



COMMUNICABLE DISEASE THREATS REPORT

# CDTR Week 41, 5-11 October 2014

All users

This weekly bulletin provides updates on threats monitored by ECDC.

# I. Executive summary EU Threats

# New! Influenza - Multistate (Europe) - Monitoring 2014-2015 season

Opening date: 9 October 2014 Latest update: 9 October 2014

Following the 2009 pandemic, influenza transmission in Europe has returned to its seasonal epidemic pattern, with peak activity during winter months. ECDC monitors influenza activity in Europe during the winter season and publishes the results on its website in the weekly Flu News Europe.

→Update of the week
During week 40 in 2014, all 31 reporting countries reported low-intensity influenza activity.

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

Opening date: 3 June 2014

Latest update: 9 October 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 of WNF-affected areas and identify significant changes in the epidemiology of the disease.

→ Update of the week

During the past week, Italy reported one new confirmed case from the previously affected province of Mantova. In neighbouring countries, Serbia reported 11 new cases in the following areas: City of Belgrade (6), Juzno-banatski district (4) and the newly affected Sumadijski district (1).

## Chikungunya outbreak - The Americas, 2013-2014

Opening date: 9 December 2013

Latest update: 2 October 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 750 000 probable and confirmed cases in the region, including 118 fatalities. The number of cases are likely to be underreported due to undertesting. Several EU countries are reporting imported cases from the affected areas.

#### →Update of the week

Compared with last week, the number of reported cases of chikungunya infections has risen in most of the affected areas. The Ministry of Health of Guatemala reports an increase in autochthonous cases. In addition Equador reports the first case of chikungunya in the country. From now onwards this threat will be monitored by ECDC on a monthly basis.

# **Non EU Threats**

### **New!** Outbreak of Marburg fever – Uganda

Opening date: 6 October 2014 Latest update: 9 October 2014

On 5 October, the Ministry of Health in Uganda, reported an outbreak of Marburg fever following the death of a healthcare worker.

## Ebola Virus Disease Epidemic - West Africa - 2014

Opening date: 22 March 2014

Latest update: 9 October 2014

An epidemic of Ebola virus disease (EVD) is ongoing in West Africa since December 2013, affecting Guinea, Liberia, Sierra Leone and Nigeria. The situation in the affected countries remains critical. The increasing number of healthcare workers that have been infected by the Ebola virus is a major cause for concern. On 8 August 2014, WHO declared the Ebola epidemic in West Africa a Public Health Emergency of International Concern (PHEIC). In recent weeks, the number of medical evacuations to the EU of healthcare workers infected with the disease or having been exposed has increased.

#### →Update of the week

Since the last CDTR on 3 October, the affected countries have reported 854 additional cases and 527 additional fatalities. On 6 October 2014, Spanish authorities reported a confirmed case of EVD in a healthcare worker who cared for a Spanish patient repatriated from Sierra Leone to Spain with Ebola infection. This is the first transmission of Ebola infection in the European Union.

## **Ebola Virus Disease Outbreak - the Democratic Republic of Congo - 2014**

Opening date: 26 August 2014

Latest update: 9 October 2014

On 24 August 2014, an outbreak of Ebola virus disease (EVD) was declared in the Boende health zone of Equateur province in the Democratic Republic of Congo. This outbreak is the seventh outbreak of EVD in the country.

#### →Update of the week

One new case has been reported in the previously affected areas during the past week. According to <u>OCHA</u>, as of 07 September 2014, there have been 71 cases (30 confirmed, 26 probable, 15 suspected) of Ebola virus disease (EVD) reported in the Democratic Republic of the Congo, including 43 deaths. Eight deaths have been reported among healthcare workers.

#### **Outbreak of Enterovirus D68 - USA**

Opening date: 10 September 2014

Latest update: 9 October 2014

Since mid-August 2014, local health authorities in more than 40 states in the U.S. have notified the Centers for Disease Control and Prevention (CDC) of 664 laboratory-confirmed Enterovirus D68 (EV-D68) infections. Canada has also experienced an increase in severe respiratory illness associated with EV-D68 cases during the same time. All patients presented with respiratory symptoms and several, particularly those with pre-existing asthma, were admitted to paediatric intensive care units. Health authorities are also investigating reports of paralysis or muscle weakness and other polio-like symptoms in a small number of children, some of whom tested positive for EV-D68 in both the U.S. and Canada. It is not yet clear whether EV-D68 is associated with paralysis in these children.

#### →Update of the week

Since the last CDTR on 03 October 2014, the <u>US CDC</u> has reported an additional 164 confirmed cases of EV-D68 from 45 states in the United States.

