

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: 12 August 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 those areas affected by West Nile fever (WNF) and identify significant changes in the epidemiology of the disease.

→ Update of the week

During the past week, six new cases of West Nile fever have been reported in the EU Member States: Italy has reported two confirmed cases in Bologna, one confirmed case in Modena and one confirmed case in Ferrara. Romania has reported one confirmed case in Ialomita and one confirmed case in Ilfov. In countries neighbouring the EU: Serbia has reported one confirmed case in Grad Beograd and Russia has reported one confirmed case in Saratov.

## Non EU Threats

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

Opening date: 16 November 2015

Latest update: 12 August 2016

Since 1 February 2016, Zika virus infection and the related clusters of microcephaly cases and other neurological disorders have been declared to constitute a public health emergency of international concern (PHEIC). Since 2015, and as of 10 August 2016, WHO has reported 66 countries and territories with mosquito-borne transmission, including most recently the State of Florida in the USA. As of 10 August 2016, 15 countries or territories have reported microcephaly and other central nervous system (CNS) malformations potentially associated with Zika virus infection or suggestive of congenital infection.

#### →Update of the week

Between 4 August and 11 August 2016, the Florida Department of Health has reported ten additional non-travel related cases in Miami-Dade County. The Department of Health still believes that active transmission is only taking place in this previously identified one-square-mile area in Miami-Dade County. As of 11 August, the [Florida Department of Health](#) has reported 404 travel-related and 25 non-travel-related Zika infections and 57 infections in pregnant women. [Media](#) are reporting that three cases are being investigated that do not have a clear link with the one-square-mile area in Miami-Dade County, including one recent case in Palm Beach county.

A field trial for genetically-modified mosquitoes engineered to reduce *Aedes aegypti* populations in Florida has been approved by the [Food and Drug Administration](#) (FDA). However, mosquitoes still need to meet state and local requirements before they can be used. If approved, the mosquitoes will be released in Key Haven, Florida.

On 9 August, a Zika-related infant death of an infant born with birth defects including microcephaly in [Texas](#) received media attention as it was the first Zika-associated-death in Texas.

On 10 August, the [Cayman Islands](#) reported the first two cases of locally-acquired Zika virus.

### Summer Olympic and Paralympic Games - Brazil - 2016

Opening date: 1 August 2016

Latest update: 12 August 2016

The 2016 Summer Olympic Games officially started in Brazil on 5 August 2016 and will last until 21 August, with more than 10 500 athletes from 205 countries participating. The 2016 Paralympics will take place from 7 to 18 September, involving 4 350 athletes from 176 countries.

The Brazilian public health authorities have strengthened surveillance for this mass gathering event. As with previous events of this type, ECDC has enhanced its epidemic intelligence activities.

#### →Update of the week

On 10 August 2016, [media](#) reported that an athlete from the Brazilian womens basketball team had been diagnosed with mumps and consequently been suspended from the competition.

### Yellow fever outbreak- Multistate (world) - Monitoring global outbreaks

Opening date: 17 March 2016

Latest update: 12 August 2016

An outbreak of yellow fever in Angola started in December 2015 in the municipality of Viana, Luanda province, and has spread to all 18 provinces of Angola. On 23 April 2016, the neighbouring Democratic Republic of Congo (DRC) officially declared a yellow fever outbreak linked to the one in Angola. Other countries (Brazil, Chad, Colombia, Ghana, Peru, Republic of Congo, and Uganda) are all currently reporting yellow fever outbreaks or sporadic cases which are not linked to the Angolan outbreak.

#### →Update of the week

According to [WHO](#), the yellow fever epidemic in Angola appears to be declining, with no new cases confirmed in the last six weeks. According to ECHO, as of 8 August, there were 2 269 suspected cases and 74 confirmed cases reported in the Democratic Republic of Congo (DRC).

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

Opening date: 24 September 2012

Latest update: 12 August 2016

Since April 2012 and as of 11 August 2016, 1 815 cases of MERS, including 698 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

Between 14 July 2016 and 11 August 2016, Saudi Arabia has recorded seven new cases and five deaths in previously reported cases. The cases have occurred in Najran (1), Buraidah (1), Jubail (2), Hafof (1), Almodhannab (1) and Hurayima (1). Five of the seven cases are male, one is female and one is of unknown gender. One of the cases in Jubail is a healthcare worker. Three of the cases had direct or indirect contact with camels.

## Public health risks - Multistate - Refugee movements

Opening date: 4 November 2015

Latest update: 12 August 2016

Europe is experiencing its largest influx of refugees since the Second World War. According to the UN Refugee Agency (UNHCR), more than one million refugees arrived in Europe in 2015 and around 150 000 in 2016. To date, there have been reported cases of acute respiratory tract infection, louse-borne relapsing fever, cutaneous diphtheria, scabies, measles, meningococcal meningitis, shigellosis, typhoid fever, hepatitis A, tuberculosis and malaria among refugees. While these cases do not represent a significant disease burden for the host countries, the diseases pose a potential threat, particularly to the health of the refugees themselves.

