



#### COMMUNICABLE DISEASE THREATS REPORT

**CDTR** 

Week 34, 19-25 August 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: 24 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 Geoportal).

#### →Update of the week

As of 24 August 2018, environmental suitability for *Vibrio* growth in the Baltic Sea for the next five days is considered to be medium to high in several coastal areas of Denmark, Germany, Latvia, Lithuania, Poland, Sweden and Russia.

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

Opening date: 30 May 2018 Latest update: 24 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 to inform blood safety authorities of areas where there is ongoing virus transmission.

#### →Update of the week

Between 17 and 23 August 2018, EU Member States reported 136 human cases of West Nile fever: Italy (59), Greece (31), Romania (25), Hungary (19) and France (2). EU neighbouring countries reported 82 cases: Israel (49) and Serbia (33). Human cases were reported for the first time from two areas in Romania and one area in Greece. All other human cases were reported from areas that have been affected during previous transmission seasons. This week, 19 deaths were reported by Greece (7), Romania (5), Serbia (4) and Italy (3).

In the same week, ten outbreaks among equids were reported by Hungary (6), Greece (2) and Italy (2).

### **Non EU Threats**

# **New! Middle East Respiratory Syndrome Coronavirus (MERS-CoV) - the UK ex Middle East - 2018**

Opening date: 23 August 2018 Latest update: 24 August 2018

On 23 August 2018, <u>Public Health England (PHE)</u> gave notification of one case of MERS-CoV detected in England. The case is a resident of the Middle East, which is probably where the patient became infected before travelling to the UK.

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

Opening date: 1 August 2018 Latest update: 24 August 2018

On 1 August 2018, the Ministry of Health of the Democratic Republic of the Congo (DRC) reported four confirmed cases of Ebola virus disease (EVD) in Mangina, North Kivu province in the north-east of the country close to the border with Uganda. This is the tenth 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

Over the past week, the Ministry of Health of the Democratic Republic of the Congo has reported 25 additional cases and 19 deaths.

As of 22 August 2018, there have been 103 EVD cases (76 confirmed, 27 probable), including 63 deaths (36 confirmed, 27 probable).

## Chikungunya and dengue – Multistate (World) – Monitoring global outbreaks

Opening date: 27 January 2017 Latest update: 24 August 2018

Chikungunya and dengue are vector-borne diseases that affect 50 to 100 million people each year. Over the past decade, chikungunya and dengue have been detected in an increasing number of countries. Chikungunya virus infection has been circulating in Asia and Africa, and has reached the Caribbean and the Americas since 2013-2014. In 2017, France and Italy reported autochthonous chikungunya cases. Dengue fever is present in Asia, the Pacific, the Caribbean, the Americas and Africa. In 2018, no autochthonous dengue or chikungunya cases were detected in EU/EEA Member States.

#### →Update of the week

**Chikungunya**: The virus is widespread in the Americas region, with several countries reporting cases in 2018. New cases have also been detected in India, Thailand and the Philippines since the previous RT update on 18 July 2018. The outbreak in Kenya is still ongoing in the African region. No outbreaks have been identified in Europe or the Australia and Pacific region since the previous report.

**Dengue**: Compared to the same period in 2017, Paraguay, Mexico, Thailand and Cambodia have observed an increasing trend in the number of cases.

### Cholera – Multistate (World) – Monitoring global outbreaks

Opening date: 20 April 2006 Latest update: 24 August 2018

Several countries in Africa, Asia and the Americas are reporting <u>cholera</u> outbreaks. Major outbreaks are currently being reported in Yemen, Nigeria, the Democratic Republic of the Congo (DRC), Haiti, Somalia and Kenya.

#### →Update of the week

Since the last CDTR update on 20 July 2018, the countries reporting the most cases are Yemen (28 644 cases, 66 deaths), Nigeria (5 963 cases, 153 deaths), DRC (2 633 cases, 219 deaths) and Niger (1 466 cases, 25 deaths). Since the previous CDTR update, WHO has declared the end of the ongoing cholera outbreaks in Malawi and Mozambique.