Canada has also experienced an increase in severe respiratory illness associated with EV-D68 cases during the same time and as of 2 October 2014, 75 cases of EV-D68 has been confirmed. Following two scientific reports of clusters of neurological illness including acute flaccid paralsysis cases (AFP), media in USA and Canada are now reporting of several small clusters of neurologic illness potentially associated with EV-D68.

# Influenza A(H5N1) - Multistate (world) - Monitoring human cases

Opening date: 15 June 2005

Latest update: 9 October 2014

The influenza A(H5N1) virus, commonly known as bird flu, is fatal in about 60% of human infections. Sporadic cases continue to be reported, usually after contact with sick or dead poultry from certain Asian and African countries. No human cases have been reported from Europe.

#### →Update of the week

Since the last monthly update on 5 September 2014, WHO hasn't acknowledged any new case worldwide.

On 30 September the <u>Ministry of Health in Egypt</u> reported the fourth case this year in Egypt. The case is in a three month old girl from Giza governorate.

#### Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 9 October 2014

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, 453 cases have been reported including 175 deaths. No autochthonous cases have been reported from outside of China. Most cases have been unlinked, and sporadic zoonotic transmission from poultry to humans is the most likely explanation for the outbreak. Sustained person-to-person transmission has not been documented and transmission peaked during the winter of 2013-2014. The reason for this pattern is not obvious. Since October 2013, 318 cases have been reported, the majority from previously affected provinces or in patients who visited these provinces prior to onset of illness.

#### →Update of the week

Since the last update on 19 September 2014, no new cases of A(H7N9) have been reported. The last case was reported to WHO on 2 September 2014 from the Xinjiang Uyghur Autonomous Region.

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

Opening date: 24 September 2012 Latest update: 9 October 2014

Since April 2012, 892 cases of MERS-CoV have been reported by local health authorities worldwide, including 356 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 MERS-CoV update in the CDTR on 03 October 2014, four additional cases of MERS-CoV infection have been reported in <u>Saudi Arabia</u>.

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

Opening date: 20 April 2006

Latest update: 9 October 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 and the recent autochthonous dengue cases in the south of France further underline the importance of surveillance and vector control in other European countries.

#### →Update of the week

On 6 October 2014, France confirmed a new autochthonous case of dengue fever in the district of Bouches-du-Rhône in Aubagne. This is the fourth autochthonous case reported in the Provence-Alpes-Côte-d'Azur region so far this year.

## Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 2 October 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.

Polio was declared a public health emergency of international concern (PHEIC) on 5 May 2014 due to concerns regarding the increased circulation and the international spread of wild poliovirus during 2014.

#### →Update of the week

During the past week, 13 new wild poliovirus 1 (WPV1) cases have been reported in Pakistan.

# **II. Detailed reports**

# New! Influenza - Multistate (Europe) - Monitoring 2014-2015 season

Opening date: 9 October 2014

Latest update: 9 October 2014

# Epidemiological summary

For week 40/2014:

- Low-intensity influenza activity was recorded by 31 reporting countries;
- Of 222 sentinel specimens tested in 17 countries, 2 (1%) were positive for influenza virus.
- Four countries experienced sporadic geographical spread and two countries reported increasing trends;
- Four hospitalised laboratory-confirmed influenza cases were reported, of which two cases from the UK were admitted to an intensive care unit.

Compared with the previous season (2013-2014), influenza activity in the European region is low despite influenza virus detections, particularly in Spain and the UK.

Web sources: Flu News Europe | ECDC Influenza |

#### ECDC assessment

Compared with the previous season (2013-2014), influenza activity in the European region is low despite influenza virus detections, particularly in Spain and the UK.

## Actions

ECDC, together with WHO, will be producing <u>Flu News Europe</u> on a weekly basis.

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

Opening date: 3 June 2014 Latest update: 9 October 2014

# Epidemiological summary

As of 9 October 2014, 69 human cases of West Nile fever have been reported in the EU and 120 cases have been reported in neighbouring countries since the beginning of the 2014 transmission season.

