



## COMMUNICABLE DISEASE THREATS REPORT

CDTR

Week 45, 2-8 November 2014

All users

This weekly bulletin provides updates on threats monitored by ECDC.

### I. Executive summary

#### EU Threats

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

Opening date: 9 October 2014

Latest update: 7 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 fifth week of the surveillance season, low-intensity influenza activity was reported by all 41 countries submitting data, but sporadic cases were reported in eight countries and increasing trend in two countries.

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

Opening date: 3 June 2014

Latest update: 7 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.

→ Update of the week

During the past week, no new cases were reported in the EU. In neighbouring countries, Israel reported eight new cases in the following areas: Tel Aviv (1), Central district (1), Haifa district (1), Northern district (3), Southern district (2). In addition, one confirmed case was reported in Palestine (Gaza Strip).

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

Opening date: 9 December 2013

Latest update: 5 November 2014

An outbreak of chikungunya virus infection has been ongoing in the Caribbean since December 2013 and spread to North, Central and South America. There is a simultaneous outbreak of chikungunya in French Polynesia. In Europe, France has reported autochthonous cases of chikungunya virus infection. This is the first time that locally-acquired transmission of chikungunya has been detected in France since 2010.

→Update of the week

As of 31 October, [WHO](#) reports 793 563 autochthonous cases (13 357 laboratory confirmed) in the Pan-American region, including 153 deaths.

In Europe, seven autochthonous cases from the Montpellier area have been reported in [France](#) this year.

The number of reported cases in the outbreak of chikungunya in French Polynesia has reached 287 cases, as of 23 October 2014.

Recent findings reported in [the media](#) this week suggest that two different Chikungunya viruses are currently circulating in Brazil: The Asian genotype virus transmitted by *Aedes aegypti* mosquito which was first identified on Saint-Martin island in December 2013 and then spread in the Caribbean and the Americas, and one virus belonging to one of the African genotypes. This recently identified African genotype virus does not seem to have the genetic mutations that would enhance transmission in *Aedes albopictus* mosquitoes.

## Non EU Threats

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

Opening date: 26 August 2014

Latest update: 6 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 case has been reported during the past week.

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

Opening date: 22 March 2014

Latest update: 31 October 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). In recent weeks, cases of transmission to healthcare workers involved in caring for patients were reported outside of the three affected countries by Spain (1) and the USA (3).

→Update of the week

As of 2 November 2014, WHO reports 13 042 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.

### Outbreak of Marburg fever – Uganda

Opening date: 6 October 2014

Latest update: 6 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.

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

Opening date: 24 September 2012

Latest update: 7 November 2014

Since April 2012, 932 cases of MERS-CoV have been reported by local health authorities worldwide, including 371 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 30 October, seven cases have been reported from Saudi Arabia, one from Taif and 6 from Riyadh.

## Outbreak of Enterovirus D68 - USA and Canada

Opening date: 10 September 2014

Latest update: 6 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 30 October 2014, the [US CDC](#) has reported 15 additional cases of respiratory illness caused by EV-D68. The number of recent unexplained neurologic illnesses involving limb weakness in children has reached 70. The investigation of a possible link to EV-D68 is still ongoing.

There is no update from Canada.

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

Opening date: 8 September 2005

Latest update: 6 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 21 new wild poliovirus type 1 (WPV1) cases have been reported, 15 cases from Pakistan and six from Afghanistan.

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

Opening date: 20 April 2006

Latest update: 5 November 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

There are ongoing outbreaks of dengue fever globally.

## II. Detailed reports

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

Opening date: 9 October 2014

Latest update: 7 November 2014

#### Epidemiological summary

For week 44/2014, of 459 sentinel influenza-like illness (ILI) and acute respiratory infection (ARI) specimens tested across 27 countries, 11 (2%) from 5 countries tested positive for influenza. No hospitalised laboratory-confirmed influenza cases were reported.

Web sources: [Flu News Europe](#) | [ECDC Influenza](#) |

#### ECDC assessment

Influenza activity is low with no indication that the influenza season has started in the European Region.

#### Actions

ECDC and WHO are producing the [Flu News Europe](#) bulletin weekly.

