

This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary

### EU Threats

#### West Nile virus - Multistate (Europe) - Monitoring season 2016

Opening date: 30 May 2016

Latest update: 4 November 2016

During the June-to-November transmission season, ECDC monitors the situation in EU Member States and neighbouring countries in order to inform the blood safety authorities of areas affected by West Nile fever and changes in the epidemiology of the disease.

→ Update of the week

This week, one new case has been reported from Romania, in Bucuresti.

#### Influenza - Multistate (Europe) - Monitoring 2016-2017 season

Opening date: 13 October 2016

Latest update: 4 November 2016

Influenza transmission in Europe shows a seasonal pattern, with peak activity during winter months. ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the [Flu News Europe website](#).

→ Update of the week

Week 43/2016 (24-30 October 2016).

Activity remained low in the region, with few samples testing positive for influenza viruses (2% of sentinel samples), being at levels similar to that observed for the same period in recent seasons.

Since week 40/2016, influenza A viruses have predominated, with most of those subtyped being A(H3N2).

## Non EU Threats

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

Opening date: 16 November 2015

Latest update: 4 November 2016

Since 1 February 2016, Zika virus infection and the related clusters of microcephaly cases and other neurological disorders constitute a public health emergency of international concern (PHEIC). Since 2015, and as of 3 November 2016, there have been 69 countries and territories reporting mosquito-borne transmission of the virus. According to WHO and as of 26 October 2016, 23 countries or territories have reported microcephaly and other central nervous system (CNS) malformations in newborns potentially associated with Zika virus infection.

→Update of the week

In the USA, 7 new locally-acquired cases have been reported in Florida since the last CDTR, bringing the cumulative number of locally-acquired cases to 188.

[Bolivia](#) and [Vietnam](#) have both confirmed the first microcephaly case potentially associated with Zika virus infection.

ECDC Zika map: The last reported case in Broward County, Florida was on 29 July 2016. Therefore, Broward County will be represented as "past transmission".

ECDC published the ninth update of the [rapid risk assessment](#) on 28 October.

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

Opening date: 24 September 2012

Latest update: 4 November 2016

Since April 2012 and as of 4 November 2016, 1 845 cases of MERS, including 704 deaths, have been reported by health authorities worldwide. The source of the virus remains unknown, but the pattern of transmission and virological studies point towards dromedary camels in the Middle East as 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 update of MERS-CoV on 12 October 2016, there have been fifteen cases reported from Saudi Arabia: Abha (1), Arar (2), Buraidah (4), Hufoof (5), Najran (1), Riyadh (1) and Urayah (1).

Thirteen of the cases are male and two are female. Of the 15 cases, five were classified as secondary cases. Of the five cases there were four, where nosocomial transmission was indicated, two of these were healthcare workers. One of the secondary case was identified as a household contact.

Of the ten primary cases two reported camel contact.

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

Opening date: 20 April 2006

Latest update: 4 November 2016

Cholera outbreaks are repeatedly reported from several countries in Africa, Asia and Americas. After the Hurricane Mathew hit Haiti on 4 October 2016, the number of cholera cases reported has been expected to increase.

→Update of the week

This week, cholera outbreaks continue to be reported in the Democratic Republic of Congo, South Sudan, Somalia, Central African Republic, Benin and Nigeria. In the Americas, Haiti is recovering after Hurricane Matthew, whose consequences might lead to an increase in the already high number of cholera cases.

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

Opening date: 8 September 2005

Latest update: 2 November 2016

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission of the virus has completely stopped and the world becomes polio-free. Polio was declared a Public Health Emergency of International Concern (PHEIC) by the World Health Organization (WHO) on 5 May 2014 due to concerns regarding the increased circulation and international spread of wild poliovirus during 2014. On 11 August 2016, at the [tenth meeting of the Emergency Committee](#), the temporary recommendations in relation to the PHEIC were extended for another three months. The World Health Organization recently declared wild poliovirus type 2 (WPV2) eradicated worldwide.

→Update of the week

During the past week one new case of wild poliovirus was reported in Afghanistan. No new circulating vaccine-derived poliovirus (cVDPV) were reported in the past week.

A new [field study](#) conducted in Sri Lanka has concluded that fractional dose inactivated polio vaccine (fIPV) is as effective as full-dose IPV in boosting mucosal immunity in OPV-primed populations.