#### **EU Member States**

Italy has reported 20 cases from the following provinces: Bologna (4), Parma (1), Cremona (2), Modena (2), Reggio nell'Emilia (1), Verona (1), Pavia (4), Mantova (2), Lodi (2) and Piacenza (1). Romania has reported 22 cases in the districts of Mures (2), Olt (5), Constanta (1), Ialomita (1), Bucuresti (1), Dambovita (1), Dolj (3), Galati (1), Giurgiu (1), Teleorman (2), Sibiu (1), Braila (1), Iasi (1) and Valcea (1). Hungary has recorded 11 cases in the following areas: Budapest (4), Csongrad county (2), Pest County (1), Jasz-Nagykun-Szolnok county (1), Bekes county (1), Hajdu-Bihar county (1) and Bacs-Kiskun county (1). Austria reported an autochthonous case of West Nile fever in Vienna. In Greece, 15 human cases have been notified since the start of the 2014 transmission season in the following prefectures: Attiki (2), Ileia (6), Rodopi (4) and Xanthi (3).

#### **Neighbouring countries**

Thirteen cases have been reported by Bosnia and Herzegovina, in Republika Srpska, in the following municipalities: Banja Luka (4), Trebinje (1), Novi Grad (1), Kljuc (1), Krupa na Uni (1), Mrkonjic Grad (1), Gornji Ribnik (1), Teslic (1), Laktasi (1) and Prijedor (1). Serbia has reported 69 cases of West Nile fever in the following regions: City of Belgrade (33), Juzno-backi district (5), Nisavski (1), Kolubarski (4), Sremski (6), Juzno-banatski (15), Podunavski (3), Raski (1) and Sumadijski (1). Russia has reported 29 cases in the following oblasts: Saratovskaya (9), Samarskaya (6), Volgogradskaya (5), Astrakhanskaya (3), Belgorodskaya (1), Altayskiy Kray (1), Chelyabinskaya (1) and Voronezhskaya (3). Israel has recorded nine cases of West Nile fever in the following areas: Central district (1), Tel Aviv district (3), Haifa district (2), Jerusalem (1) and Northern district (2).

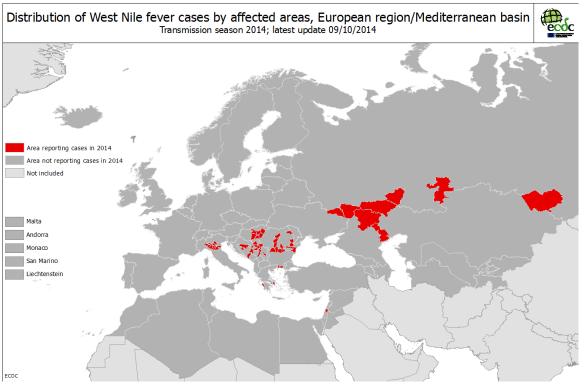
#### Web sources: ECDC West Nile fever | ECDC West Nile fever risk assessment tool | West Nile fever maps | WHO fact sheet

#### 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 <u>EU blood</u> <u>directive</u>, 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.



### Chikungunya outbreak - The Americas, 2013-2014

Opening date: 9 December 2013

Latest update: 2 October 2014

# Epidemiological summary

As of 3 October 2014, more than 750 000 suspected and confirmed cases of chikungunya virus infection have been reported from the affected countries and territories in the Caribbean and the rest of the Americas, including 118 fatalities. For a breakdown of figures, please see the latest <u>WHO PAHO update</u>. The number of cases are likely to be underreported due to undertesting.

Several European countries have reported imported cases of chikungunya infection in patients with a travel history to the affected areas.

#### 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 North, 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

ECDC

Caribbean, including awareness among clinicians, travel clinics and blood safety authorities.

### Actions

ECDC published an updated Rapid Risk Assessment on 27 June 2014.

# New! Outbreak of Marburg fever – Uganda

Opening date: 6 October 2014 Latest update: 9 October 2014

# Epidemiological summary

On 5 October, the Ministry of Health in Uganda reported the death on 30 September of a healthcare worker from Marburg fever in Uganda. The 30-year-old male patient was recently recruited as a radiographer at Mengo hospital. As of today, eight suspected cases are under quarantine and 97 contacts are being followed up (including 16 people from Kampala).

Source : CDC | media | MoH Uganda

#### ECDC assessment

Ugandan authorities have reported several outbreaks since the virus was identified in 1967: in 2007 (4 cases), in 2008 (2 cases) and in 2012 (20 cases including nine deaths). The last outbreak reported in 2012 took place in four districts in Uganda (Kabale, Ibanda, Mbarara, and Kampala). The response to the current outbreak is led by the Ministry of Health, US Centers for Disease Control and Prevention, Médecins Sans Frontières and UNICEF.

# Ebola Virus Disease Epidemic - West Africa - 2014

Opening date: 22 March 2014 Latest update: 9 October 2014

## Epidemiological summary

Since December 2013 and as of 5 October 2014, 8 032 cases of EVD, including 3 865 deaths, have been reported by WHO in their report.