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

Opening date: 3 June 2014

Latest update: 7 November 2014

#### Epidemiological summary

As of 6 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](#)

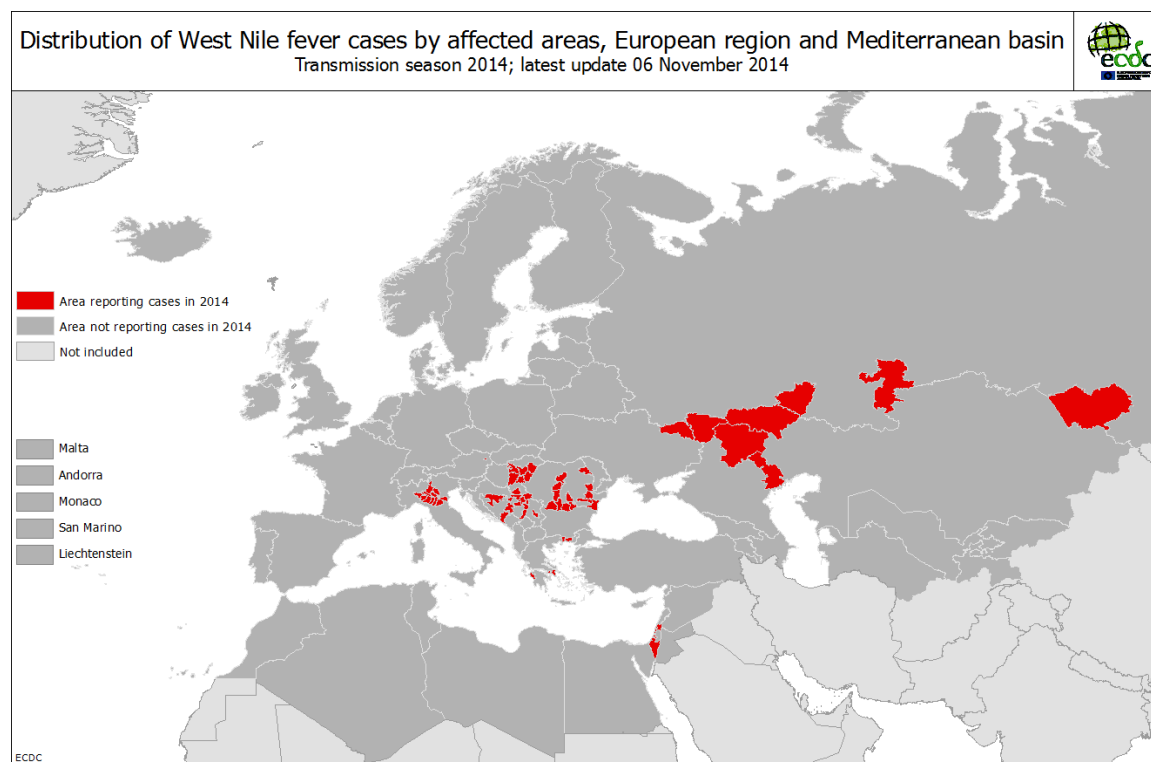
#### ECDC assessment

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 [EU blood directive](#), 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



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

Opening date: 9 December 2013

Latest update: 5 November 2014

## Epidemiological summary

As of 31 October 2014, nearly 800 000 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 153 fatalities.

In Europe, as of 31 October, [French authorities](#) reported seven autochthonous cases. The cases live in Montpellier in the vicinity of a chikungunya case imported from Cameroon. Several EU/EFTA countries (France, Greece, Italy, the Netherlands, Spain and Switzerland) have reported imported cases of chikungunya infection in patients with travel history to the affected areas.

**Web sources:** [PAHO update](#) | [ECDC Chikungunya](#) | [CDC Factsheet](#) | [Medisys page](#) |

## ECDC assessment

Epidemiological data indicate that the outbreaks are still expanding both in the Caribbean, the Americas and in the Pacific. The vector is endemic in both regions, where it also transmits dengue virus. Further spread of the outbreaks is to be expected. Continued vigilance is needed to detect imported cases of chikungunya in tourists returning to the EU from these regions. This requires awareness among clinicians, travel clinics and blood safety authorities.

