



COMMUNICABLE DISEASE THREATS REPORT

# CDTR Week 46, 9-15 November 2014

### All users

This weekly bulletin provides updates on threats monitored by ECDC.

## **I. Executive summary** EU Threats

## **New!** Outbreak of Legionnaires' disease – Portugal - 2014

Opening date: 10 November 2014 Latest update: 13 November 2014

On 9 November, Portugal reported a large community-based outbreak of Legionnaires' disease in Vila Franca de Xira. As of 13 November 2014, 311 cases and seven deaths have been reported. Investigations are ongoing to establish the source of the outbreak.

### Influenza – Multistate (Europe) – Monitoring 2014–2015 season

Opening date: 9 October 2014

Latest update: 14 November 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

In the sixth week of the surveillance season, low-intensity influenza activity was reported by all 39 countries submitting data, but sporadic cases were reported in seven countries and increasing trend in two countries.

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

Opening date: 3 June 2014

Latest update: 13 November 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.

 $\rightarrow$ Update of the week During the past week, no new cases were reported in the EU or neighbouring countries.

## **Non EU Threats**

### Ebola Virus Disease Epidemic - West Africa - 2014

Opening date: 22 March 2014 Latest update: 13 November 2014

An epidemic of Ebola virus disease (EVD) has been ongoing in West Africa since December 2013, mainly affecting Guinea, Liberia and Sierra Leone. The situation in the affected countries remains critical. On 8 August 2014, WHO declared the Ebola epidemic in West Africa a Public Health Emergency of International Concern (PHEIC).

### →Update of the week

As of 9 November 2014, WHO reports 14 098 confirmed, probable, and suspected cases of Ebola virus disease (EVD) in six affected countries (Guinea, Liberia, Mali, Sierra Leone, Spain and the United States of America) and two previously affected countries (Nigeria and Senegal). EVD transmission remains persistent and widespread in Guinea, Liberia, and Sierra Leone. No additional cases have been reported in Spain or the USA.

On 12 and 13 November, WHO acknowledged two additional confirmed fatal cases of EVD and two new probable cases in Bamako (Mali). These cases are not linked to the confirmed case from Guinea previously reported in Kayes on 23 October.

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

Opening date: 26 August 2014 La

Latest update: 13 November 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 No new confirmed cases have been reported during the past week.

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

Latest update: 13 November 2014

On 5 October 2014, the Ministry of Health in Uganda reported a laboratory-confirmed outbreak of Marburg fever. The index case was a healthcare worker who died on 28 September at Mengo hospital in Kampala.

→ Update of the week

No new confirmed cases of Marburg haemorrhagic fever have been reported since the detection of the index case in early October. After 42 days without additional cases, Ugandan authorities declared the outbreak over on 12 November.

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

Opening date: 31 March 2013

Opening date: 6 October 2014

Latest update: 13 November 2014

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, 455 cases have been reported including 176 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, 320 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 monthly update on 8 October 2014, two new cases were reported in China by WHO.

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

Opening date: 15 June 2005

Latest update: 13 November 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 2 October 2014, WHO has not acknowledged new human cases of avian influenza A (H5N1) worldwide.

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

Opening date: 24 September 2012 Latest update: 13 November 2014

Since April 2012, 938 cases of MERS-CoV have been reported by local health authorities worldwide, including 373 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 and virological studies points towards dromedary camels in the Middle East being a reservoir from which humans sporadically become infected through zoonotic transmission. Human-to-human transmission is amplified among household contacts and in healthcare settings.

#### →Update of the week

Since the last CDTR of 7 November, six cases have been reported from Saudi Arabia, two from Taif, two from Riyadh, one from Jeddah and one from Alkharj.

### Outbreak of Enterovirus D68 - USA and Canada

Opening date: 10 September 2014 Latest update: 14 November 2014

Since mid-August 2014, local health authorities in more than 45 states in the USA have been notifying the Centers for Disease Control and Prevention (CDC) of laboratory-confirmed enterovirus 68 (EV-D68) infections. Since mid-September Canada has also experienced an increase in severe respiratory illness associated with EV-D68 infections. All patients presented with respiratory symptoms. Several others, 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 USA 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 update on 6 November 2014, the <u>US CDC</u> has reported no additional cases of respiratory illness caused by EV-D68. The number of recent <u>unexplained neurologic illnesses</u> involving limb weakness in children has reached 75. The investigation of a possible link to EV-D68 is still ongoing.