The distribution of EVD cases by affected countries is as follows:

• Guinea: 1298 cases and 768 deaths as of 5 October 2014;

• Liberia: 3924 cases and 2210 deaths as of 4 October 2014;

• Sierra Leone: 2789 cases and 879 deaths as of 5 October 2014;

• Nigeria: 20 cases and 8 deaths, with last confirmed case in Lagos on 5 September 2014 (30 days ago as of 5 October)

and in Rivers State on first September 2014 (34 days ago as of 5 October);

• **Senegal**: 1 case, no deaths, confirmed on 28 August 2014 (38 days ago as of 5 October). All contacts have completed 21 days of follow-up.

As of 5 October 2014, WHO reported 401 health-care workers with EVD, of which 232 have died.

**Spain**: on 6 October, Spanish authorities reported a confirmed case of EVD in a healthcare worker in La Paz-Carlos III hospital in Madrid. She reportedly developed fever in the night of the 29 September. According to the Spanish Ministry of Health, she participated in the medical care of the repatriated patient and was wearing appropriate personal protection equipment. She was admitted to La Paz-Carlos III Hospital on 6 October and is under strict isolation.

The Spanish authorities have initiated contact tracing. As of 9 October, 58 contacts are being monitored, of which five are highrisk contacts. Preliminary results of the investigation point to an incident during the removal of the personal protection equipment (PPE) on 24 September as the mode of transmission.

**United States:** on 30 September, CDC confirmed the first imported case of EVD in United States (Dallas, Texas). The patient did not present with symptoms when leaving West Africa, but developed symptoms four days after arriving in the United States. The patient died on 8 october.

Eight medical evacuations of confirmed EVD cases to Europe have taken place: three in Germany, two in Spain, one in the UK, one in France and one in Norway.

Web sources: ECDC Ebola page | ECDC Ebola and Marburg fact sheet | WHO Ebola Factsheet | Spanish MoH | CDC

#### ECDC assessment

This is the largest ever documented epidemic of EVD in terms of numbers and geographical spread. The epidemic has not yet reached its peak and is currently in a phase of rapid spread.

The evolving outbreak of EVD over the last weeks increases the likelihood that EU residents and travellers to the EVD-affected countries will be exposed to infected or ill persons. The risk of infection for residents and visitors in the affected countries through exposure in the community is considered low if they adhere to the recommended precautions. Residents and visitors to the affected areas run a risk of exposure to EVD in healthcare facilities. The level of this risk is related to how well the infection control measures are being implemented in these settings and the nature of the care required. The risk of being exposed to the Ebola virus is higher for healthcare workers, e.g. volunteers from NGOs who work in settings where appropriate infection control measures have not been implemented. As the outbreak is still evolving and more staff is deployed in the affected countries to support the outbreak control, the risk of importation of EVD cases to the EU is increasing.

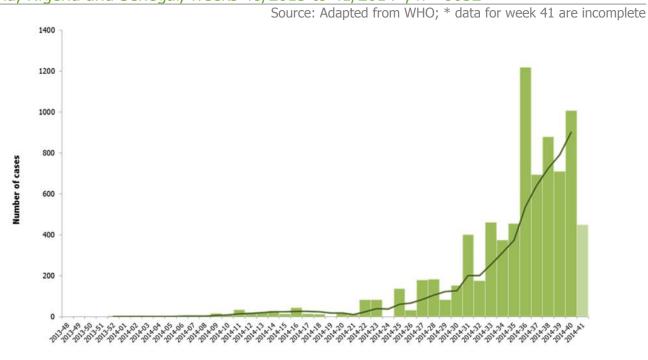
The risk of Ebola viruses spreading from an EVD patient who arrives in the EU as result of a planned medical evacuation is considered extremely low. The transmission to a healthcare worker in Spain illustrates the connection between the outbreak in West-Africa and the risk for the EU and further stresses the need to control the outbreak in West-Africa.

If a symptomatic case of EVD presents in an EU Member State, secondary transmission to caregivers in the family and in healthcare facilities cannot be ruled out. Once the possibility of EVD has been recognised and, healthcare providers have taken precautions to stop transmission, the risk of spread is reduced to a minimum.