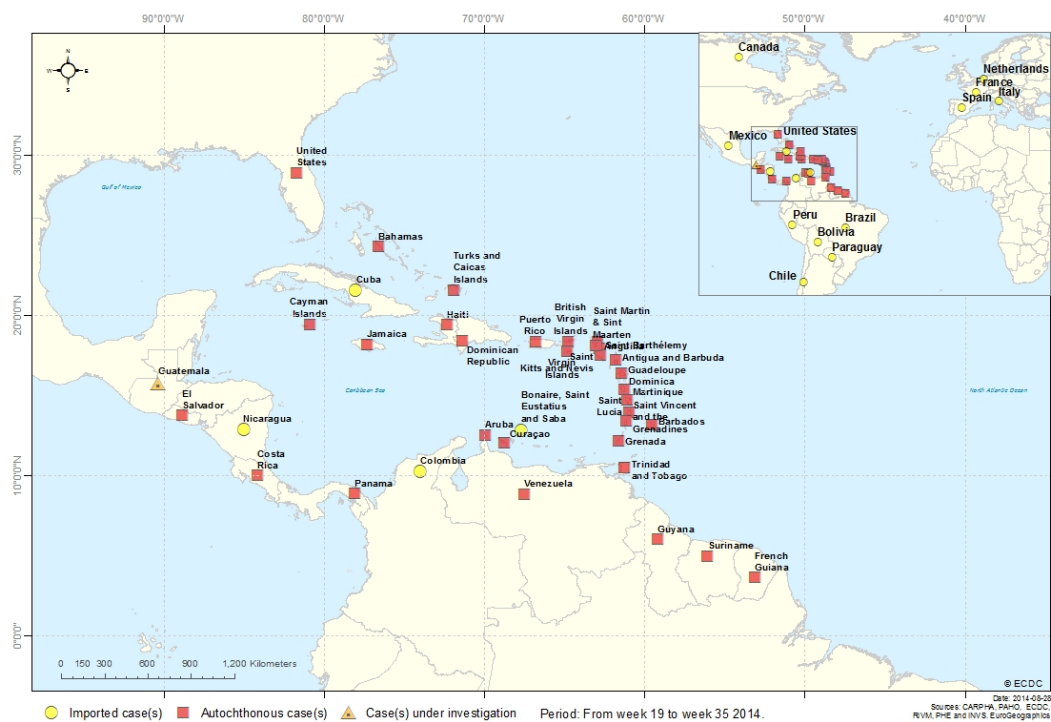
## Actions

ECDC published an updated [Rapid Risk Assessment](#) on 27 June 2014.

ECDC monitors the global chikungunya situation on a monthly basis.

## Chikungunya in the Caribbean as of 05 September 2014

ECDC



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

Opening date: 26 August 2014

Latest update: 6 November 2014

## Epidemiological summary

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

As of 26 October 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](#).

## Ebola Virus Disease Epidemic - West Africa - 2014

Opening date: 22 March 2014

Latest update: 31 October 2014



## Epidemiological summary

### Distribution of cases

Countries with widespread and intense transmission:

- Guinea: 1 731 cases and 1 041 deaths (as of 02 November 2014);
- Liberia: 6 525 cases and 2 697 deaths (as of 31 October 2014);
- Sierra Leone: 4 759 cases and 1 070 deaths (as of 02 November 2014).

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

- United States: four cases including one death, the last confirmed case occurred in New York City on 23 October 2014;
- Spain: one case, no deaths. The case is the result of secondary transmission in Spain to a nurse who cared for an EVD patient who had been evacuated from Liberia. The nurse was isolated on 6 October 2014. This case tested negative for Ebola for a second time on 21 October 2014 and was discharged on 5 November 2014);
- Mali: One confirmed imported case from Guinea was reported in Kayes, Mali on 23 October. The case died on 24 October;
- 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 outside of West Africa

#### USA

No new EVD cases have been reported since 23 October. The last case is a medical aid worker who volunteered in Guinea and returned to the United States. He is currently hospitalised.

#### Spain

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

#### Mali

On 23 October, Mali reported its first confirmed case of EVD. The patient was a 2-year old girl who travelled from Guinea with her grandmother to Mali and died on 24 October in Kayes. The patient was symptomatic for much of the journey. At present, 108 contacts are being monitored. This includes 79 in Kayes and 29 in Bamako.

### 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, 546 healthcare workers (HCWs) are known to have been infected with EVD up to the end of 2 November, 310 of whom have died. Four HCWs were infected between 27 October and 2 November. 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 6 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.

**Web sources:** [ECDC Ebola page](#) | [ECDC Ebola and Marburg fact sheet](#) | [WHO Ebola Factsheet](#) | [Spanish MoH](#) | [CDC](#) | [WHO Roadmap](#) | [Media](#) | [MSF](#) |

## 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 to support the epidemic control, the risk of importation of EVD cases to the EU is increasing. The risk of Ebola virus 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 [EVD ECDC page](#).

On 17 October, ECDC published an updated [rapid risk assessment](#).

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 [Assessing and planning medical evacuation flights to Europe for patients with Ebola virus disease and people exposed to Ebola virus](#).

