



#### **COMMUNICABLE DISEASE THREATS** REPORT

CDTR Week 26, 24-30 June 2018

All users

This weekly bulletin provides updates on threats monitored by ECDC.

# I. Executive summary EU Threats

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

Opening date: 24 May 2018 Latest update: 29 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 (<u>ECDC 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 without further validation.

#### →Update of the week

As of 28 June 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 Denmark and Germany.

### **Non EU Threats**

## New! Poliomyelitis (VDPV1) - Papua New Guinea - 2018

Opening date: 26 June 2018 Latest update: 29 June 2018

According to WHO, the Papua New Guinea authorities reported a vaccine-derived poliovirus type 1 (VDPV1) outbreak on 25 June 2018. Papua New Guinea has not registered any case of wild poliovirus since 1996, and the country was certified as poliofree in 2000 along with the rest of the WHO Western Pacific Region.

→Update of the week

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.

**Response**: Response activities are ongoing in Morobe Province. Experts from national and provincial authorities, from UNICEF and from WHO are performing contact tracing. An immunisation campaign was launched in the community targeting children under 15 years of age. As of 25 June 2018, 845 children from the Lufa Mountain Settlement have been vaccinated.

Source: WHO

**ECDC links**: ECDC factsheet

## **Ebola virus disease - Democratic Republic of the Congo - 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 the Equateur Province which borders on the Congo River and the Republic of Congo.

#### →Update of the week

Since the last CDTR published on 21 June 2018, authorities reported one probable cases. However, this case notification is due to a reclassification of a case who died on 20 May 2018.

As of 27 June 2018, the Ministry of Health of DRC has reported 57 cases, including 29 deaths. Of these, 38 cases are confirmed, 15 are probable and four are supected. So far, all cases have been reported from four health zones: Bikoro (24), Iboko (29) and Wangata (4) in Equateur Province.

The last confirmed case had onset of symptoms on 2 June.

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

Opening date: 30 May 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 neighbouring countries. EU Member States reported 127 equine cases.

#### →Update of the week

This week the first human cases of West Nile fever in the EU for the current transmission season have been reported by Greece and Italy. Greece reported four cases (three confirmed and one probable case) in Dytiki Attiki in the Attiki Region. Human WNF cases have been reported previously in the Attiki Region between 2012 and 2014. Italy reported one confirmed case in Rovigo, an area where human WNF cases were reported in previous years. All cases had symptom onset in week 22 and 24. For the current transmission season no equine cases have been reported to ADNS.

## Mass gathering monitoring- Russia- FIFA World Football Cup 2018

Opening date: 7 June 2018 Latest update: 29 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.

 $\underline{\text{WHO}\ \text{EURO}}$  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: 29 June 2018

### **Epidemiological summary**

Sea surface temperatures (SST) in the Baltic Sea are available <a href="https://example.com/here">here</a>. Vibrio suitability tool is available on the <a href="https://example.com/here">E3 Geoportal</a>. 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.

## **New! Poliomyelitis (VDPV1) – Papua New Guinea – 2018**

Opening date: 26 June 2018 Latest update: 29 June 2018

## **Epidemiological summary**

**WHO Assessment**: 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 3 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 immunization activities the risk of international spread of the cVDPV from Papua New Guinea to other countries is low.

#### **ECDC** assessment

No action for ECDC.

## **Ebola virus disease - Democratic Republic of the Congo - 2018**

Opening date: 8 May 2018

### **Epidemiological summary**

Since the last CDTR published on 21 June 2018, authorities reported one probable cases. However, this case notification is due to a reclassification of a case who died on 20 May 2018.

As of 27 June 2018, the Ministry of Health of DRC has reported 57 cases, including 29 deaths. Of these, 38 cases are confirmed, 15 are probable and four are supected. So far, all cases have been reported from four health zones: Bikoro (24), Iboko (29) and

3/9

Wangata (4) in Equateur Province.

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. 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 is ongoing support 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, from 21 Mai to 27 June, 3 330 people have neen vaccinated.

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 heath 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'.