### →Update of the week

On 8 August 2016, the Robert Koch Institute in Berlin published an [overview of measles cases](#) reported from asylum seeker centres in Germany over the period January to July 2016, showing a marked increase in reports of measles cases since mid-May.

From mid-May to 20 July 2016, 53 measles cases were reported from asylum seeker centres, compared to only three in the period January-April. According to the German authorities this increase seems to be concomitant with the arrival in Germany of groups of asylum seekers from Chechnya.

These 53 cases of measles were reported from 11 different asylum seeker centres across eight Federal states. All cases were in children aged 0–13 years, with the exception of two adults aged 21 and 22 years. Cases had travelled from Chechnya to Germany using different routes crossing Poland, Russia or Belarus. The initial case among Chechen asylum seekers was reported on 10 May 2016, a few days after arrival at a centre, suggesting infection was acquired while travelling. Similarly, symptoms appeared within a few days of arrival at the asylum seeker centres for several other cases, suggesting that the infection was likely to have been acquired while travelling to Germany. Typing pointed towards a strain that has been circulating in the Caucasus. Secondary cases were reported among residents and staff at the centres.

ECDC published an [epidemiological update](#) on the issue, highlighting the potential for measles outbreaks in structures hosting migrants and asylum seekers and the need for staff working in migrant reception centres to be vaccinated against measles.

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

Opening date: 8 September 2005

Latest update: 12 August 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 WHO on 5 May 2014 due to concerns regarding the increased circulation and international spread of wild poliovirus during 2014. On 20 May 2016, at the ninth 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 eradicated worldwide.

### →Update of the week

On 10 August 2016, WHO reported that wild poliovirus type one (WPV1) has been detected from Borno state in Nigeria during the month of July in two children with acute flaccid paralysis and close healthy contacts. Nigeria had been polio-free for two years before the detection of these two new cases. Pakistan and Afghanistan have not recorded additional cases this week.

## II. Detailed reports

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

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Opening date: 30 May 2016

Latest update: 12 August 2016

#### Epidemiological summary

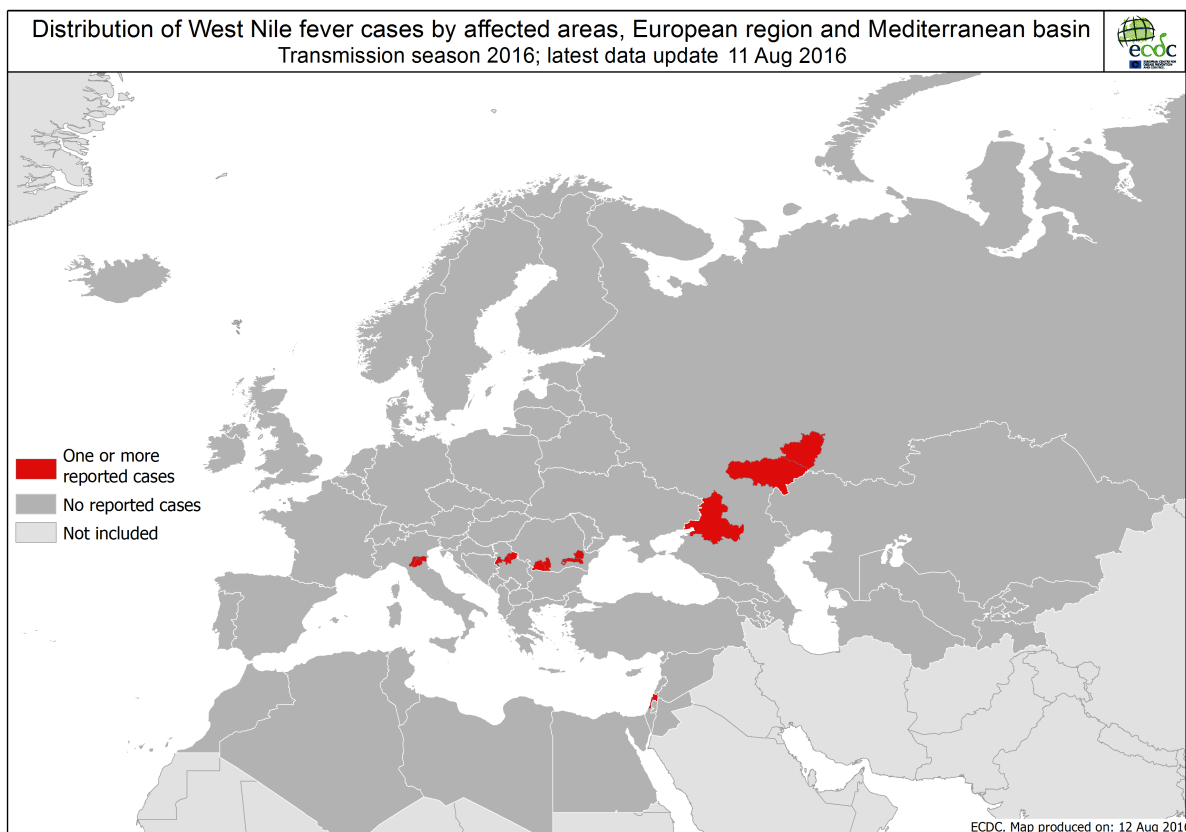
As of 11 August 2016, 11 cases of West Nile fever in humans have been reported in the EU Member States and 24 cases in the neighbouring countries, since the beginning of the 2016 transmission season.