On 23 October ECDC published [Public health management of persons having had contact with Ebola virus disease cases in the EU](#).

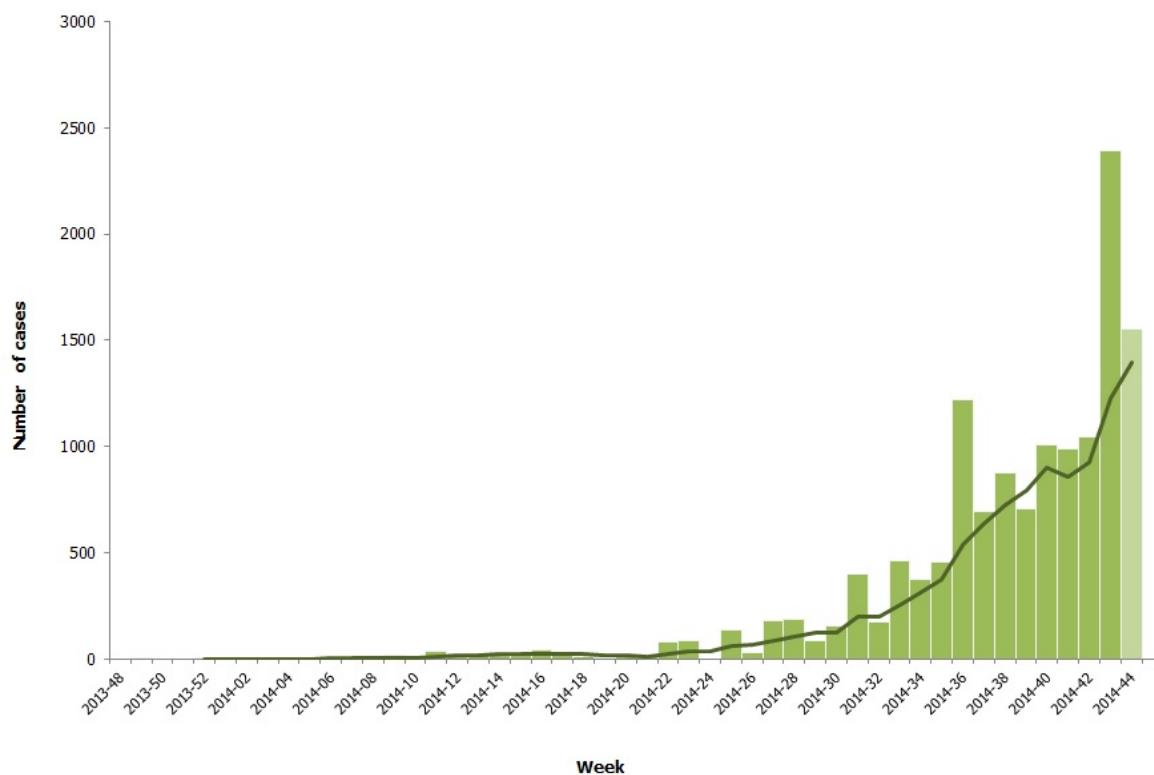
On 29 October, ECDC published a training tool on the [safe use of PPE and options for preparing for gatherings in the EU](#)



## Distribution of reported cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia, Nigeria and Senegal, weeks 48/2013 to 45\*/2014