On 11 November, the WHO Director-General will convene the eleventh meeting of the International Health Regulations (IHR) Emergency Committee for poliomyelitis.

## II. Detailed reports

### West Nile virus - Multistate (Europe) - Monitoring season 2016

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Opening date: 30 May 2016

Latest update: 4 November 2016

#### Epidemiological summary

Since the beginning of the 2016 transmission season and as of 4 November 2016, 206 cases of West Nile fever in humans have been reported in the EU Member States and 261 cases in the neighbouring countries.

**Source:** [ECDC WNF page](#) | [MoH Russia](#) | [MoH Israel](#)

#### ECDC assessment

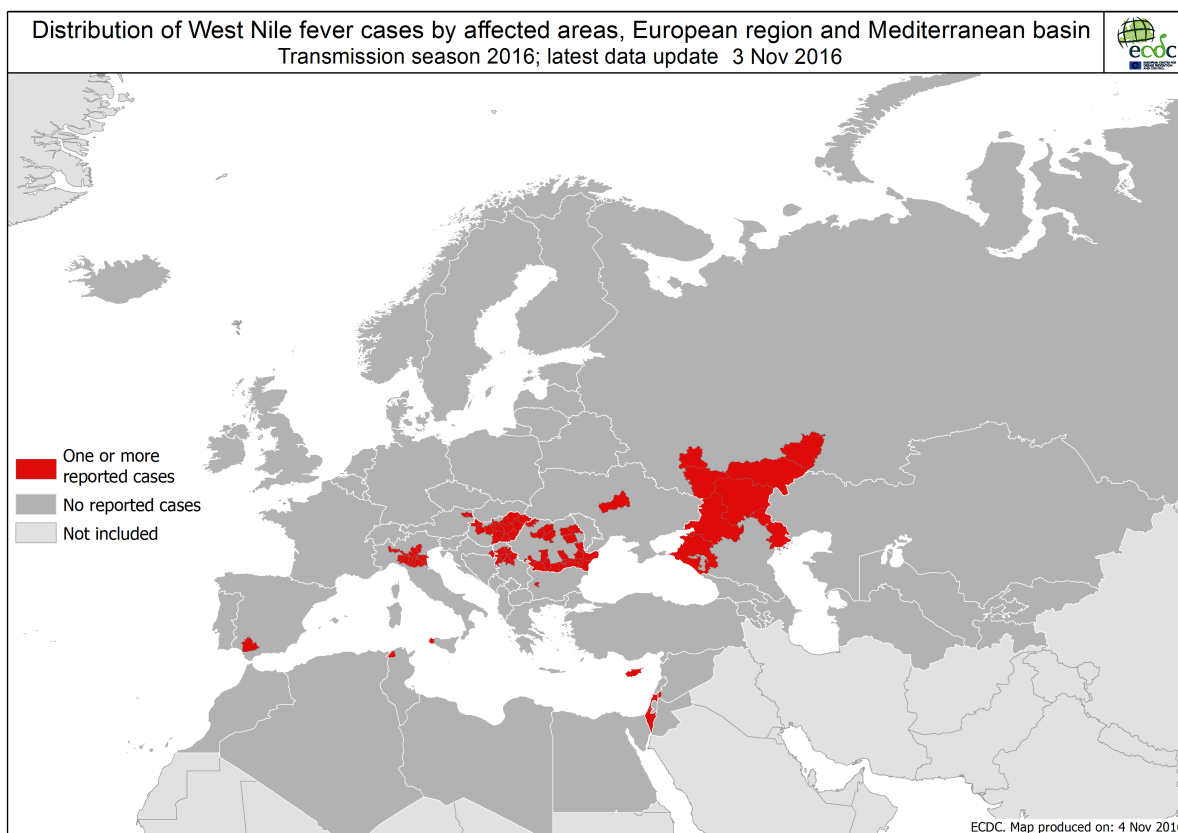
As expected at this time of the year, the weekly number of cases has started to decrease.

#### Actions

Since the beginning of June 2016, ECDC produces weekly WNF maps during the transmission season to inform blood safety authorities of WNF-affected areas.