# II. Detailed reports

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

Opening date: 24 May 2018 Latest update: 24 August 2018

### **Epidemiological summary**

As of 24 August 2018, environmental suitability for Vibrio growth in the Baltic Sea for the next five days is considered to be medium to high in several coastal areas of Denmark, Germany, Latvia, Lithuania, Poland, Sweden and Russia.

Sea surface temperatures in the Baltic Sea can be consulted <a href="here">here</a>. A *Vibrio* suitability tool is available on the <a href="mailto:E3 Geoportal">E3 Geoportal</a>. 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:

As of 24 August 2018, Norway has reported six cases of *Vibrio* infection and one of *Shewanella* infection, all associated with bathing in the Oslo Fjord. In addition to these seven severe cases, 27 people have had mild *Vibrio* sores and ear infections. According to media reports, Sweden has reported 58 cases of *Vibrio* infection, including one death.

Germany has reported one fatal case associated with bathing in the Baltic Sea in 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-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 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 the 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: 24 August 2018

### **Epidemiological summary**

Between 17 and 23 August 2018, EU Member States reported 136 human cases of West Nile fever: Italy (59), Greece (31), Romania (25), Hungary (19) and France (2). EU neighbouring countries reported 82 cases: Israel (49) and Serbia (33). Human cases were reported for the first time from two areas in Romania and one area in Greece. All other human cases were reported from areas that have been affected during previous transmission seasons. This week, 19 deaths were reported by Greece (7), Romania (5), Serbia (4) and Italy (3).

In the same week, ten outbreaks among equids were reported by Hungary (6), Greece (2) and Italy (2).

In 2018, as of 23 August 2018, EU Member States reported 410 human cases: Italy (183), Greece (106), Hungary (58), Romania (56), France (5) and Croatia (2). EU neighbouring countries reported 210 human cases: Serbia (159), Israel (49) and Kosovo\* (2). To date, a total of 39 deaths due to West Nile fever have been reported by Serbia (15), Greece (11), Italy (6),

Romania (6) and Kosovo\*(1).

During the current transmission season, 64 outbreaks among equids have been reported by Italy (41), Hungary (18) and Greece (5).

\*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.

**Publications:** An early start of West Nile virus seasonal transmission: the added value of One Heath 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**: West Nile fever | Atlas

Sources: <u>TESSy</u> | <u>ADNS</u>

### **ECDC** assessment

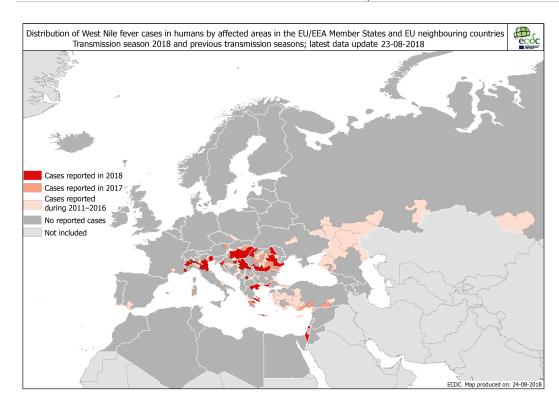
The 2018 transmission season started earlier than usual and higher case numbers have been reported than during the same period in the previous years. All human cases reported during the current transmission season were reported in previously affected countries. In accordance with <a href="European Commission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

#### **Actions**

During the transmission season, ECDC publishes <u>West Nile fever maps</u> together with an epidemiological summary every Friday. ECDC published a rapid risk assessment on the <u>'Early large increase in West Nile virus infections in the EU/EEA and EU neighbouring countries</u>' on 13 August 2018.

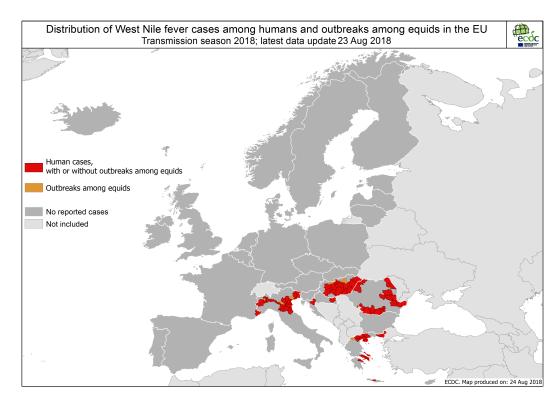
### Distribution of human West Nile fever cases by affected areas as of 23 August