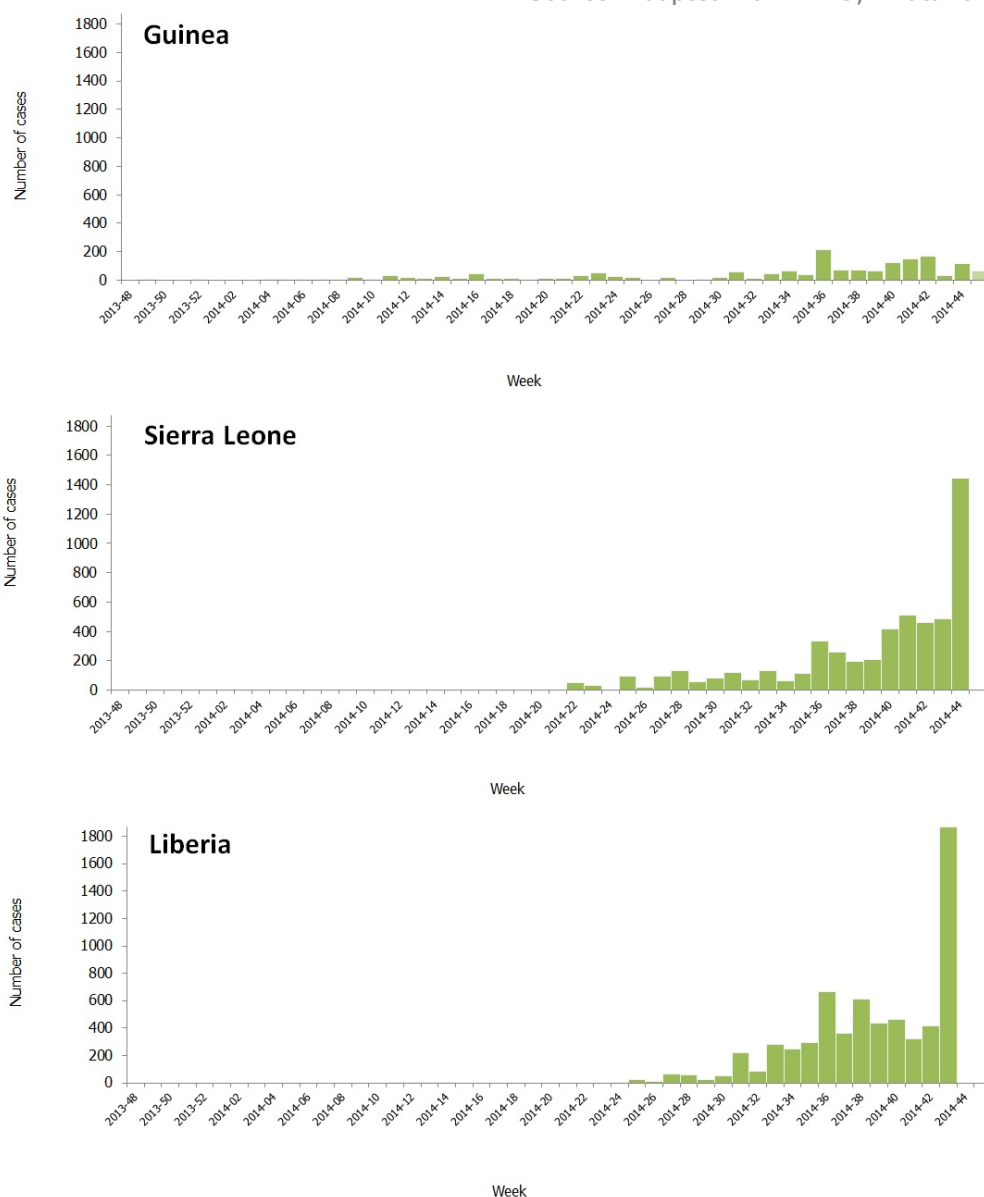
Source: Adapted from WHO; \*Data for week 45 are incomplete