## Distribution of West Nile fever cases by affected areas, European region and Mediterranean basin

ECDC



## Influenza - Multistate (Europe) - Monitoring 2016-2017 season

Opening date: 13 October 2016

Latest update: 4 November 2016

### Epidemiological summary

#### Week 43/2016 (24–30 October 2016)

Activity remained low in the region, with few samples testing positive for influenza viruses (2% of sentinel samples), being at levels similar to that observed for the same period in recent seasons.

Since week 40/2016, influenza A viruses have predominated, with most of those subtyped being A(H3N2).

#### Global update

As of the end of October, influenza activity in temperate southern hemisphere countries continued to decrease or remained low. Influenza activity in the temperate zone of the northern hemisphere remained at inter-seasonal levels. More information

### ECDC assessment

5/12

As is usual for this time of year, influenza activity is low in the European Region.

## Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the [Flu News Europe website](#). Risk assessments for the season are available from the European Centre for Disease Prevention and Control ([ECDC](#)) and the [WHO Regional Office for Europe](#) websites.

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

Opening date: 16 November 2015

Latest update: 4 November 2016

### Epidemiological summary

#### 1. Update on number of cases

##### The USA:

Five locally-acquired cases have been recorded in Florida over the past week. To date, 188 locally-acquired and 776 imported cases of Zika have been reported in Florida. The distribution of the locally-acquired cases is as follows: 176 in Miami-Dade, five in Palm Beach, one in Pinellas and one in Broward. The location of exposure for the other five cases is still under investigation.

##### EU/EEA imported cases:

Since July 2015 (week 26), 20 countries (Austria, Belgium, the Czech Republic, Denmark, Finland, France, Hungary, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom) have reported 1 944 travel-associated Zika virus infections through The European Surveillance System (TESSy). Over the same time period, seven EU countries reported 91 Zika cases among pregnant women.

Since February 2016, 12 countries have reported evidence of person-to-person transmission of Zika virus, probably via a sexual route.

#### 2. Update on microcephaly and/or central nervous system (CNS) malformations potentially associated with Zika virus infection

As of 26 October 2016, microcephaly and other central nervous system (CNS) malformations associated with Zika virus infection or suggestive of congenital infection have been reported by 23 countries or territories. Brazil reports the highest number of cases. Nineteen countries and territories worldwide have reported an increased incidence of Guillain-Barré syndrome (GBS) and/or laboratory confirmation of a Zika virus infection among GBS cases.

**Web sources:** [ECDC Zika Factsheet](#) | [PAHO](#) | [Colombian MoH](#) | [Brazilian MoH](#) | [Brazilian microcephaly case definition](#) | [SAGE MOH Brazil](#) | [Florida Health department](#)

### ECDC assessment

The spread of the Zika virus in the Americas and Asia is likely to continue as the vectors (*Aedes aegypti* and *Aedes albopictus* mosquitoes) are widely distributed there. The likelihood of travel-related cases in the EU is increasing. A detailed [risk assessment](#) was published on 28 October 2016. As neither treatment nor vaccines are available, prevention is based on personal protection measures. Pregnant women should consider postponing non-essential travel to Zika-affected areas.