**ECDC** 



# Distribution of West Nile fever cases among humans and outbreaks among equids in the EU as of 23 August

TESSy and ADNS



# **New!** Middle East Respiratory Syndrome Coronavirus (MERS-CoV) - the UK ex Middle East - 2018

Opening date: 23 August 2018 Latest update: 24 August 2018

### **Epidemiological summary**

On 23 August 2018, <u>Public Health England (PHE)</u> reported case of MERS-CoV detected in England. The case is a resident of the Middle East, which is probably where the patient became infected before travelling to the UK. The case was initially admitted to a hospital in Leeds and was transferred to the Royal Liverpool Hospital, an expert respiratory infectious disease centre. The patient's condition is stable and the patient is receiving appropriate treatment.

According to PHE, although this is a serious infection for the individual, the risk of transmission to the general population from this case is very low.

As a precautionary measure, PHE experts will be contacting people who might have been in close contact with the individual to monitor their symptoms and provide health advice.

This is the fifth case of MERS diagnosed in England, with previous cases diagnosed between 2012 and 2013.

#### **ECDC** assessment

Human cases of MERS-CoV continue to be reported in the Arabian Peninsula, and specifically in Saudi Arabia. The case in the UK is another example of the possibility of detecting imported cases in the EU. Despite the fact that imported cases continue to be detected in Europe, the risk of sustained human-to-human transmission in Europe remains very low. Moreover, appropriate and rapidly deployed infection and prevention control measures in healthcare facilities minimise the risk of health-care associated outbreaks.

On 2 August 2018, ECDC published a <u>risk assessment</u> regarding public health risks related to communicable diseases during the 2018 Hajj, Saudi Arabia, 19–24 August 2018 where MERS-CoV is discussed.
On 31 July 2015, ECDC published a rapid risk assessment on MERS - CoV on its website.

#### **Actions**

ECDC is producing a rapid risk assessment on this event to be distributed to the European Commission and Member States on 28 August 2018.

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

Opening date: 1 August 2018 Latest update: 24 August 2018

### **Epidemiological summary**

As of 22 August 2018, the Ministry of Health of the Democratic Republic of the Congo has reported 103 EVD cases (76 confirmed, 27 probable), including 63 deaths (36 confirmed, 27 probable). As of 20 August 2018, 13 cases have been reported in healthcare workers. Of these, 12 are confirmed and one has died.

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.

As of 23 August 2018 and according to a European Civil Protection and Humanitarian Aid Operations (ECHO) report, 2 282 contacts have been identified: 1205 in Mabalako, 351 in Beni and 629 in Mandima and 97 in Oicha. Of these, 79% are being followed up.

**Response activities:** As of 22 August 2018, 2 613 people have been vaccinated in Mabalako (1 311), in Beni (632), in Mandima (626) and Oicha (44). So far, 10 patients have received experimental mAB114 treatment (all in Mangina). In addition, there are four experimental therapeutic drugs approved by the <u>DRC's Ethics Committee</u>: ZMapp, Remdesivir, Favipiravir and Regn3450.

**Travel:** According to the WHO disease outbreak news (DON) released on 14 August 2018, Burundi, Central African Republic, Rwanda, South Sudan, Uganda and Zambia are implementing entry screening.

In the EU/EEA countries, <u>Belgium</u>, <u>Germany</u>, <u>Italy</u> and <u>Spain</u> have issued advice against traveling to the North Kivu region due to the Ebola outbreak. Additionally, the <u>US CDC</u> and <u>WHO</u> have issued travel recommendations.

Sources: Ministry of Health of the 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.

Transport routes linking the affected areas to other regions in the DRC and several neighbouring countries (mainly Rwanda and Uganda) may facilitate the spread of the virus. The situation is aggravated by the displacement of people due to conflict and crisis. According to <u>WHO</u>, the public health risk is considered high at the national and regional levels.

