



#### COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 33, 10-16 August 2014

All users

This weekly bulletin provides updates on threats monitored by ECDC.

# I. Executive summary EU Threats

# West Nile virus - Multistate (Europe) - Monitoring season 2014

Opening date: 3 June 2014

Latest update: 14 August 2014

West Nile fever (WNF) is a mosquito-borne disease which causes severe neurological symptoms in a small proportion of infected people. During the June to November transmission season, ECDC monitors the situation in EU Member States and neighbouring countries in order to inform blood safety authorities regarding WNF-affected areas and identify significant changes in the epidemiology of the disease.

→Update of the week

This week, one case from Greece and two from Israel have been reported. The case in Greece is the first case of WNF in the EU detected in 2014.

## Non EU Threats

## **Outbreak of Ebola Virus Disease - West Africa - 2014**

Opening date: 22 March 2014 Latest update: 14 August 2014

An outbreak of Ebola virus disease (EVD) is ongoing in West Africa since December 2013 affecting Guinea, Liberia, Sierra Leone and, more recently, Nigeria. Since April 2014, there has been a new wave of transmission in all three affected countries, and the outbreak continues to evolve at an alarming pace. This is the largest ever documented outbreak of EVD, unprecedented in both the number of cases and deaths. It is also the largest outbreak in terms of geographical spread.

#### →Update of the week

Since the last CDTR on 7 August 2014, the four affected countries have reported 264 additional cases (15 in Guinea, 154 in Liberia, 92 in Sierra Leone and three in Nigeria) including 137 new fatalities.

On 8 August 2014, the outbreak was declared a <u>public health emergency of international concern (PHEIC)</u> by the World Health Organization.

On 11 August 2014, the WHO panel reached consensus that, in the circumstances of this outbreak, it is ethical to offer unproven interventions with as yet unknown efficacy and adverse effects, as potential treatment or prevention.

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

Opening date: 24 September 2012 Latest update: 14 August 2014

Since April 2012, 855 cases of MERS-CoV infection have been reported by local health authorities worldwide, including 332 deaths. To date, all cases have either occurred in the Middle East, have direct links to a primary case infected in the Middle East, or have returned from this area. The source of the virus remains unknown but the pattern of transmission points towards an animal reservoir in the Middle East from which humans sporadically become infected through zoonotic transmission.

→Update of the week

Since the last CDTR, health authorities in Saudi Arabia have reported two new cases and one death in a previously reported case.

## Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 14 August 2014

Dengue fever is one of the most prevalent vector-borne diseases, affecting an estimated 50 to 100 million people each year, mainly in the tropical regions of the world. The identification of sporadic autochthonous cases in non-endemic areas in recent years has already highlighted the risk of locally acquired cases occurring in EU countries where the competent vectors are present. The dengue outbreak in the Autonomous Region of Madeira, Portugal, in October 2012 further underlines the importance of surveillance and vector control in other European countries.

→Update of the week

During 2014, no autochthonous dengue cases have been reported in Europe.

## Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 14 August 2014

An outbreak of chikungunya virus infection has been ongoing in the Caribbean since December 2013. The outbreak has spread to North, Central and South America. There have been more than 580 000 probable and confirmed cases in the region, including 34 fatalities so far. Several EU countries are reporting imported cases from the affected areas.

→Undate of the week

Compared to last week, the number of reported cases of chikungunya infections has risen by 12% in the affected areas. The Dominican Republic saw the highest increase, with more then 60 000 new cases reported. The overall death toll is 34.

# Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 14 August 2014

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission stops and the world is polio-free. According to the World Health Organization (WHO), polio transmission currently occurs in ten countries worldwide. Polio was declared a public health emergency of international concern (PHEIC) on 5 May 2014.

→Update of the week

During the past week, four new infections with wild poliovirus 1 (WPV1) have been reported, all in Pakistan.