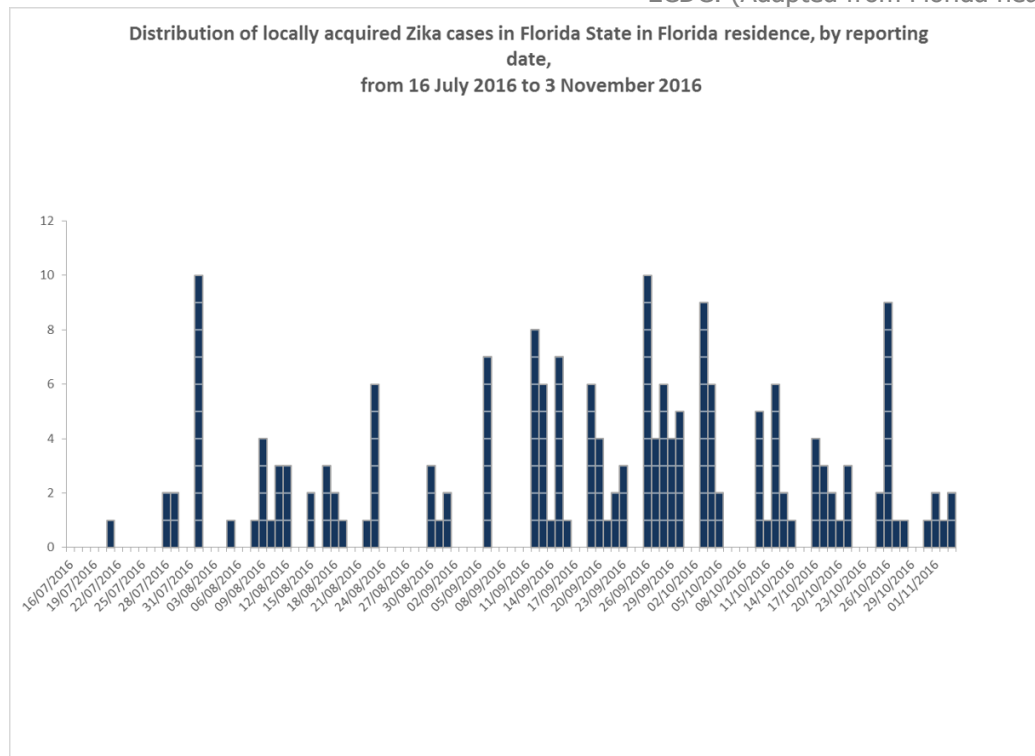
## Actions

ECDC publishes an [epidemiological update](#) every Friday together with [maps](#) containing information on countries or territories which have reported confirmed autochthonous cases of Zika virus infection. A Zika virus infection atlas is also available on the ECDC [website](#).

ECDC publishes information concerning vector distribution on the [ECDC website](#), showing the distribution of the vector species at 'regional' administrative level (NUTS3).

## Distribution of locally acquired Zika cases in Florida State (US), by reporting date, from 16 July 2016 to 3 November 2016

ECDC: (Adapted from Florida health department and media)



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

Opening date: 24 September 2012

Latest update: 4 November 2016

### Epidemiological summary

As of 4 November 2016, 1 845 cases of MERS, including 704 deaths, have been reported by health authorities worldwide.

**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](#)

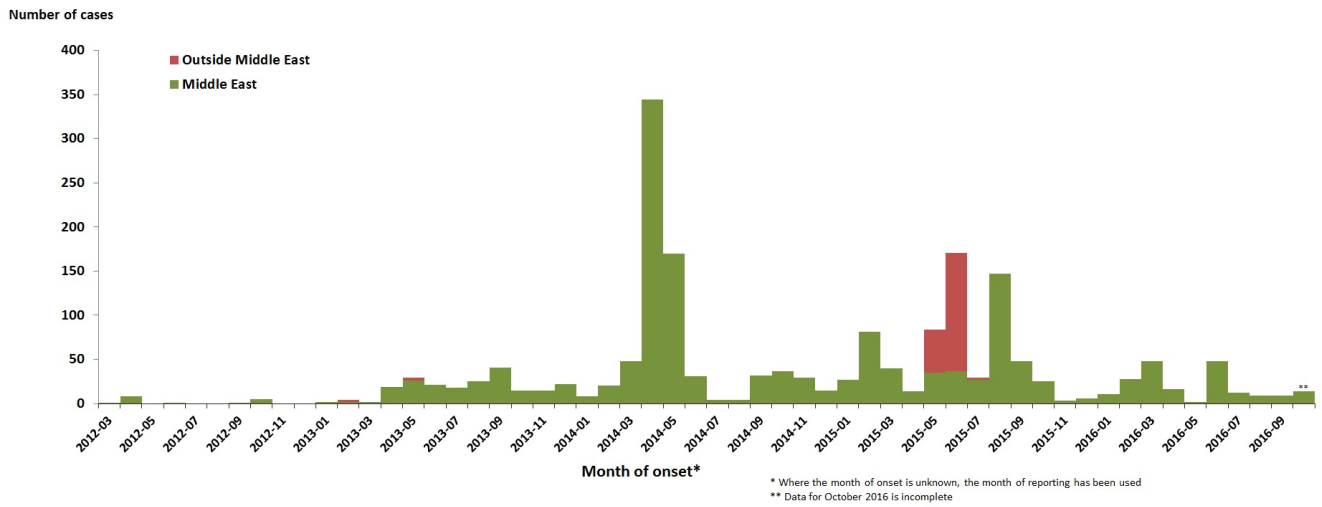
### ECDC assessment

The risk of sustained human-to-human transmission in Europe remains very low. The ECDC's conclusion continues to be that the MERS-CoV outbreak poses a low risk to the EU, as stated in the [Rapid Risk Assessment](#) published regarding the last case in Europe on 16 October 2014.