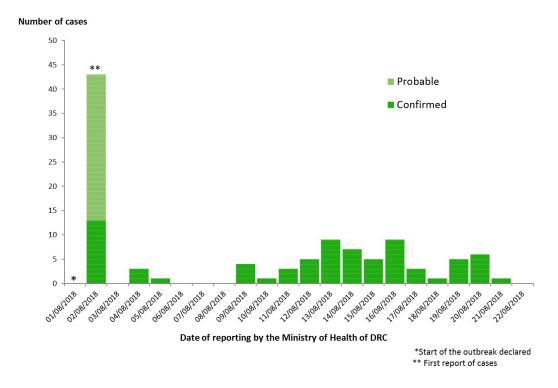
ECDC published a rapid risk assessment on 9 August 2018.

#### **Actions**

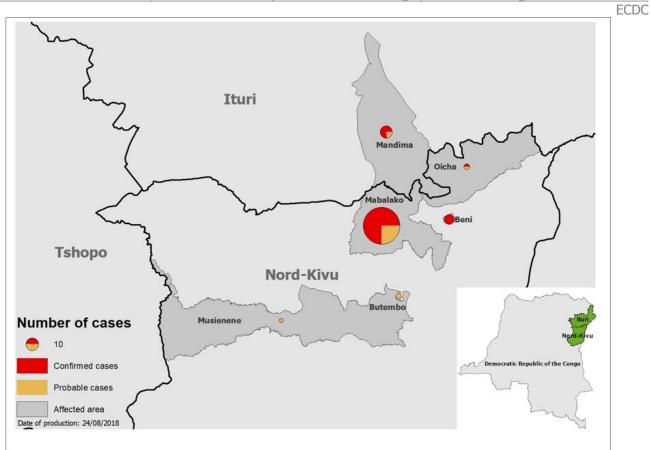
ECDC is monitoring this threat on a daily basis through epidemic intelligence.

# Distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 22 August 2018

Epicurve adapted from the DRC MoH data



# Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 22 August 2018



## Chikungunya and dengue - Multistate (World) - Monitoring global outbreaks

Opening date: 27 January 2017 Latest update: 24 August 2018

### **Epidemiological summary**

#### Europe

No autochthonous dengue or chikungunya cases were detected in continental EU/EEA countries.

#### Americas and the Caribbean

#### Chikungunya:

<u>Bolivia</u>: In 2018, as of 7 August, Bolivia has reported 77 confirmed chikungunya cases. This represents an increase of three cases since the previous RT update on 18 July 2018. For the same period in 2017, Bolivia reported 22 cases.

<u>Brazil</u>: In 2018, as of 14 July, Brazil has reported 40 841 confirmed cases and 13 deaths. This represents an increase of 21 470 confirmed cases since the previous RT update on 18 July 2018. The number of reported cases in 2018 is noticeably lower than for the same time period in 2016 and 2017.

<u>Colombia:</u> In 2018, as of 15 July, Colombia has reported 394 chikungunya cases. Among these cases, 64 are laboratory confirmed cases and 15 remain suspected cases.

<u>Costa Rica:</u> In 2018, as of 15 July, Costa Rica has reported 238 suspected chikungunya cases. This represents an increase of 175 suspected cases since the previous RT update on 18 July 2018.

<u>El Salvador</u>: In 2018, as of 12 August, El Salvador has reported 222 suspected cases. This represents an increase of 51 suspected cases since the previous RT update on 18 July 2018. For the same period in 2017, El Salvador reported 392 suspected cases.

Mexico: In 2018, as of 12 August, Mexico has reported 18 confirmed chikungunya cases, seven more cases since the previous RT update on 18 July 2018. For the same period in 2017, Mexico reported 22 confirmed cases.

<u>Nicaragua</u>: In 2018, as of 5 August, Nicaragua has reported 184 suspected cases. Additionally, 24 cases were confirmed for the same time period in Nicaragua. This represents an increase of 88 suspected cases since the previous RT update. For the same period in 2017, Nicaragua reported 16 confirmed cases.

<u>Panama</u>: In 2018, as of 30 June, Panama had reported six confirmed cases. This represents an increase of four confirmed cases since the previous RT update. For the same period in 2017, Panama reported 23 confirmed cases.

<u>Paraguay</u>: In 2018, as of 5 August, Paraguay has reported 1 159 probable chikungunya cases. Additionally, Paraguay is reporting 67 cases as confirmed cases in the regions of Central, Amambay, Guaira and Paraguari. This represents an increase of 11 probable cases and the confirmation of six additional cases since the previous RT update on 18 July 2018.