#### Actions

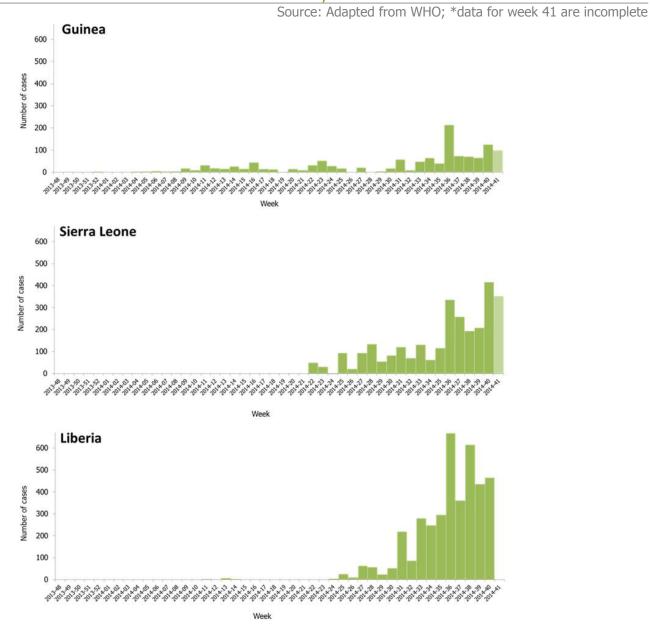
On 30 September, ECDC published an updated <u>rapid risk assessment</u>. On 10 September, ECDC published an EU <u>case definition</u>. An epidemiological update is published weekly on the <u>EVD ECDC page</u>.

# Distribution of reported cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia, Nigeria and Senegal, weeks 48/2013 to 41/2014\*, n= 8032

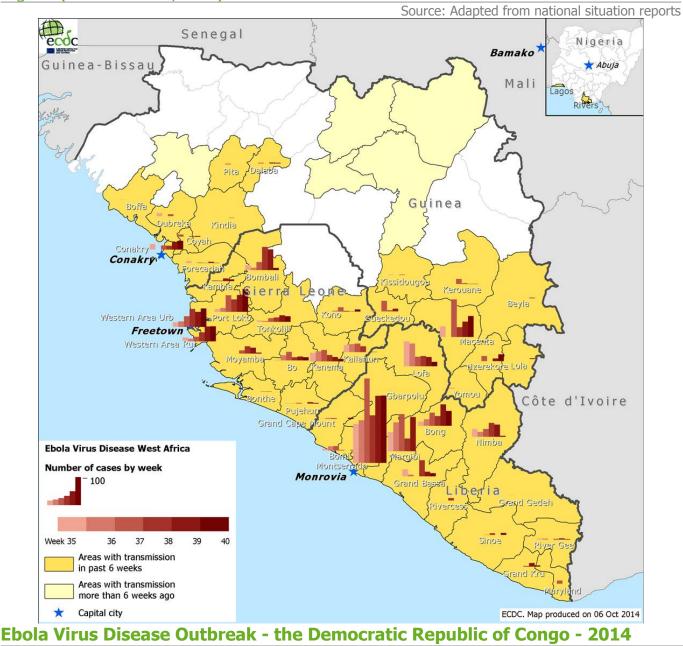


```
Week
```

# Distribution of cases of EVD by week of reporting in the three countries with widespread and intense transmission as of week 41 2014\*, n = 8011



# Distribution of cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia and Nigeria (as of week 40/2014)



Opening date: 26 August 2014

Latest update: 9 October 2014

# Epidemiological summary

On 26 August 2014, the Ministry of Health in the Democratic Republic of the Congo (DRC) notified the World Health Organization Regional Office for Africa (WHO/AFRO) of an outbreak of EVD in Equateur Province. Between 28 July and 7 September 2014, 71 cases (including 43 deaths) were identified. Eight healthcare workers have died. Eight-hundred-and-sixteen contacts (out of 1 121) have completed 21 day follow-up and 305 contacts are still being monitored. The index case was a pregnant woman from Ikanamongo Village who butchered a bush animal given to her by her hunter husband. She fell ill with symptoms of EVD and died on 11 August at a private clinic in Isaka Village.

A team of national and international specialists have been deployed to work with the local response teams. There are two treatment centres in the affected area run by Médecins sans Frontières (MSF): one 10-bed unit in Boende, and one 40-bed unit in Lokolia.

The species causing this outbreak is *Zaïre ebolavirus*. The strain was found to be 99% homologous to Kikwit 1995 strain and therefore different from the *Zaïre ebolavirus* strain circulating in West Africa.

Web Sources: WHO AFRO | ECDC Ebola factsheet | OCHA

#### ECDC assessment

The outbreak in DRC is unrelated to the ongoing outbreak in West Africa.