Weekly number of EVD cases published on 5/11/2014



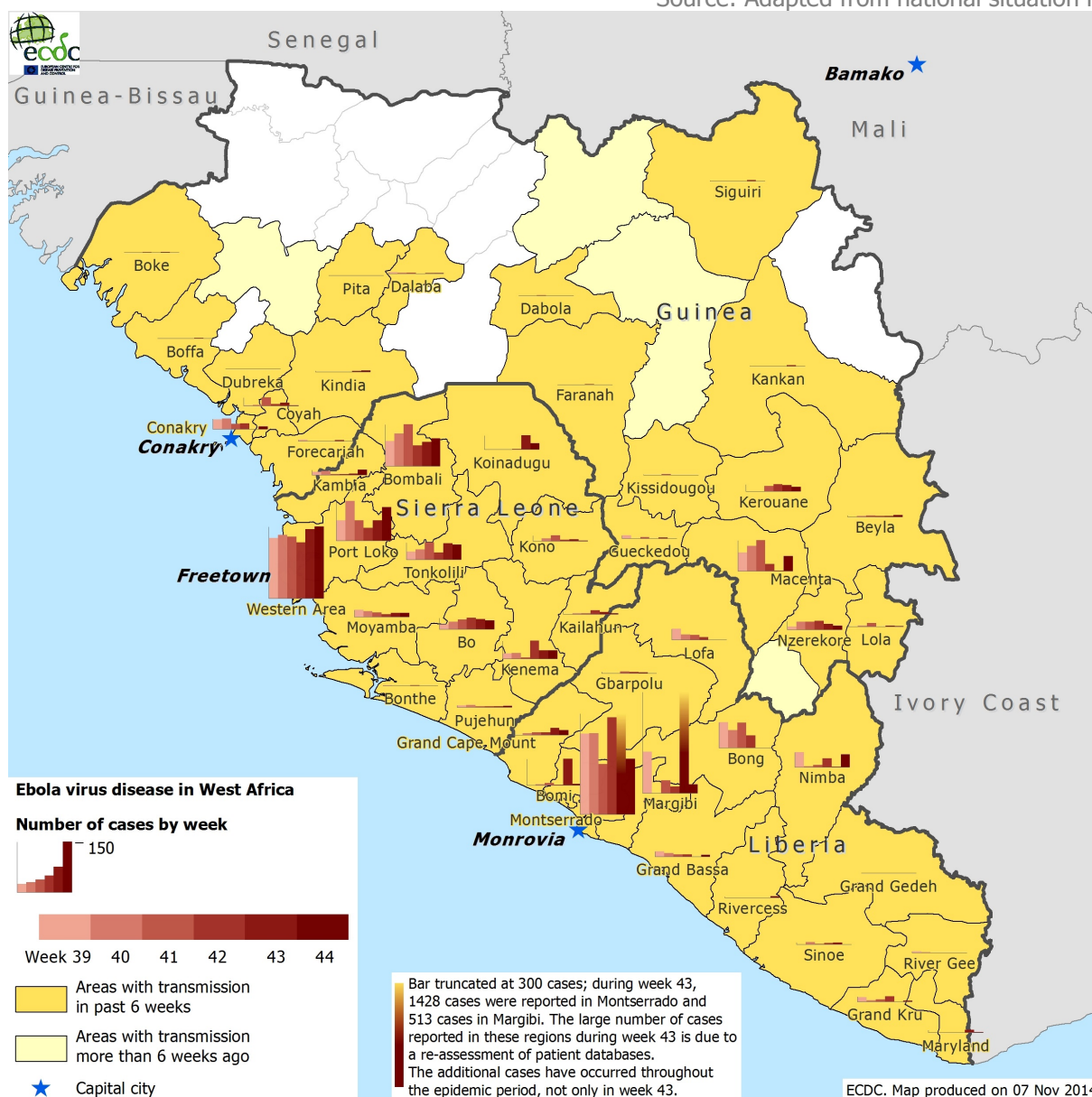
## Distribution of cases of EVD by week of reporting in the three countries with widespread and intense transmission, as of week 45\* 2014

Source: Adapted from WHO; \*Data for week 45 are incomplete



## Distribution of cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia and Nigeria (as of week 44/2014)

Source: Adapted from national situation reports



## Outbreak of Marburg fever – Uganda

Opening date: 6 October 2014

Latest update: 6 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.

According to the last situation report on 17 October, there have been no new confirmed Marburg cases in Uganda since the index case was reported.

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 declared 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.

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

Opening date: 24 September 2012

Latest update: 7 November 2014

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## Epidemiological summary

Since April 2012 and as of 6 November 2014, 932 cases of MERS-CoV have been reported by local health authorities worldwide, including 371 deaths. The distribution is as follows:

### Confirmed cases and deaths by region:

#### Middle East

Saudi Arabia: 796 cases/338 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:** [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 factsheet for professionals](#)