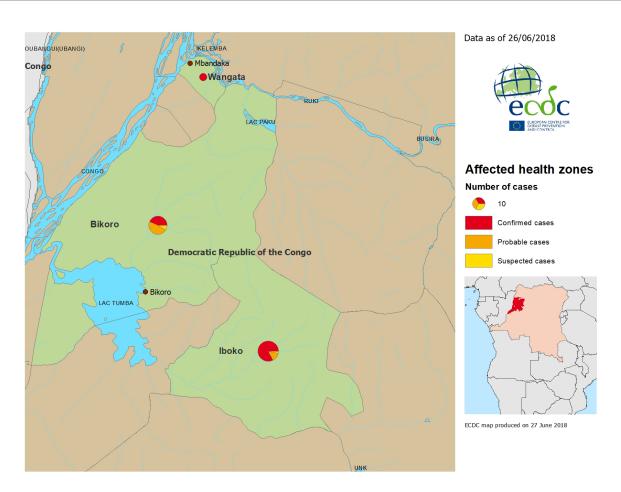
For the European Union/European Economic Area (EU/EEA) citizens living in, or travelling through, areas of DRC not known to have EVD cases, the **risk of exposure is very low**, provided they adhere to the recommended precautions. **The overall risk of introduction and further spread of Ebola virus within 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 27 June 2018

**ECDC** 



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

Opening date: 30 May 2018

## Epidemiological summary

This week the first human cases of West Nile fever in the EU for the current transmission season have been reported by Greece and Italy. Greece reported four cases (three confirmed and one probable case) in Dytiki Attiki in the Attiki Region. Human WNF cases have been reported previously in the Attiki Region between 2012 and 2014. Italy reported one confirmed case in Rovigo, an area where human WNF cases were reported in previous years. All cases had symptom onset in week 22 and 24. Since the beginning of the 2018 transmission season and as of 28 June 2018, no human cases have been reported by neighbouring countries.

For the current transmission season no equine cases have been reported to ADNS.

ECDC link: ECDC West Nile fever web page | ECDC: equine West Nile fever web page | ECDC atlas

**Sources**: <u>TESSy</u> and <u>ADNS</u>

5/9

#### **ECDC** assessment

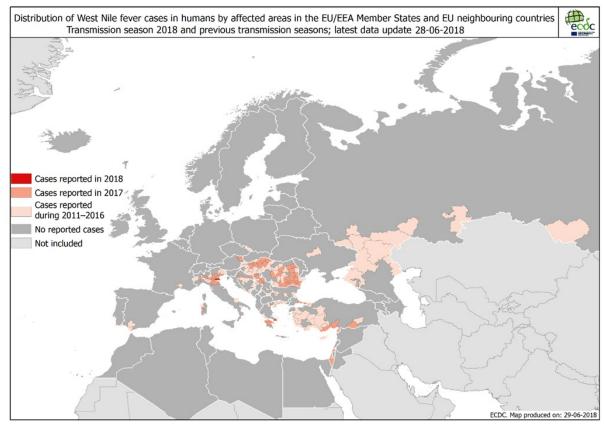
The first human West Nile fever cases have been reported in an EU Member State this week, which is consistent with observations of seasonal transmission from previous years. In accordance with <u>Commission Directive 2014/110/EU</u>, prospective donors should be deferred for 28 days after leaving a risk 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 (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 29 June 2018.

TESSy and ADNS



## Mass gathering monitoring- Russia- FIFA World Football Cup 2018

Opening date: 7 June 2018 Latest update: 29 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 29 June 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.

#### Diphtheria in Luhansk region, Ukraine

The second case of diphtheria was reported in Luhansk region, by the <u>Ukrainian Ministry of Health</u> which is about 200 km north from Rostov-on-Don, one of the FIFA 2018 hosting cities. The Ministry of Health recommends giving necessary vaccinations against diphtheria as soon as possible to children and adults. The level of vaccination coverage against diphtheria

7/9

remains low: only half of Ukrainian children aged 18 months received three doses of the vaccine, and less than half of adults are protected from diphtheria by the DTP vaccine.

#### Highest measles alert level in Brazil

On 18 June 2018, <u>Brazil</u> raised their measles alert (level 3) to the highest level in order to manage ongoing measles outbreaks in the country and prevent importation of measles from Europe in relation to FIFA 2018.

#### Dirofilaria repens in Russia

A clincal case of migrating Dirofilaria repens was detected in <u>Russia</u>. Dirofilaria repens is a roundworm transmitted through mosquitoes to humans (occasional host) from dogs or cats or other carnivores (definite host). The disease is <u>prevalent in Russia</u>, accounting for the most of the cases in Europe. The majority of the cases in Russia are detected in Rostov, Volgograd and Nizhny Novgorod.

#### Stomach problems in Swedish team, Russia

Three players of Swedish football team in FIFA 2018 developed stomach problems on 21 June 2018, according to media. The players did not travel to Sochi for the game against the German team on 23 June 2018.

#### Measles in Leningrad region, Russia

On 21 June 2018, Rospotrebnadzor reported a suspected case of measles in a one and a half year old child in Sertolovo (30 km from FIFA 2018 stadium in St. Petersburg). The case has a recent travel history to Ingushetia.

#### **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 published a <u>risk assessment on 28 May 2018</u>. 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.