The epidemiological features of this outbreak are consistent with previous outbreaks of EVD involving *Zaïre ebolavirus*. It is likely that more cases will be identified in the coming weeks, as active case-finding and contact monitoring is in place, and given the duration of up to three weeks of the incubation period. However, control measures currently implemented with the support of international partners are expected to prevent the further spread of the disease.

#### Actions

ECDC is monitoring this event through epidemic intelligence and has published a rapid risk assessment.

# **Outbreak of Enterovirus D68 - USA**

Opening date: 10 September 2014

Latest update: 9 October 2014

#### Epidemiological summary

Hospitals in Missouri and Illinois were the first to document in August 2014 an increase of severe respiratory illness in children that was later identified to be caused predominantly by EV-D68 infection. Almost all the confirmed cases have been among children. Many of the children had asthma or a history of wheezing. As of 8 October 2014, 45 state health departments in the U.S. have reported an increase in respiratory illness in children. This increase can be caused by many different viruses that are common during this time of year. EV-D68 appears to be the predominant type of enterovirus this year and may be contributing to the increases in severe respiratory illnesses.

Canada has also experienced an increase in severe respiratory illness associated with EV-D68 cases during the same time and as of 2 October 2014, 75 cases of EV-D68 has been confirmed. Following two scientific reports of clusters of neurological illness including acute flaccid paralysis cases (AFP), media in USA and Canada are now reporting of several small clusters of neurologic illness potentially associated with EV-D68.

On 3 October 2014, two reports were published by the US CDC on clusters of neurologic illness, including Acute Flaccid Paralysis with possible association with EV-D68:

Between 8 August and 15 September 2014, a cluster of nine children at Childrens Hospital in Colorado developed symptoms of neurological illness characterised by extremity weakness and/or cranial nerve dysfunction. All had a preceding febrile illness 3–16 days prior to onset of neurologic illness.

Between January 2012 and May 2014, 23 cases of AFP, mainly children, with anterior myelitis of unknown etiology were detected by active surveillance in California. EV-D68 was identified in upper respiratory tract specimens of two patients out of twenty-three.

On 30 September the <u>BC Centre for Disease Control in Canada</u> issued a notice through ProMED mail providing details on two confirmed EV-D68 cases in BC with paralytic manifestations, but specified that causality could not be proven. Four paralysis cases are currently being investigated in Alberta and nine in Ontario for connection to EV-D68.

Sporadic cases of EV-D68 have been documented in several EU/EEA countries in recent years. In 2014, EV-D68 was detected in at least four EU/EEA countries but no epidemic clusters of severe disease have been reported. To date, EU/EEA countries have not reported a growing number of acute respiratory infections or an increased number of hospital admissions.

**Web sources**: <u>MMWR</u> | <u>CDC</u> | <u>Kansas Health institute</u> | <u>Illinois Department of Health</u> | <u>CDC Q&A</u> | <u>Public Health Canada</u> | <u>Alberta</u> <u>health services</u>

### ECDC assessment

EV-D68 is a potential cause of respiratory tract infections, mainly among children. It can be found in respiratory secretions such as saliva, nasal mucus or sputum. The virus spreads from person to person when an infected person coughs, sneezes or touches contaminated surfaces. There are no available vaccines or specific treatments for EV-D68 and clinical care is symptomatic treatment.

EV-D68 has rarely been reported outside North America, and the number of cases is likely to be underestimated in the United States and Canada due to the absence of a mandatory surveillance system. This year, the magnitude of the outbreak in the United States exceeds previous years, and the transmission of the virus outside North America, including the EU/EEA, remains a possibility. However, the likelihood for cases to be laboratory-confirmed in EU/EEA countries is low because most countries do not routinely screen for EV-D68, and the disease is not notifiable. EU/EEA countries need to remain vigilant and consider strengthening respiratory sample screening for enteroviruses and enterovirus typing. More systematic testing of severe respiratory illness cases for EV-D68 could be considered in EU/EEA countries to better document the circulation of this virus.

## Actions

ECDC published a <u>rapid risk assessment</u> on 26 September 2014 and is in the process of updating this risk assessment.

# Influenza A(H5N1) - Multistate (world) - Monitoring human cases

Opening date: 15 June 2005

Latest update: 9 October 2014

# Epidemiological summary

From 2003 to 19 September 2014, 667 cases including 393 deaths have been reported from 16 countries to WHO. The last cases were reported on 29 June 2014.