As of 4 November 2014, 214 specimens, collected from across <u>Canada</u> between August and October 2014, have tested positive for EV-D68. This is an increase of 64 specimens since the last update of 16 October.

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

Opening date: 8 September 2005 Latest update: 13 November 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, one new case of wild poliovirus type 1 (WPV1) was reported in Pakistan.

## **II. Detailed reports**

## **New!** Outbreak of Legionnaires' disease – Portugal - 2014

Opening date: 10 November 2014

Latest update: 13 November 2014

### Epidemiological summary

On 6 November 2014, Portugal identified an outbreak of Legionnaires' disease in three parishes (Póvoa de Santa Iria, Forte da Casa and Vialonga) of Vila Franca de Xira, situated 30km north of Lisbon. Vila Franca de Xira is not considered a tourist area. Seventeen cases were initially identified on 7 November when epidemiological and environmental investigations started.

As of 13 November, the Portuguese Ministry of Health has reported 311 cases and seven deaths. The cases are from the Lisbon region (303), North region (3), Central region (4) and the region of Algarve (1).

Source: Portugese MoH |

### ECDC assessment

This is the largest outbreak of Legionnaires' disease ever reported in Portugal and one of the largest in the European Union. Vila Franca de Xira is not considered a tourist destination. Despite the magnitude of the outbreak, this event can be considered a local event. All cases were infected in Vila Franca de Xira where the outbreak is occurring. Cooling towers of major industrial installations in the area of Vila Franca de Xira were closed and investigations to identify the source of the outbreak are ongoing.

### Actions

ECDC published a rapid risk assessment and deployed two experts to participate in the outbreak investigation.

### Influenza – Multistate (Europe) – Monitoring 2014–2015 season

Opening date: 9 October 2014

Latest update: 14 November 2014

## Epidemiological summary

For week 45/2014, of 477 sentinel influenza-like illness (ILI) and acute respiratory infection (ARI) specimens tested across 28 countries, seven (1%) from 5 countries tested positive for influenza. No hospitalised laboratory-confirmed influenza cases were reported.

Web sources: Flu News Europe | ECDC Influenza |

### ECDC assessment

As is typical for this time of the year, influenza activity in Europe and Central Asia is low and there is no indication that the influenza season has started.

### Actions

ECDC and WHO are producing the <u>Flu News Europe</u> bulletin weekly.

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

Opening date: 3 June 2014

Latest update: 13 November 2014

## Epidemiological summary

As of 13 November 2014, 74 human cases of West Nile fever have been reported in the EU, and 136 cases have been reported in neighbouring countries since the beginning of the 2014 transmission season.

### **EU Member States**

Italy has reported 24 cases from the following provinces: Bologna (4), Parma (1), Cremona (3), Modena (2), Reggio nell'Emilia (1), Verona (1), Pavia (5), Mantova (2), Lodi (2), Piacenza (2) and Brescia (1). Romania has reported 23 cases in the districts of Mures (2), Olt (6), 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 one 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 76 cases of West Nile fever in the following regions: City of Belgrade (35), Juzno-backi district (5), Nisavski (1), Kolubarski (4), Sremski (6), Juzno-banatski (19), Podunavski (4), 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 17 cases of West Nile fever in the following areas: Central district (2), Tel Aviv district (4), Haifa district (3), Southern district (2) Jerusalem (1), Northern district (5). One confirmed case has been reported in Palestine\* (Gaza Strip).

\*This designation shall not be construed as recognition of a State of Palestine and is without prejudice to the individual positions of the Member States on this issue.

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.

ECDC



## Ebola Virus Disease Epidemic - West Africa - 2014

Opening date: 22 March 2014

Latest update: 13 November 2014

## Epidemiological summary

### **Distribution of cases**

Countries with widespread and intense transmission:

- Guinea: 1 878 cases and 1 142 deaths (as of 9 November 2014);
- Liberia: 6 822 cases and 2 836 deaths (as of 8 November 2014);
- Sierra Leone: 5 368 cases and 1 169 deaths (as of 9 November 2014).

Countries with an initial case or cases, or with localised transmission:

- Mali reported three confirmed and two probable cases, including four deaths.
- United States: four confirmed cases, including one death.
- Spain: one case, no deaths.
- Nigeria: 20 cases and eight deaths. Nigeria was declared Ebola free on 19 October 2014.
- Senegal: One confirmed imported case. Senegal was declared Ebola free on 17 October 2014.

