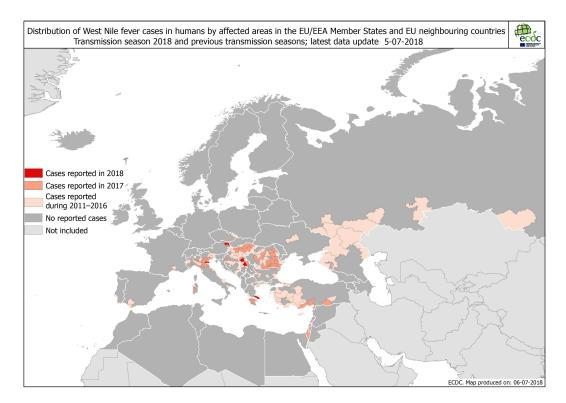
ECDC assessment

The first human West Nile fever cases were reported in an EU Member State last week, which is consistent with observations of seasonal transmission from previous years. All human cases reported during the current transmission season were reported in previously affected countries. In accordance with <u>Commission Directive 2014/110/EU</u>, 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 publishes 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 (<u>TESSy</u>), while equine cases are collected through the Animal Disease Notification System (<u>ADNS</u>) 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.

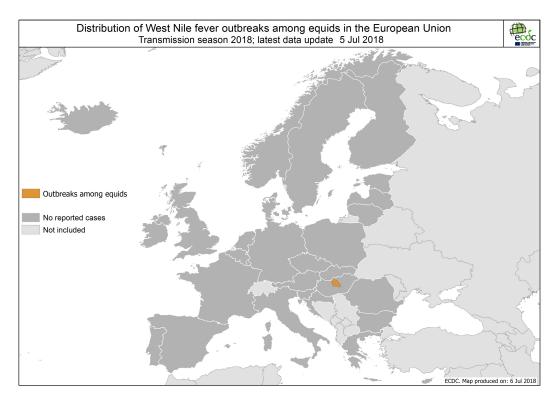
Distribution of human West Nile fever cases by affected areas as of 5 July 2018



ECDC

TESSy

Distribution of West Nile fever outbreaks among equids in the EU as of 5 July 2018



Mass gathering monitoring- Russia- FIFA World Football Cup 2018

Opening date: 7 June 2018

Latest update: 6 July 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 5 July 2018, the environmental <u>suitability for Vibrio growth in the Baltic Sea</u> over the next five days is considered to be low in Kaliningrad, Russia.

Monitoring of the public water areas in St. Petersburg

According to <u>Rospotrebnadzor</u> in St. Petersburg, Russia, as of 26 June 2018, the water quality at a number of monitored beaches did not meet the requirements established by sanitary legislation in the following public water areas: Izhora, Kolpino district; 1st Suzdal Lake (Upper), 2nd Suzdal Lake; 3rd Suzdal Lake, Olginsky Pond, Vyborgsky District; Kolonistsky pond, Pushkin district; Lake Razliv (beaches: "Officers", "White Mountain", "North", "Green Mountain", "New"); The Gulf of Finland (beaches: "Kronstadt" Kronstadt region, "Komarovsky", "Laskovy", "Wonderful", "Golden", "Children's", "Dubkovsky", "Sestroretsk" Resort area, "Sea Dubki" Primorsky district); R. Neva (the beach of the Peter and Paul Fortress), Petrogradsky district; lake The Bezimanyi, Krasnoselsky district.

Measles outbreak in Kaluga region

News <u>media</u> reported an outbreak of measles in Kaluga region (~200 km from Moscow). Fifty-nine cases were detected in the districts of Borovsk, Maloyaroslaveckyi and Kaluga. These are the first cases of measles reported in Kaluga since 2015.

Measles in Mogilev, Belarus

An <u>imported case</u> of measles has been reported in Mogilev, Belarus (~600 km south-west of Moscow). This is the first case of measles reported in the region.

Yellow fever in Brazil On 26 June 2018, the <u>Brazilian Ministry of Health</u> reported one case of yellow fever in Rondopolis, Mato Grosso, Brazil.

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 hygiene measures in order to reduce the risk of gastrointestinal illness and ensure that they are vaccinated prior to travel. Protective measures against tick bites are also advised for travellers going to areas with high tick activity.

Actions

ECDC monitors this event in the hosting, neighbouring and participating countries on a daily basis and shares this information with relevant public health partners. ECDC published a <u>risk assessment on 28 May 2018</u>.

Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

Epidemiological summary

Since the beginning of 2018, two countries have recorded cases of wild polio virus type 1 (WPV1): Afghanistan (eight cases) and Pakistan (three cases). This is an increase of five cases, compared with the same period 2017.

Since the beginning of the year, four countries have detected circulating vaccine-derived polio viruses type 2 (cVDPV2): Nigeria (one case), the Democratic Republic of Congo (seven cases), Somalia (four cases), and Papua New Guinea (one case). In 2017, for the same period, 27 cVDPV2 had been recorded.

Democratic Republic of Congo: On 3 July 2018, WHO reported three different outbreaks of circulating vaccine-derived poliovirus type 2 (cVDPV2). In February 2018, the government declared cVDPV2 to be a national public health emergency.

First outbreak: The cVDPV2 strain previously detected in Haut Lomami, Tanganyika and Haut Katanga provinces, spread to Ituri province in June 2018, close to the border with Uganda. The virus was confirmed in an AFP case, with onset of paralysis on 5 May 2018.

Second outbreak: Maniema province reported separate cVDPV2 outbreak, with two cases confirmed in 2017. The date of onset of paralysis of the most recent case was 18 April 2017. So far, no new cases have been detected in 2018, and there is no evidence that this virus has spread further geographically.

The third detected outbreak of cVDPV2 was found in Mongala province and isolated from an AFP case in the Yamongili Health Zone. The onset date of paralysis was 26 April 2018. Circulation of the strain was confirmed when the same strain was isolated in stool specimens from two healthy community contacts.

WHO is elevating the risk of further national spread to 'very high', and the risk of international spread to 'high'. This risk is magnified by known population movements between the affected area of DR Congo and Uganda, Central African Republic and South Sudan, and the upcoming rainy season (which is associated with increased intensity of virus transmission). The detection of cVDPV2s underscores the importance of maintaining high routine vaccination coverage everywhere to minimise the risk and consequences of poliovirus circulation. These events also underscore the risk posed by any low-level transmission of the virus.

Papua New Guinea: According to WHO, the Papua New Guinea authorities reported a vaccine-derived poliovirus type 1 (VDPV1) outbreak on 25 June 2018.

WHO reported one confirmed case in a 6-year-old boy who presented with a lower limb weakness. This case was detected on 28 April 2018 in Morobe Province. On 21 May, investigations and laboratory results confirmed a VDPV1. According to WHO, on 22 June 2018, the US CDC confirmed circulation of the virus, which was also isolated from stool specimens of two healthy children from the same community.

Papua New Guinea has not registered any case of wild poliovirus since 1996, and the country was certified as polio-free in 2000 along with the rest of the WHO Western Pacific Region. In Morobe Province, polio vaccine coverage is low, with 61% of children having received the recommended three doses. Water, sanitation and hygiene conditions are also challenging in this area. Because of relatively limited travel to and from this area and the planned immunisation activities, the risk of international spread of the cVDPV from Papua New Guinea to other countries is low.

ECDC links: <u>ECDC poliomyelitis web page</u> | <u>Information to travellers to polio-infected countries</u> **Sources:** <u>WHO IHR Emergency Committee</u> | <u>Polio eradication: weekly update</u> | <u>WHO</u> | <u>WHO AFRO</u> | <u>Polio eradication: DRC</u>

ECDC assessment

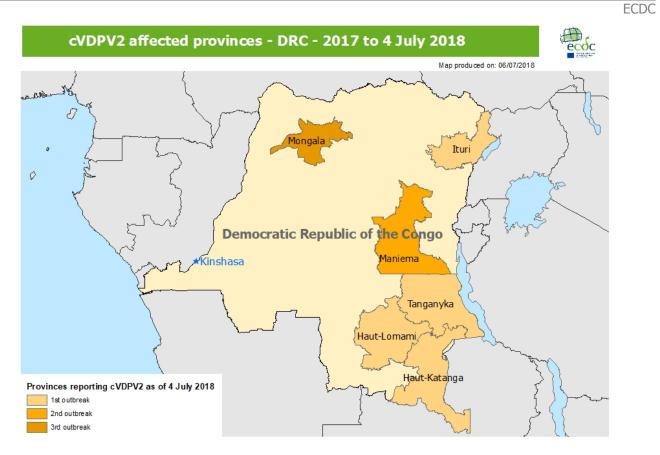
The last locally-acquired wild polio cases within the current EU borders were reported from Bulgaria in 2001. The most recent wild polio outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases. Importation of the infection as well as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

cVDPV2 affected provinces - DRC - 2017 to 4 July 2018



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