## 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 [epidemiological update](#) on 06 November 2014.

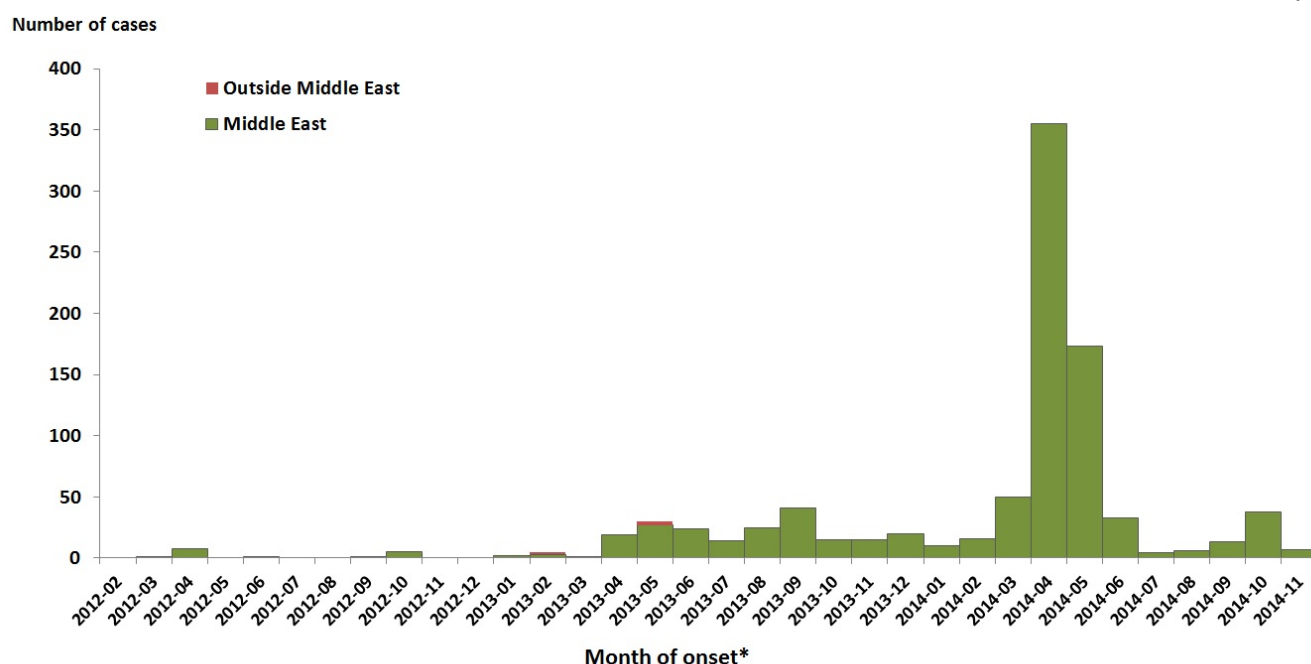
The last [rapid risk assessment](#) was updated on 16 October 2014.

ECDC is closely monitoring the situation in collaboration with WHO and EU Member States.

ECDC published a [factsheet for health professionals regarding MERS-CoV](#) on 20 August 2014.

## Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 6 November 2014 (n=932)