### Situation in Guinea, Sierra Leone, Liberia and Mali

According to WHO, the weekly incidence appears to be stable at the country level in Guinea. In Sierra Leone, the weekly incidence continues to rise, while in Liberia it appears to be declining. In all three countries, EVD transmission remains persistent and widespread, particularly in the capital cities. All administrative districts in Liberia and Sierra Leone have reported at least one confirmed or probable case of EVD since the start of the epidemic. Cases and deaths continue to be under-reported.

In Mali, after the report of a first case in Kayes imported from Guinea on 23 October, WHO reported four additional cases in Bamako that are not linked to the first case. Two are probable cases from Guinea, one was admitted in a clinic in Bamako on 25 October and died on 27 October, the second was a visitor of this patient who also died (the date of his death is not available so far). The two other cases are confirmed cases in healthcare workers who cared for the patient in the clinic. One died on 11 November.

## Situation outside of West Africa

No new EVD cases have been reported since 23 October. The latest reported case concerns a medical aid worker who

volunteered in Guinea and recently returned to the United States. He was hospitalised in New York City and was discharged healthy on 11 November 2014.

### Spain

No new cases have been reported since 6 October when a healthcare worker was infected while caring for an Ebola-infected patient in Madrid. She recovered and tested negative for EVD on 19 October. A second negative test was obtained on 21 October. All 83 contacts of the HCW have completed a 21-day follow-up. Spain will be declared free of EVD 42 days after the date of the second negative test if no new cases are reported.

### **Healthcare workers**

The increasing number of healthcare workers that have been infected by the Ebola virus is a major cause for concern. According to WHO, 566 healthcare workers (HCWs) are known to have been infected with EVD up to the end of 12 November, 321 of whom have died. Early indications are that a substantial proportion of infections occurred outside the context of Ebola treatment and care centres.

### Medical evacuations from EVD-affected countries

Seventeen individuals have been evacuated or repatriated from the EVD-affected countries. As of 13 November, there have been nine medical evacuations of confirmed EVD cases to Europe (three to Germany, two to Spain, one to the UK, one to France, one to Norway and one to Switzerland) and two exposed persons have been repatriated to the Netherlands.

### Figures

First epi-curve: Distribution of reported cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia, Nigeria, Mali and Senegal, weeks 48/2013 to 46\*/2014

\* In week 45/2014, WHO carried-out retrospective correction in the data resulting in reporting 299 fewer cases which resulted in a negative value for new cases in week 45 which is not plotted.

**\*\*** According to WHO, the marked increase in the cumulative total number of cases in week 43 is due to a more comprehensive assessment of patient databases leading to 3 792 additional reported cases. However, these cases have occurred throughout the epidemic period.

Second epi-curve: Distribution of cases of EVD by week of reporting in the three countries with widespread and intense transmission, as of week 46\* 2014

\* The marked increase in the number of cases reported in Sierra Leone (week 44) and Liberia (week 43) results from a more comprehensive assessment of patient databases. The additional 3 792 cases have occurred throughout the epidemic period.
\*\* In week 45/2014, WHO reported -476 cases in Sierra Leone due to retrospective corrections.
§ In week 44/2014, WHO reported zero cases for Liberia.

Web sources: <u>ECDC Ebola page</u> | <u>ECDC Ebola and Marburg fact sheet</u> | <u>WHO Ebola Factsheet</u> | <u>Spanish MoH</u> | <u>CDC</u> | <u>WHO</u> <u>Roadmap</u> | <u>Media</u> | <u>MSF</u> | <u>Mali MoH</u>

### 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 epidemic of EVD over recent 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. As the epidemic is still evolving and more international staff are deployed to the affected countries spreading from an EVD patient who arrives in the EU as result of a planned medical evacuation is considered to be low when appropriate measures are strictly adhered to, but cannot be excluded in exceptional circumstances. The transmission of Ebola from a patient to a healthcare worker in Spain illustrates the connection between the epidemic in West Africa and the risk for the EU, and further stresses the need to control the epidemic 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 excluded. The highest risk is at an early stage of the disease, before the risk of EVD has been recognised, and at the late stage of the disease when patients have very high viral loads and undergo invasive therapeutic procedures.