# II. Detailed reports

# West Nile virus - Multistate (Europe) - Monitoring season 2014

Opening date: 3 June 2014 Latest update: 14 August 2014

## **Epidemiological summary**

On 13 August, Greece reported its first case of West Nile fever since the start of the 2014 season. The case is an 85-year-old man, resident of East Attica. The case has no travel history.

On 10 August, Israel reported two cases of WNF. The patients, one confirmed from Netanya and one probable from Tel Aviv, were diagnosed in July.

#### Summary:

As of 14 August and since the beginning of the 2014 transmission season, one case of WNF has been reported in the EU (Greek case). Twenty-seven cases have been reported from neighbouring countries: 13 cases from Bosnia and Herzegovina, five cases from Serbia, seven cases from Russia and two cases from Israel.

Web sources: ECDC West Nile fever | ECDC West Nile fever risk assessment tool | West Nile fever maps |

#### **ECDC** assessment

West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures is considered important for ensuring blood safety by the national health authorities when human cases of West Nile fever occur. According to the <a href="EU blood directive">EU blood directive</a>, efforts should be made to defer blood donations from affected areas with ongoing virus transmission.

#### **Actions**

Since week 23, ECDC has been producing weekly West Nile fever (WNF) risk maps during the transmission season to inform blood safety authorities regarding WNF affected areas.





## Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014 Latest update: 14 August 2014

# Epidemiological summary

The following distribution and classification of cases (as of 11 August 2014) is based on the best available information reported by ministries of health through the World Health Organization's Regional Office for Africa:

As of 11 August 2014, the cumulative number of cases in the four countries stands at 1 975, including 1 069 deaths. Distribution is as follows:

- Guinea, 510 cases (369 confirmed, 133 probable, and 8 suspected), including 377 deaths;
- Liberia, 670 cases (166 confirmed, 358 probable, and 146 suspected), including 355 deaths;
- Nigeria, 12 cases (10 confirmed, 2 suspected), including 3 deaths; and
- Sierra Leone, 783 cases (706 confirmed, 38 probable, and 39 suspected), including 334 deaths.

On 14 August, <u>WHO</u> stated that: "Staff at the outbreak sites see evidence that the numbers of reported cases and deaths vastly underestimate the magnitude of the outbreak."

A Spanish citizen working in a catholic hospital in Monrovia (Liberia) was evacuated to <u>Spain</u> on 6 August. He died on 12 August 2014.

Worldwide, more than thirty countries (including USA, Canada, France, Germany, Austria, Spain and Greece) have issued guidance to avoid unnecessary travel to the affected countries.

**Web sources**: WHO/AFRO outbreak news | WHO Ebola Factsheet | ECDC Ebola health topic page | ECDC Ebola and Marburg fact sheet | Risk assessment guidelines for diseases transmitted on aircraft | EID "Undiagnosed Acute Viral Febrile Illnesses, Sierra Leone" |

### **ECDC** assessment

This is the largest outbreak of EVD reported so far and also the first documented outbreak of EVD in West Africa. The origin of the outbreak is unknown. The outbreak, after an apparent slowdown, has intensified again in the last few weeks, with an upsurge

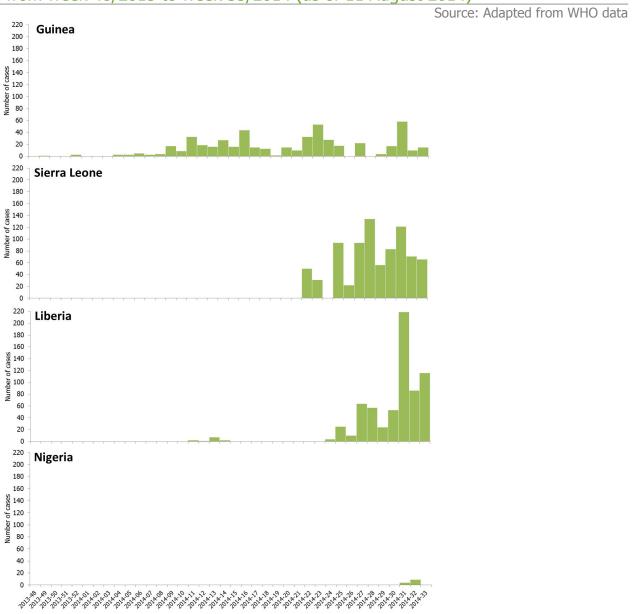
of EVD cases. Community resistance, inadequate treatment facilities and insufficient human resources in certain affected areas are among the challenges currently faced by the three countries in responding to the EVD outbreak.