#### **Dengue**

In 2018 and as of 18 August 2018, PAHO has reported 318 000 suspected and confirmed dengue cases in the whole Americas region. This is an increase of 40 000 cases since the last ECDC update on 20 July. Brazil accounts for more than half of the cases (181 800), followed by Paraguay (28 400), Nicaragua (25 680), Mexico (21 590) and Colombia (21 530). Compared to last year's figures, the trend in Brazil is the same, whereas Paraguay and Mexico have recorded a 3-fold increase in the number of cases. The figures for each country of the Americas region can be found on the WHO Health information platform.

#### Asia

#### Chikungunya:

<u>India</u>: In 2018, as of 22 July, India has reported 16 027 suspected chikungunya cases. Additionally, 2 298 chikungunya cases are confirmed. This represents an increase of 666 confirmed cases and 3 238 suspected cases since the previous RT update on 18 July 2018.

<u>Philippines</u>: According to media quoting health authorities, a new outbreak of chikungunya has been reported in Maripipi island, in Biliran province. As of 2 August 2018, 101 cases had been reported.

<u>Thailand</u>: In 2018, as of 10 August, Thailand had reported 201 cases from five provinces in the south of the country. The provinces affected are Satun, Narathiwat, Songkla, Suratthani and Phuket. This represents an increase of 153 cases, since the previous RT update on 18 July 2018.

#### Dengue:

In Asia, Thailand, Cambodia and Bangladesh have reported an increasing trend compared to last year:

According to the Ministry of Health, <u>Thailand</u> has reported 28 140 cases, as of 13 August. This represents an increase of 10 000 cases since the previous CDTR update.

As of 10 July 2018, <u>Cambodia</u> has reported 2 957 suspected dengue cases. The number of reported cases continues to increase compared to the previous weeks, following a seasonal trend. The peak of the season is usually observed in mid-August.

As of 29 July, media has reported approximately 1 000 cases in Dhaka, the capital of Bangladesh.

The following countries have reported a decreasing trend compared to the same period in 2017:

As of 22 July, <u>India</u> has officially reported 14 233 cases since the beginning of the year, mainly from Kerala.

In 2018, as of 7 July 2018, Lao PDR has reported 2 064 dengue cases, compared to 4 000 cases for the same period in 2017.

Malaysia had reported 46 568 cases of dengue as of 19 August 2018, compared to 59 521 for the same time period in 2017.

According to the Ministry of Health and as of 20 August 2018, <u>Sri Lanka</u> had reported 35 580 cases of dengue, compared to 105 000 cases for the same time period in 2017.

According to WHO, <u>Vietnam</u> had reported 19 938 cases as of 7 July 2018, compared to 50 000 cases recorded for the same period in 2017.

As of 4 August 2018, Myanmar had reported 11 750 cases, compared to 15 000 cases in August 2017.

According to national authorities, <u>Singapore</u> had reported 1 688 cases, as of 11 August. The numbers are in line with those reported in 2017 for the same time period.

#### **Africa**

#### Chikungunya:

Kenya: No update has been provided since the previous RT report on 18 July.

#### Dengue:

There are no updates regarding Tanzania and Ethiopia.

In 2018 and as of 12 August 2018, <u>Réunion</u> had reported 6 476 autochthonous cases of dengue on the island, an increase of 506 cases since ECDC's last monthly update. Cases have started to decrease over the past three weeks, reaching approximately 30 cases per week. The most affected areas remain the western part of the island. The circulating serotype is DENV-2.

#### Australia and the Pacific

Chikungunya: No outbreaks are reported.

#### **Dengue**

In 2018 and as of 19 July 2018, according to WHO, <u>Australia</u> has reported 415 cases of dengue. The number of cases is lower than during the same period in previous years (2013-2017).

According to WHO, New Caledonia has reported 1 712 confirmed dengue cases in 2018 as of 11 July.

According to the Pacific Public Health Surveillance Network and <u>local health authorities</u>, there are DENV-1 outbreaks or active circulation in <u>Wallis and Futuna</u> (188 cases), Tahiti, Bora Bora, Raiatea, Moorea, and Hao. DENV-2 is circulating in American Samoa, Kiribati and Tonga.