### Actions

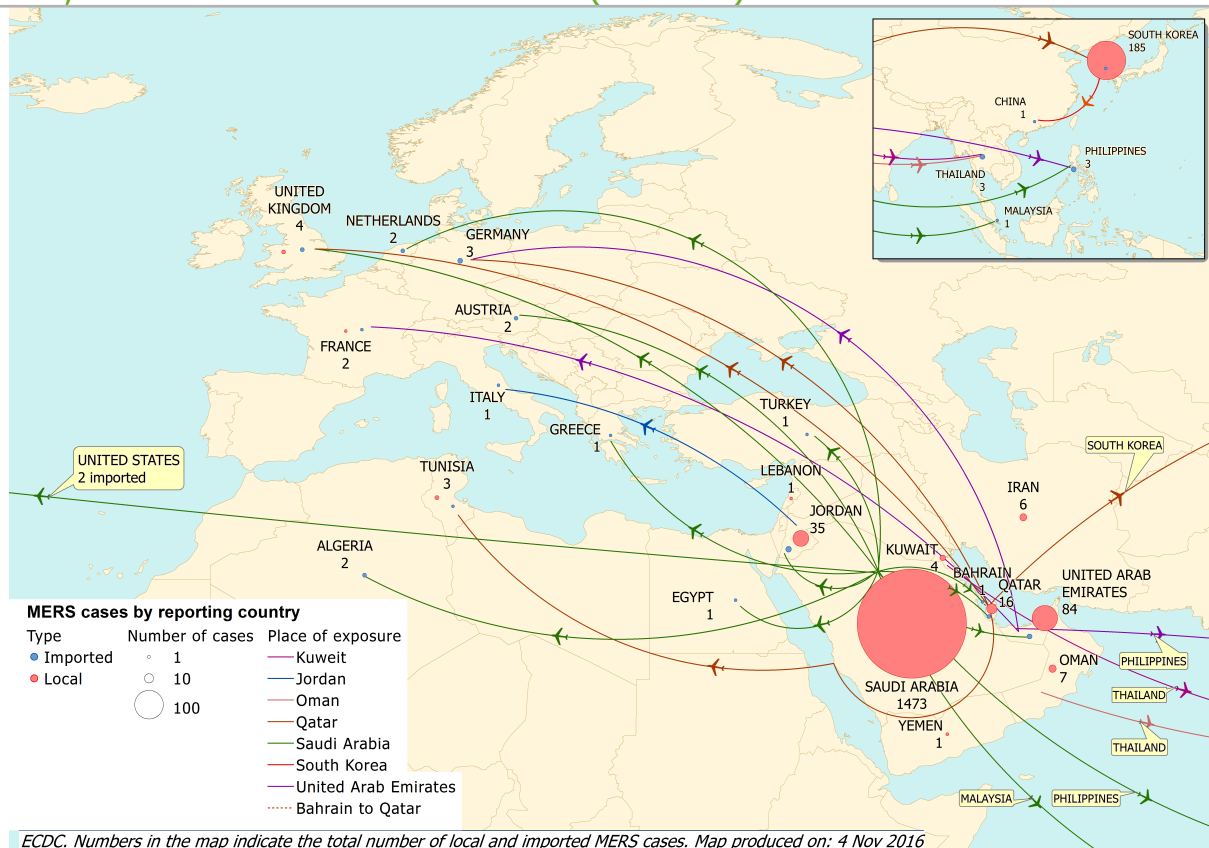
ECDC published the 21st update of its MERS CoV [rapid risk assessment](#) on 21 October 2015.

Distribution of confirmed cases of MERS-CoV by first available date, and probable place of infection, March 2012 – 4 November 2016 (n=1 843)





## Distribution of confirmed cases of MERS-CoV by place of reporting and probable place of infection, March 2012 – 4 November 2016 (n=1 845)



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

Opening date: 20 April 2006

Latest update: 4 November 2016

### Epidemiological summary

#### Africa

##### Uganda

In October, according to media there have been 40 cases and two deaths due to cholera in Amuru, Uganda.