Transmission requires direct contact with blood, secretions, organs or other bodily fluids of dead or living infected persons or animals. Therefore the risk of infection is still considered very low if precautions are strictly followed. However, the increase in the number of new EVD cases in recent weeks, the urban transmission, and the fact that not all chains of transmission are known, is increasing the likelihood of visitors and travellers coming into contact with infected/ill persons. The risk of exposure in healthcare facilities for EU residents and visitors to the affected areas is related to the implementation of effective infection transmission control measures in these settings and the nature of the care required. Recent reports of transmission to healthcare workers in different healthcare settings indicate that effective infection control measures are not being thoroughly implemented across healthcare facilities in the region.

#### **Actions**

ECDC published an update of its rapid risk assessment on 1 August 2014.

# Distribution of the EVD cases by week of reporting in Guinea, Sierra Leone, Liberia and Nigeria from week 48/2013 to week 33/2014 (as of 11 August 2014)



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

Opening date: 24 September 2012 Latest update: 14 August 2014

# **Epidemiological summary**

Since April 2012, and as of 14 August 2014, 855 cases of MERS-CoV have been reported by local health authorities worldwide, including 332 deaths.

#### Confirmed cases and deaths by region Middle East

Saudi Arabia: 723 cases/299 deaths United Arab Emirates: 73 cases/9 deaths

Qatar: 7 cases/4 deaths Jordan: 18 cases/5 deaths Oman: 2 cases/2 deaths Kuwait: 3 cases/1 death

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Egypt: 1 case/0 deaths Yemen: 1 case/1 death Lebanon: 1 case/0 deaths Iran: 5 cases/2 deaths

#### **Europe**

UK: 4 cases/3 deaths Germany: 2 cases/1 death France: 2 cases/1 death Italy: 1 case/0 deaths Greece: 1 case/1 death Netherlands: 2 cases/0 deaths

**Africa** 

Tunisia: 3 cases/1 death Algeria: 2 cases/1 death

Asia

Malaysia: 1 case/1 death Philippines: 1 case/0 deaths

**Americas** 

United States of America: 2 cases/0 deaths

Web sources: ECDC's latest rapid risk assessment | ECDC novel coronavirus webpage | WHO | WHO MERS updates | WHO travel health update | WHO Euro MERS updates | CDC MERS | Saudi Arabia MoH

#### **ECDC** assessment

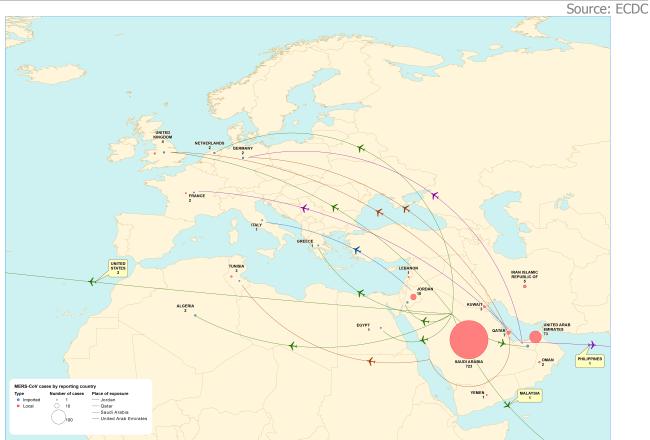
The source of MERS-CoV infection and the mode of transmission have not been identified. Dromedary camels are a host species for the virus, and many of the primary cases in clusters have reported direct or indirect camel exposure. Almost all of the recently reported secondary cases, many of whom are asymptomatic or have only mild symptoms, have been acquired in healthcare settings. There is therefore a continued risk of cases presenting in Europe following exposure in the Middle East, and international surveillance for MERS-CoV cases is essential.