Web sources: ECDC Rapid Risk Assessment | Avian influenza on ECDC website | WHO update | WHO EMRO |

#### ECDC assessment

The risk of secondary cases in Europe is considered to be very low. Europeans travelling to China and south-east Asia should avoid live poultry markets and contact with chickens, ducks, wild birds and their droppings. This reduces the risk of exposure to both A(H5N1) and A(H7N9). Poultry meat and eggs should be well cooked.

Hong Kong reported the world's first outbreak of bird flu among humans in 1997, when six people died. Most human infections are the result of direct contact with infected birds, and countries with large poultry populations in close contact with humans are considered to be most at risk of bird flu outbreaks. There are currently no indications of a significant change in the epidemiology associated with any clade or strain of the A(H5N1) virus from a human health perspective. This assessment is based on the absence of sustained human-to-human transmission, and on the observation that there is no apparent change in the size of clusters or reports of chains of infection. However, vigilance for avian influenza in domestic poultry and wild birds in Europe remains important.

#### Actions

ECDC follows the worldwide A(H5N1) situation through epidemic intelligence activities in order to identify significant changes in the epidemiology of the virus. ECDC re-assesses the potential of a changing risk for A(H5N1) to humans on a regular basis.

ECDC published a <u>rapid risk assessment</u> covering A(H5N1) and other human infections with avian influenza viruses in China on 26 February 2014.

WHO is now reporting H5N1 cases on a monthly basis. ECDC will continue monthly reporting in the CDTR to coincide with WHO reporting.

# Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 9 October 2014

## **Epidemiological summary**

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, human cases have continued to be reported, and as of 4 September 2014, there were 453 laboratory-confirmed cases: Zhejiang (139), Guangdong (109), Jiangsu (56), Shanghai (42), Fujian (22), Hunan (24), Anhui (18), Jiangxi (6),Henan (4), Beijing (4), Guangxi (4), Shandong (4), Hebei (1), Guizhou (1), Jilin (2), Xinjiang Uygur (2), Hong Kong (10), Taiwan (4) and one imported case in Malaysia. The second wave of the outbreak started in October 2013. Since then 318 cases have occurred. The number of reported cases has been declining since April 2014 and only sporadic cases have been reported during the past months.

Most cases have developed severe respiratory disease. One hundred and seventy-five patients have died.

#### Web sources: Chinese CDC | WHO | WHO FAQ page | ECDC |

#### ECDC assessment

This outbreak is caused by a novel reassortant avian influenza virus capable of causing severe disease in humans. Currently, the most likely scenario is that this remains a local, although geographically widespread, zoonotic outbreak, in which the virus is transmitted sporadically to humans in close contact with the animal reservoir, similar to the influenza A(H5N1) situation. It is expected that there may be further sporadic cases of human infection with the virus in affected and possibly neighbouring areas in China. Affected provinces and municipalities continue to maintain surveillance and response activities.

Imported cases of influenza A(H7N9) may be detected in Europe. However, the risk of the disease spreading among humans following an importation to Europe is considered to be very low. People in the EU presenting with severe respiratory infection and a history of potential exposure in the outbreak area will require careful investigation in Europe.

#### Actions

The Chinese health authorities continue to respond to this public health event with enhanced surveillance, epidemiological and laboratory investigation, including scientific research. ECDC is monitoring developments and updates reports on a monthly basis.

ECDC published an updated Rapid Risk Assessment on 26 February 2014.

ECDC published a guidance document <u>Supporting diagnostic preparedness for detection of avian influenza A(H7N9) viruses in</u> <u>Europe</u> for laboratories on 24 April 2013.

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

Opening date: 24 September 2012

Latest update: 9 October 2014

## Epidemiological summary

Since April 2012 and as of 9 October 2014, 892 cases of MERS-CoV have been reported by local health authorities worldwide, including 356 deaths. The distribution is as follows:

#### Confirmed cases and deaths by region:

Middle East Saudi Arabia: 759 cases/323 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 Egypt: 1 case/0 deaths Yemen: 1 case/1 death Lebanon: 1 case/0 deaths Iran: 5 cases/2 death

#### 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 Austria: 1 case/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**: <u>ECDC's latest rapid risk assessment</u> | <u>ECDC novel coronavirus webpage</u> | <u>WHO</u> | <u>WHO MERS updates</u> | <u>WHO</u> <u>travel health update</u> | <u>WHO Euro MERS updates</u> | <u>CDC MERS</u> | <u>Saudi Arabia MoH</u> | <u>ECDC factsheet for professionals</u>