##### Ghana

Since late October and as of 2 November, the Ministry of Health of Ghana, has confirmed that 157 cholera cases have been reported in the Central regional capital, Cape Coast.

##### **Central African Republic**

According to the weekly regional update the number of cases have sharply reduced in the past week. However, suspected cases of cholera are still being reported.

***The Democratic Republic of Congo***

In DRC since the beginning of 2016 and as of week 40, there have been 22 558 cases of these 546 were reported in week 40.

***Niger***

After a gastroenteritis rumour received on 20 October, an investigation was conducted in Niger health district Dosso, where 23 people were affected. There were six community deaths and three deaths in health facilities, an intra-hospital mortality of 17% and overall 39%. *Vibrio cholerae* O1, serotype Ogawa was isolated from the samples collected. A joint team from the Ministry of Health Niamey, Dosso, WHO and UNICEF was sent on October 26 to monitor the situation and needs.

***Cameroon***

As of week 41, 17 suspected cholera cases were reported compared to 61 in the same period in 2015. These cases are in six out of ten regions (Centre, East, Far North, Littoral, North and South). No cases have been laboratory confirmed.

***Somalia***

The number of reported cases of AWD/cholera in the first half of 2016 alone is 140 per cent higher than those reported for the whole of 2015.

***Burundi***

According to media, the community in Kinogono is the most affected by the cholera epidemic that is sweeping through Minago area in Rumonge province. The epidemic broke out on 9 October and has affected 13 people in total so far. Patients are treated at the centre for cholera treatment. Two patients are still hospitalized while 11 have already been discharged.

***Americas***

Between epidemiological week (EW) 1 and EW 38 of 2016, 29 630 cholera cases were reported in four countries of the Americas: the Dominican Republic (1 069), Ecuador (1), Haiti (28 559), and Mexico (1). Majority of the cases, 96.4% were reported in Haiti.

***Haiti***

Since 4 October 2016, the date of the hurricane, 3 500 suspected cases of cholera have been reported by [OCHA](#).

***Asia******Yemen***

Since the beginning of October and as of 1 November 2016, 67 confirmed cholera cases have been detected in Sanaa, Aden, Alhudaïda, Taiz and Ebb. There are 2 070 suspected cases in nine Governorates in Yemen.

**Source:** [Cholera platform](#)

**ECDC assessment**

In Haiti, the increase of number of cholera cases after the Hurricane on 4 October is a particular concern. A call for French-speaking epidemiologists to be deployed in Haiti through the GOARN mechanism has been distributed to the EU National Focal Points for Response and Threat Detection on 24 October 2016.

**Actions**

ECDC continues to monitor cholera outbreaks globally through its epidemic intelligence activities to identify significant changes in epidemiology and will report on a monthly base.

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

Opening date: 8 September 2005

Latest update: 2 November 2016

**Epidemiological summary**

As of 1 November 2016, 28 cases of WPV1 have been reported to WHO in 2016, compared with 51 for the same period in 2015. The cases were detected in Pakistan (15), Afghanistan (9) and Nigeria (4). Three cases of cVDPV have been reported in 2016, compared with 18 for the same period in 2015. The three cases were all reported from Laos.

**Web sources:** [Polio eradication: weekly update](#) | [ECDC Poliomyelitis factsheet](#) | [Temporary Recommendations to Reduce International Spread of Poliovirus](#) | [WHO Statement on the Seventh Meeting of the International Health Regulations Emergency Committee on Polio](#)

## ECDC assessment

The detection of new cases in Nigeria is not unusual nor unexpected. It is not an indication that the current outbreak response is not effective, as it is too early to see an impact on the epidemiology of the virus circulation. It is an indicator that surveillance continues to be strengthened.

Continued detection of positive environmental samples throughout 2016 in Pakistan confirms that virus transmission remains geographically widespread across the country, despite strong improvements being achieved.

The last locally-acquired wild polio cases within the current EU borders were reported from Bulgaria in 2001. The most recent wild polio outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

**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?](#) | [RRA Outbreak of circulating vaccine-derived poliovirus type 1 \(cVDPV1\) in Ukraine](#)

## Actions

ECDC monitors 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 reintroduced 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.

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