The risk of secondary transmission in the EU remains low and can be reduced further through screening for exposure among patients presenting with respiratory symptoms (and their contacts) and strict implementation of infection prevention and control measures for patients under investigation.

#### **Actions**

ECDC published an <u>epidemiological update</u> on 2 July 2014.
The last <u>rapid risk assessment</u> was published on 2 June 2014.
ECDC is closely monitoring the situation in collaboration with WHO and EU Member States.

# Distribution of confirmed cases of MERS-CoV by reporting country and place of probable infection, March 2012 - 14 August 2014 (n=855)



# Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 14 August 2014

# Epidemiological summary

**EUROPE**: No autochthonous cases have been reported so far in 2014

**ASIA**: According to WHO, in Cambodia, 1 520 cases and 11 deaths have been reported, a decrease compared to the same period in previous years. In the Philippines, 35 264 and 134 deaths have been reported so far in 2014, which is also a decrease compared to the same period in 2013. In Malaysia 53 246 cases and 147 deaths have been reported so far this year. In Singapore, 12 257 cases and four deaths have been reported so far this year. Laos and Vietnam are experiencing a lower number of cases compared to this time in previous years. Taiwan reports cases in the southern region. According to media in Myanmar more than 1 200 people, the majority of them children, have been hospitalised with severe dengue fever in Yangon during the past six months. Twelve of the cases have died.

**PACIFIC**: There is ongoing transmission of dengue in the <u>Pacific</u> including Fiji, French Polynesia, Nauru, New Caledonia, Queensland (Australia), Solomon Islands, Tonga, Tuvalu, Vanuatu.

**AMERICAS**: Cuban <u>media</u> report that 1 200 cases have been notified in the last two months in Camagüey and more than 600 cases in Isla de la Juventud. In <u>Mexico</u>, according to media, 265 cases have been reported in the State of Baja California Sur, this is an increase of 83% compared to the same period in 2013. In <u>Brazil</u>, Ceará reported more than 10 000 cases this year, a decrease compared to the same period last year.

Web sources: ECDC Dengue | Healthmap Dengue | MedISys | ProMED America, Asia, Pacific |

#### **ECDC** assessment

ECDC monitors individual outbreaks, seasonal transmission patterns and inter-annual epidemic cycles of dengue through epidemic intelligence activities in order to identify significant changes in disease epidemiology. Of particular concern is the potential for the establishment of dengue transmission in Europe. Before the 2012 outbreak in the Autonomous Region of Madeira, local transmission of dengue was reported for the first time in France and Croatia in 2010. Imported cases continue to be detected in European countries, highlighting the risk of locally acquired cases occurring in countries where the competent vectors are present.

#### **Actions**

ECDC has published a technical <u>report</u> on the climatic suitability for dengue transmission in continental Europe and <u>guidance for invasive mosquitoes' surveillance</u>.

Since week 28/2013, ECDC has been monitoring dengue on a bi-weekly basis.

# Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 14 August 2014

## **Epidemiological summary**

Several EU/EFTA countries have reported imported cases of chikungunya infection in patients with travel history to the affected areas: France, Greece, Italy, the Netherlands, Spain and Switzerland.