### Actions

An epidemiological update is published weekly on the <u>EVD ECDC page</u>. On 17 October, ECDC published an updated <u>rapid risk assessment</u>. On 10 September, ECDC published an EU case definition.

On 22 September ECDC published assessment and planning for medical evacuation by air to the EU of patients with Ebola virus disease and people exposed to Ebola virus.

On 6 October ECDC published risk of transmission of Ebola virus via donated blood and other substances of human origin in the EU.

On 13 October, ECDC published a document entitled "Infection prevention and control measures for Ebola virus disease: Entry and exit screening measures".

On 22 October ECDC published <u>Assessing and planning medical evacuation flights to Europe for patients with Ebola virus disease</u> and people exposed to Ebola virus.

On 23 October ECDC published <u>Public health management of persons having had contact with Ebola virus disease cases in the EU</u>. On 29 October, ECDC published a training tool on the <u>safe use of PPE</u> and <u>options for preparing for gatherings in the EU</u>.

# Distribution of reported cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia, Nigeria and Senegal, weeks 48/2013 to 46\*/2014

Source: Adapted from WHO; \*Data for week 46 are incomplete



Week

# Distribution of cases of EVD by week of reporting in the three countries with widespread and intense transmission, as of week 46\* 2014



Source: Adapted from WHO; \*Data for week 46 are incomplete

# Distribution of cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia and Nigeria (as of week 45/2014)



Opening date: 26 August 2014

Latest update: 13 November 2014

## Epidemiological summary

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.

As of 7 November 2014, there have been 66 cases (38 confirmed, 28 probable) of Ebola virus disease (EVD) reported in the Democratic Republic of Congo (DRC), including 49 deaths. Eight of the deaths have been among healthcare workers. The index case was a pregnant woman exposed to bush meat who presented with symptoms of EVD and died in hospital on 11 August.

The last reported case tested negative for the second time on 10 October. The DRC will therefore be declared free of EVD 42 days after the date of the second negative test if no new cases are reported.

Web Sources: WHO AFRO | ECDC Ebola factsheet | OCHA |WHO situation report

### ECDC assessment

The outbreak in DRC is unrelated to the current epidemic in West Africa. It appears at present that control measures implemented with the support of international partners have prevented further spread of the disease.

### Actions

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

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

Opening date: 6 October 2014

Latest update: 13 November 2014

## Epidemiological summary

On 5 October 2014, the Ministry of Health in Uganda reported a laboratory-confirmed outbreak of Marburg fever. The index case was a healthcare worker, a radiographer recently recruited at Mengo hospital in Kampala. The onset of symptoms was on 11 September. The case presented to Mpigi District Health Centre on 17 September 2014, and was transferred to Mengo Hospital, Kampala, on 23 September 2014. On admission the case presented with symptoms including fever, headache, abdominal pain, vomiting and diarrhoea and died on 28 September 2014. The case reported no history of travel beyond Mpigi, and no contact with a person with similar illness. He had not eaten bush meat nor had he had contact with bats in the previous four weeks.

After 42 days without additional cases, Ugandan authorities declared the outbreak over on 12 November.

Source : CDC | MoH Uganda | WHO AFRO

### ECDC assessment

Marburg virus disease is a severe and highly fatal disease caused by a virus from the same family as the one that causes Ebola virus disease. Both viruses can cause large outbreaks such as the ongoing Ebola virus disease outbreak in West Africa. Marburg fever cases are not unexpected in Uganda as authorities have reported several outbreaks there 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 in 2012 affected four districts in Uganda (Kabale, Ibanda, Mbarara, and Kampala).

It appears at present that control measures implemented with the support of international partners have prevented further spread of the disease. The outbreak could be decleared over after 42 days have passed since the death of the index case.

### Actions

The response to the current outbreak is led by the Ministry of Health, the US Centers for Disease Control and Prevention, Médecins Sans Frontières, and UNICEF.

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

Opening date: 31 March 2013

Latest update: 13 November 2014

## Epidemiological summary

Since the last monthly update on 8 October 2014, two new cases were reported by WHO. The first case is a 44-year-old female from Urumqi City, Xinjiang Uyghur Autonomous Region, with onset of symptoms on 4 September. She was admitted to a hospital on 7 September and died on 9 September. The case had a history of exposure to live poultry. The second case is a 7-year-old female from Chaoyang District, Beijing Municipality, with onset of symptoms on 16 September. She was not hospitalised and the condition of the case was mild.