#### **ECDC** assessment

Chikungunya and dengue are endemic in large regions of the intertropical zone. Introduction in areas with competent vectors via viraemic travellers is possible. Environmental conditions in Europe are now favourable for the growth of mosquito populations and could lead to a high vector abundance.

ECDC published a <u>rapid risk assessment</u> on chikungunya in France on 23 August 2017, a <u>rapid risk assessment</u> on chikungunya in Italy on 9 October 2017 and a <u>rapid risk assessment</u> on the dengue outbreak in Reunion on 7 July 2018.

#### **Actions**

ECDC monitors these threats through epidemic intelligence and reports on a monthly basis.

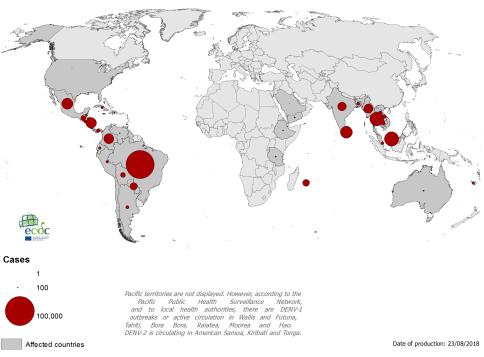
Geographical distribution of Chikungunya cases detected worldwide in the past three months, as of 23 August 2018

**ECDC** 



Geographical distribution of dengue cases detected worldwide in the past three months, as of 23 August 2018

ECDC



# Cholera - Multistate (World) - Monitoring global outbreaks

Opening date: 20 April 2006 Latest update: 24 August 2018

### **Epidemiological summary**

#### **Americas**

<u>Dominican Republic:</u> In 2018 and as of 28 July, the Dominican Republic has reported 41 cholera cases and no fatalities. This represents an increase of 23 cases since the previous CDTR update on 20 July 2018. During the same period in 2017, the Dominican Republic reported 96 cholera cases.

<u>Haiti:</u> In 2018 and as of 11 August, Haiti reported 2 956 cases including 34 deaths (CFR: 1.2%). This represents an increase of 228 cases and six deaths since the previous CDTR update on 20 July 2018. In 2017, Haiti reported 13 681 cholera cases including 159 deaths (CFR: 1.2%). Since the beginning of the outbreak in 2010 and as of 11 August 2018, Haiti has reported 818 956 suspected cholera cases including 9 782 deaths (CFR: 1.2%).

#### Africa

<u>Cameroon:</u> As of 13 August 2018, Cameroon has reported 168 cholera cases including 12 deaths (CFR: 7.1%) since the beginning of the outbreak in May 2018. Although suspected cases have been reported nationwide, only north and central regions of Cameroon have reported confirmed cases. This represents an increase of 130 cases and eight deaths since the previous CDTR update on 20 July 2018.

<u>DR Congo:</u> Since January 2017 and as of 5 August 2018, DR Congo has reported 77 542 suspected cholera cases, including 1 885 deaths (CFR: 2.4%). This represents an increase of 2 633 cases and 219 deaths since the previous CDTR report on 20 July 2018.

Ethiopia: Since January 2017 and as of 29 July 2018, Ethiopia has reported 50 048 acute watery diarrhoea (AWD) cases, including 898 deaths (CFR: 1.8%). This represents an increase of 192 cases since the previous CDTR update on 20 July 2018.

<u>Kenya:</u> As of 13 August 2018 and since January 2017, Kenya has reported 9 825 cases. This represents an increase of 185 cholera cases since the previous CDTR update on 19 July 2018. In 2018 alone, 78 deaths related to this outbreak have been reported.

<u>Malawi:</u> On July 2018, WHO declared the end of the cholera outbreak in Malawi. Since the beginning of the outbreak on June 2018, nine cases including two deaths (CFR: 22.2%) were reported.

<u>Mozambique:</u> On July 2018, WHO declared the end of the cholera outbreak in Mozambique. Since the beginning of the outbreak on August 2017, 2 397 cases including five deaths (CFR: 0.2%) were reported.