Web sources: PAHO update | ECDC Chikungunya | CDC Factsheet | Medisys page | CARPHA interactive chikungunya map

#### **ECDC** assessment

Epidemiological data indicate that the outbreak, which started in Saint Martin (FR), is still expanding and has reached Central and South America. Increasing case numbers have been observed from most of the affected areas. The vector is endemic in the region, where it also transmits dengue virus. Further spread of the outbreak is to be expected.

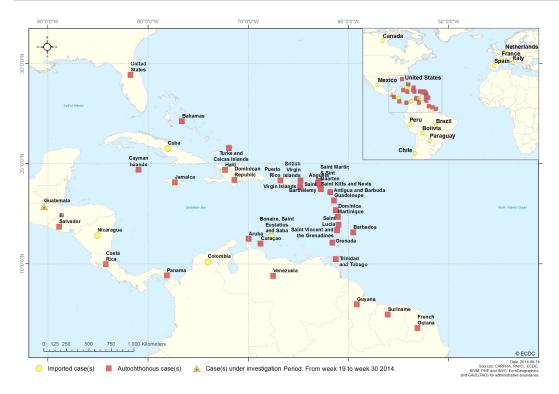
Vigilance is recommended for the occurrence of imported cases of chikungunya in tourists returning to the EU from the Caribbean, including awareness among clinicians, travel clinics and blood safety authorities.

#### **Actions**

ECDC updated its Rapid Risk Assessment and published it on the website on 27 June 2014.

# Chikungunya in the Caribbean as of 14 August 2014

Source: ECDC



# Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 14 August 2014

# Epidemiological summary

During the past week, four new infections with wild poliovirus 1 (WPV1) have been reported, all from Pakistan.

Worldwide, 139 cases have been reported to WHO so far in 2014, compared with 181 for the same time period in 2013. In 2014, nine countries have reported cases: Pakistan (108 cases), Afghanistan (8 cases), Equatorial Guinea (5 cases), Nigeria (5 cases), Somalia (4 cases), Cameroon (5 cases), Iraq (2 cases), Syria (1 case), and Ethiopia (1 case).

Equatorial Guinea has been added to the list of 'virus-exporting countries' which should now implement a set of Temporary Recommendations recently issued by the Director-General of the World Health Organization under the International Health Regulations (2005). These recommendations call for the vaccination of all residents and long-term visitors prior to international travel. The addition of Equatorial Guinea to the list follows the detection of wild poliovirus genetically linked to the current outbreak in Cameroon in a sewage sample collected near Sao Paulo, Brazil.

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet

## **ECDC** assessment

Europe is polio-free. The last polio cases within the current EU borders were reported from Bulgaria in 2001. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

Genetic sequencing indicated that the five cases reported in 2014 from Equatorial Guinea are linked to the ongoing outbreak in Cameroon. A national emergency action plan to respond to the polio outbreak has been developed by the Ministry of Health in Equatorial Guinea and polio partner agencies and is now being implemented.

The recent importation to Brazil from Equatorial Guinea demonstrates that all regions of the world continue to be at risk of exposure to wild poliovirus until polio eradication is completed globally.

The confirmed circulation of WPV in several countries and the documented exportation of WPV to other countries support the fact that there is a potential risk for WPV being re-introduced into the EU/EEA. The highest risk of large poliomyelitis outbreaks occurs in areas with clusters of unvaccinated populations, people living in poor sanitary conditions, or a combination of the two.

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**References**: ECDC latest RRA | Rapid Risk Assessment on suspected polio cases in Syria and the risk to the EU/EEA | Wild-type poliovirus 1 transmission in Israel - what is the risk to the EU/EEA? | WHO statement on the meeting of the International Health Regulations Emergency Committee concerning the international spread of wild poliovirus, 5 May 2014

### **Actions**

ECDC follows 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 re-introduced into the EU.

Following the declaration of polio as a PHEIC, ECDC updated its <u>risk assessment</u>. ECDC has also prepared a background document of travel recommendations for the EU.

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