#### 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.

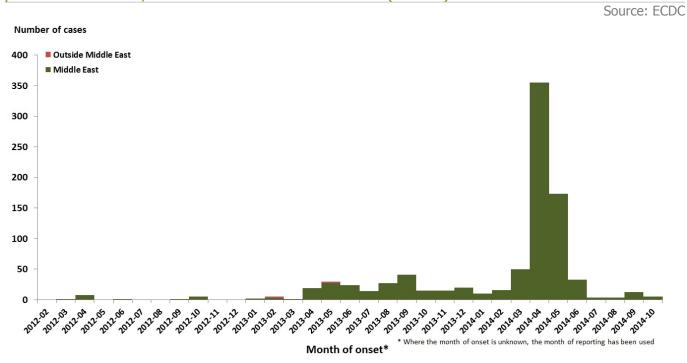
The risk of secondary transmission in the EU remains low and can be reduced further through screening for exposure among patients presenting with respiratory symptoms (and their contacts) and strict implementation of infection prevention and control measures for patients under investigation.

#### Actions

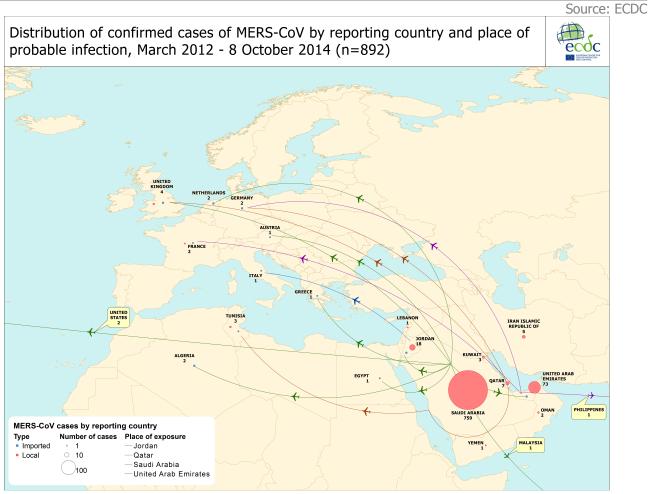
ECDC published an <u>epidemiological update</u> on 1 October 2014. The last<u>rapid risk assessment</u> was updated on 21 August 2014. ECDC is closely monitoring the situation in collaboration with WHO and EU Member States. ECDC published a <u>factsheet for health professionals regarding MERS-CoV</u> on 20 August 2014.

14/18

# Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 - 9 October 2014 (n=892)



# Distribution of MERS-CoV cases by place of reporting as of 9 October 2014 (n = 892)



# Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 9 October 2014

# Epidemiological summary

On 6 October 2014, <u>France</u> reported a new autochthonous case of dengue fever in the district of Bouches-du-Rhône in Aubagne. This is the second autochthonous case reported in the district of Bouches-du-Rhône in 2014. The Regional Health Agency (ARS) report that this case was infected before the implementation of vector control measures on 20 September following the notification of the first case. In total, four autochthonous dengue cases have been reported in the Provence-Alpes-Côte-d'Azur region so far this year, two cases in Var district and two cases in Bouches-du-Rhône district.

#### Web sources: ECDC Dengue | Healthmap Dengue | MedISys |

#### ECDC assessment

Recently reported autochthonous transmission of dengue fever in France and Japan highlights the risk of locally-acquired cases occurring in countries where the competent vectors are present.

16/18

### Actions

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

From week 41/2014 onwards, ECDC will monitor the dengue situation worldwide on a monthly basis.

# Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 2 October 2014

# Epidemiological summary

During the past week, 13 new cases of WPV1 have been reported. Worldwide, 222 cases have been reported to WHO so far in 2014, compared with 282 for the same time period in 2013. In 2014, nine countries have reported cases: Pakistan (187 cases), Afghanistan (10 cases), Nigeria (6 cases), Equatorial Guinea (5 cases), Somalia (5 cases), Cameroon (5 cases), Iraq (2 cases), Syria (1 case), and Ethiopia (1 case).

After the declaration of a PHEIC, WHO issued a set of Temporary Recommendations that call for the vaccination of all residents in, and long-term visitors to, countries with polio transmission prior to international travel.

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet |Temporary Recommendations to Reduce International Spread of Poliovirus

#### 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.

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 and in people living in poor sanitary conditions, or a combination of the two.

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

## 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 with travel recommendations for the EU.

On <u>4 September 2014 ECDC</u> published a news item regarding the WHO IHR Emergency Committee decision to add Equatorial Guinea as a wild poliovirus-exporting country and the renewal of the WHO PHEIC recommendations.

= =: :: : :

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