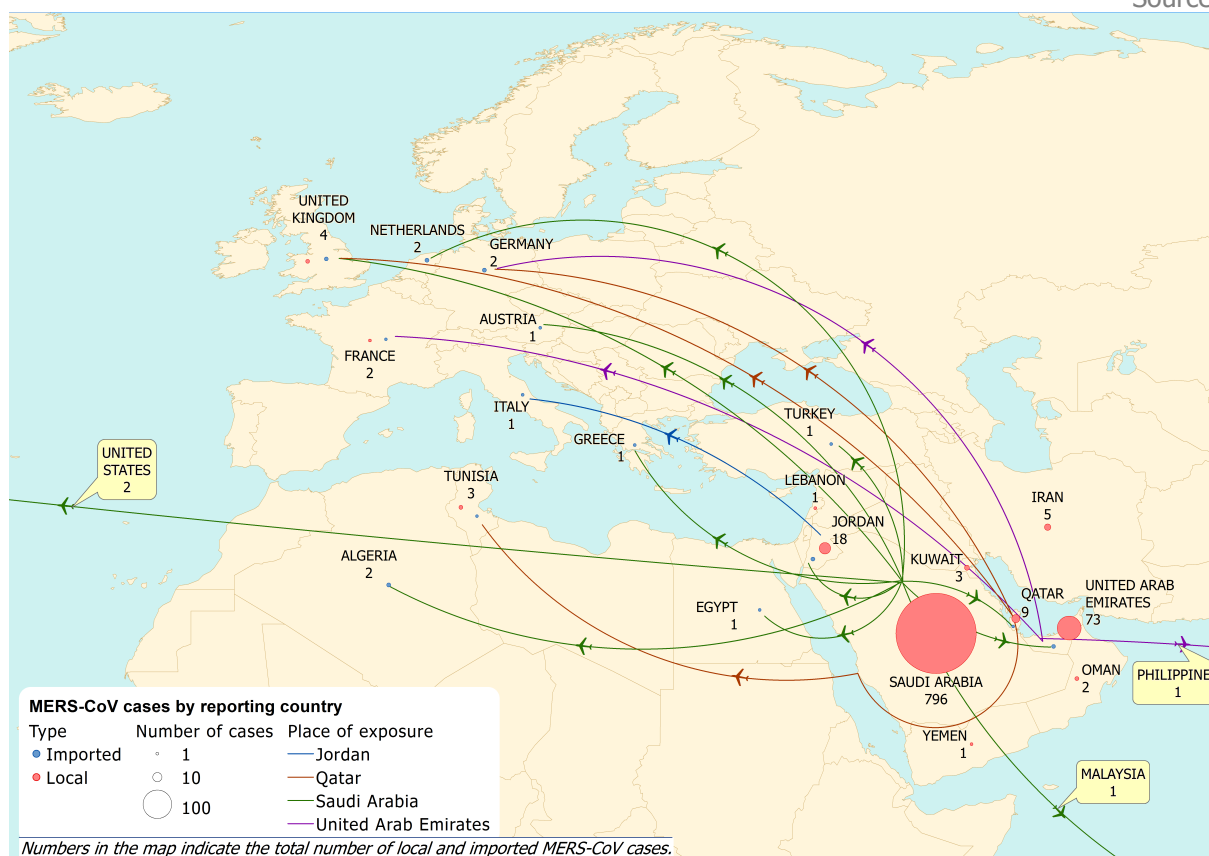
Data for November 2014 is incomplete



\* 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 6 November 2014 (n=932)

Source: ECDC



## Outbreak of Enterovirus D68 - USA and Canada

Opening date: 10 September 2014

Latest update: 6 November 2014

### Epidemiological summary

Hospitals in Missouri and Illinois were the first to document an increase of severe respiratory illness in children in the US in mid-August 2014. As of 6 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 11 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 27 October, [Canada](#) has reported confirmed cases in 8 provinces. As of 16 October 2014, 150 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

14/18



investigating possible link to EV-D68 in cases of paralysis in children.

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.

On 7 November, [Eurosurveillance](#) has 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:** [MMWR](#) | [CDC](#) | [Kansas Health institute](#) | [Illinois Department of Health](#) | [CDC Q&A](#) | [Public Health Canada](#) | [Alberta health services](#)

## 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: 6 November 2014

### Epidemiological summary

Worldwide in 2014, 278 cases have been reported to WHO so far, compared with 328 for the same time period in 2013. In 2014, nine countries have reported cases: Pakistan (235 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 that there is a potential risk for WPV being re-introduced to the EU/EEA. The highest risk of large poliomyelitis outbreaks occurs

15/18

in areas with clusters of unvaccinated populations and in people living in poor sanitary conditions, or a combination of the two.

**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 to the EU.

Following the declaration of polio as a PHEIC, ECDC updated its [risk assessment](#). ECDC has also prepared a background document with travel recommendations for the EU.

On 4 September 2014, [ECDC](#) 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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## Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 5 November 2014

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### Epidemiological summary

**Europe:** On 6 October 2014, [France](#) 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.

**Asia:** There is an ongoing outbreak of dengue fever infection in Japan. As of 20 October, the Ministry of Health, Labour and Welfare in Japan has reported 159 confirmed autochthonous cases of dengue fever. While cases were reported from throughout Japan, the majority of cases (142/159, 89.3%) were associated with visiting Yoyogi Park in Tokyo or its vicinity. The number of new cases is decreasing and the latest case was reported on 15 October. To date, DENV-1 has been identified, and it is likely of Southeast Asian origin.

In China, as 23 October 2014, nearly 40 000 dengue cases have been reported in Guangdong province and the most affected municipalities are Guangzhou (33 385 cases) and Foshan (3 289 cases), according to [media](#) quoting the National Health Planning Commission. However, in the past two weeks, the number of newly reported cases has stabilised. On 27 October, Hong Kong recorded its first autochthonous case of dengue fever in the last four years. A second [possible autochthonous](#) case is currently under investigation.

Over the past few weeks, Punjab province in Pakistan has been reporting increased dengue activity, particularly in Rawalpindi and Lahore.

Dengue cases are on the rise in [Sri Lanka](#) with 3 241 cases reported in October, according to the latest update from the Ministry of Health.

**Pacific:** Dengue outbreaks are ongoing in Tonga (DENV-3) and French Polynesia (DENV-1), according to the Pacific Public Health Surveillance Network (PACNET).

**Africa:** In Sudan, [media](#) quoting the Ministry of Health in North Darfur, report that two people died from dengue fever on 26 October and 15 others have been infected in four districts of El Fasher.

### Publications

A study published in [Eurosurveillance](#) describes 'Concurrent outbreaks of dengue, chikungunya and zika virus infections – an unprecedented epidemic wave of mosquito-borne viruses in the Pacific 2012-2014'.

A study published in [Emerging Infectious Diseases](#) describes an autochthonous case of dengue fever imported to England from Japan in September 2014.

**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.

**Actions**

ECDC has published a technical [report](#) on the climatic suitability for dengue transmission in continental Europe and [guidance for the surveillance of invasive mosquitoes](#).

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

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