Niger: As of 15 August, Niger has reported 1 489 cases and suspected cases including 26 deaths (CRF: 1.8%) since the beginning of the outbreak on 5 July 2018. This represents an increase of 1 466 cases and 25 deaths since the previous CDTR update on 20 July 2018. The outbreak is localised in two health districts, Madarounfa and Maradi, both bordering Nigeria.

<u>Nigeria:</u> In 2018 and as of 5 August, Nigeria has reported 19 961 suspected cholera cases including 293 deaths (CFR: 1.5%). This represents an increase of 5 963 cases and 153 deaths since the previous CDTR update on 20 July 2018. The outbreak has spread in different areas, affecting eighteen states including the Federal Capital Territory. According to WHO, there has been a decline in the overall national trend of the cholera outbreak since the peak in week 21.

<u>Somalia:</u> In 2018, as of 16 August, WHO is reporting 6 130 suspected cholera cases including 41 deaths (CFR: 0.7%) since December 2017. This represents an increase of 548 cases and one death since the previous CDTR update on 20 July 2018. According to WHO, there has been a declining trend for the past four weeks and cases are localised in Banadir and Lower Jubba regions.

Tanzania: In 2018, as of 5 August, Tanzania has reported 3 422 cholera cases including 66 deaths (CFR: 1.9%). This is an increase of 429 cases and seven deaths since the previous CDTR update on 20 July 2018. The last case reported in Zanzibar was on 11 July 2017.

<u>Uganda:</u> As of 24 July and since the beginning of the outbreak on April 2018, 263 cases including nine deaths (CFR: 3.4%) have been reported. Four districts, including Kampala, Kween, Mbale and Bulambuli have been reporting cases. This is an increase of 171 cases and eight deaths since the previous CDTR update on 20 July 2018.

#### Asia

India: According to media sources, as of 1 August 2018, 24 additional cholera cases have been reported in Mumbai (6) and Hoshiarpur (18).

<u>Malaysia:</u> According to a media source quoting health authorities, 42 cholera cases have been reported during 2018 in Sabah region, on the island of Borneo.

Yemen: Since the beginning of the outbreak in October 2016 and as of 18 August 2018, Yemen has reported 1 144 024 suspected cholera cases and 2 376 deaths (CFR: 0.2%). This represents an increase of 28 644 cases and 66 deaths since the last CDTR update on 20 July 2018. Some of the most affected governorates are: Amanat Al Asima, Al Hudaydah, Hajjah, Amran and Dhamar.

#### **ECDC** assessment

There has been an unusual increase in the number of cholera cases in Nigeria, the Horn of Africa and Gulf of Aden over the past few months. Despite the number of cholera outbreaks reported worldwide, very few cases are reported each year among returning EU/EEA travellers.

According to WHO, vaccination should be considered for travellers at higher risk, such as emergency/relief workers who are likely to be directly exposed. Vaccination is generally not recommended for other travellers.

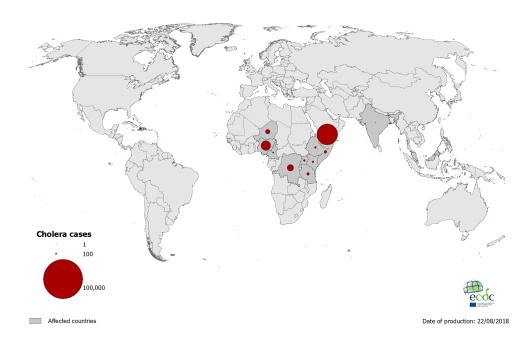
Travellers to cholera-endemic areas should seek advice from travel health clinics to assess their personal risk and apply precautionary sanitary and hygiene measures to prevent infection. These can include drinking bottled water or water treated with chlorine, carefully washing fruit and vegetables with bottled or chlorinated water before consumption, regularly washing their hands with soap, eating thoroughly cooked food and avoiding consumption of raw seafood products.

#### **Actions**

ECDC monitors cholera outbreaks globally through its epidemic intelligence activities in order to identify significant changes in epidemiology and inform public health authorities. Reports are published on a monthly basis.

# Geographical distribution of new cholera cases reported worldwide between July to August 2018

**ECDC** 



# Geographical distribution of cholera cases worldwide between January to August 2018

**ECDC** 



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