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 13 November 2014, there were 455 laboratory-confirmed cases: Zhejiang (139), Guangdong (109), Jiangsu (56), Shanghai (42), Fujian (22), Hunan (24), Anhui (18), Jiangxi (6),Henan (4), Beijing (5), Guangxi (4), Shandong (4), Hebei (1), Guizhou (1), Jilin (2), Xinjiang Uygur (3), Hong Kong (10), Taiwan (4) and one imported case in Malaysia. The second wave of the outbreak started in October 2013. Since then 320 cases have occurred. The number of reported cases has been

11/19

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-six patients have died.

### Web sources: Chinese CDC | WHO | WHO FAQ page | ECDC | WHO DON 29 October |

### 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.

## Distribution of avian influenza A(H7N9) cases by week of reporting, as of 13 November 2014



# Distribution of cumulative number of human cases of avian influenza A(H7N9), by province and date, China, week 14/2013 to week 46/2014



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

Opening date: 15 June 2005

Latest update: 13 November 2014

## Epidemiological summary

From 2003 to 2 October 2014, 668 cases including 393 deaths have been reported from 16 countries to WHO.

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.

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

Opening date: 24 September 2012

Latest update: 13 November 2014

## Epidemiological summary

Since April 2012 and as of 13 November 2014, 938 cases of MERS-CoV have been reported by local health authorities worldwide, including 373 deaths. The distribution is as follows:

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

Saudi Arabia: 802 cases/340 deaths United Arab Emirates: 73 cases/9 deaths Qatar: 9 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 deaths

### Europe

Turkey: 1 case/1 death 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 MERS-CoV 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. 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 06 November 2014. The last <u>rapid risk assessment</u> was updated on 16 October 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.

# Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 - 13 November 2014 (n=938)



\* Where the month of onset is unknown, the month of reporting has been used

Geographical distribution of confirmed MERS-CoV cases and place of probable infection, worldwide, as of 13 November 2014 (n=938)



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

Opening date: 10 September 2014 Latest update: 14 November 2014

## Epidemiological summary

Hospitals in Missouri and Illinois were the first to document an increase of severe respiratory illness in children in the USA in mid-August 2014. As of 14 November, the US CDC has reported 1 116 confirmed cases in 47 states and the District of Columbia caused by EV-D68 infection. Almost all confirmed cases have been among children, and many of the children have a medical history of asthma and wheezing. EV-D68 has been detected in specimens from 12 patients who died. On 26 September 2014, the US CDC issued a National Health Advisory with a case definition to investigate the possible linkage of clusters of acute neurologic disease to the EV-D68 outbreak.

The current outbreak in Canada began on 15 September 2014, when Alberta Health Services reported 18 cases of EV-D68 among hospitalised patients under the age of 18 years.

As of 4 November 2014, 214 specimens have tested positive for EV-D68. One fatality in a young man with severe asthma was linked to EV-D68. Health authorities in Canada are also investigating possible links to EV-D68 in cases of paralysis in children.

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Sporadic cases of EV-D68 have been documented in several EU/EEA countries in recent years.

On 12 November 2014, the media reported in <u>Finland</u> that EV-D68 has been confirmed in five hospitalised children in Turku. There have been ten reported cases in Turku this autumn, but no other cases have been reported in any other part of the country.

On 7 November, <u>Eurosurveillance</u> published an article: Acute flaccid paralysis following enterovirus D68 associated pneumonia, France, 2014

On 23 October 2014, an article describing the EV-D68 situation in the Netherlands was published in Eurosurveillance.

**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 are 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 probability that EV-D68 cases will be laboratory-confirmed in EU/EEA countries is low because most EU Member States 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.

A connection between EV-D68 and the observed neurological illness in the USA and Canada has not yet been proven.

### Actions

ECDC published a first update of the rapid risk assessment on 15 October 2014.

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

Opening date: 8 September 2005

Latest update: 13 November 2014

## Epidemiological summary

Worldwide in 2014, 279 cases have been reported to WHO so far, compared with 334 for the same time period in 2013. In 2014, nine countries have reported cases: Pakistan (236 cases), Afghanistan (18 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

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that there is a potential risk for WPV being re-introduced to 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 to 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 4 September 2014, <u>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.

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