#### ECDC assessment

West Nile virus infection in humans is a notifiable disease in the EU. National health authorities consider the implementation of control measures important for ensuring blood safety when human cases of West Nile fever occur. In accordance with the [EU blood directive](#), blood donors should be deferred from donation for 28 days after leaving a risk area of locally-acquired West Nile Virus unless an individual Nucleic Acid Test (NAT) is negative.

#### Actions

From week 22 onwards, ECDC produces weekly West Nile fever (WNF) maps during the transmission season (i.e. June to November) to inform blood safety authorities of WNF-affected areas.



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

Opening date: 16 November 2015

Latest update: 12 August 2016

### Epidemiological summary

#### EU/EEA imported cases:

Since week 45/2015, 18 countries (Austria, Belgium, the Czech Republic, Denmark, Finland, France, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Romania, Slovenia, Spain, Sweden and the UK) have reported 1 230 travel-associated Zika virus infections through [The European Surveillance System \(TESSy\)](#).

#### EU's Outermost Regions and Territories

As of 11 August 2016:

*Guadeloupe:* 27 330 suspected cases have been detected, an increase of 815 suspected cases since last week. The weekly number of cases has decreased compared to the previous two weeks.

*French Guiana:* 9 400 suspected cases have been detected, an increase of 65 cases since last week. The weekly number of cases

5/11

has been decreasing over the last two weeks.

*Martinique*: 34 740 suspected cases have been reported, an increase of 250 since last week. The weekly number of cases is declining.

*St Barthélemy*: 440 suspected cases have been detected, an increase of 65 suspected cases since last week. The virus is still actively circulating.

*St Martin*: 1 895 suspected cases have been detected, an increase of 75 suspected cases since last week. The weekly number of cases has decreased compared to the previous week.

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

As of 10 August 2016, microcephaly and other central nervous system (CNS) malformations associated with Zika virus infection or suggestive of congenital infection had been reported by 15 countries or territories. Brazil has reported the highest number of cases. Sixteen 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.

Since February 2016, 11 countries have reported evidence of person-to-person transmission of Zika virus, probably via a sexual route.

In the EU, Spain (2) and Slovenia (1) have reported congenital malformations associated with Zika virus infection after travel in the affected areas. Cases have also been detected in the EU's Outermost Regions and Territories in Martinique, French Guiana and French Polynesia.

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

### ECDC assessment

The spread of the Zika virus epidemic in the Americas 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 is available [here](#). 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 published an updated [Rapid Risk Assessment](#) on 12 July 2016.

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

## Summer Olympic and Paralympic Games - Brazil - 2016

Opening date: 1 August 2016

Latest update: 12 August 2016

### Epidemiological summary

#### Host country - Brazil

In addition to the weekly summary, no further health events have been detected.

#### Europe and rest of the world

No major events related to Rio 2016 have been detected.

The Olympic Games officially started on 5 August 2016.

### ECDC assessment

Visitors to the 2016 Olympics and Paralympics Summer Games in Rio de Janeiro, Brazil will be most at risk of gastrointestinal

illness and vector-borne infections. Therefore, they should ensure standard hygiene measures to reduce the risk of gastrointestinal illness and protect themselves against mosquito/other insect bites using insect repellent and by wearing long-sleeved shirts and trousers in regions where vector-borne diseases are endemic.

## Actions

ECDC published a [risk assessment](#) on 9 June 2016. ECDC is monitoring this event from 1 August until 23 September 2016 through epidemic intelligence.

## Yellow fever outbreak- Multistate (world) - Monitoring global outbreaks

Opening date: 17 March 2016

Latest update: 12 August 2016

### Epidemiological summary

In **Angola**, since 5 December 2015 and as of 5 August 2016, there have been 3 867 suspected cases, 879 of which were laboratory-confirmed, according to [WHO](#). There were 369 (CFR 9.7%) deaths among the suspected cases and 119 (CFR 13.5%) among the confirmed cases. Local transmission has been documented in 45 districts across 12 provinces. No laboratory-confirmed cases of yellow fever have been reported in Luanda or Huambo since May.

Since the start of the year and as of 8 August 2016, the **Democratic Republic of Congo (DRC)** has reported 2 269 suspected and 74 confirmed cases (56 cases imported from Angola, 12 autochthonous, three sylvatic and three still being investigated), according to the latest [ECHO report](#). The number of reported fatalities among the confirmed cases is 16 (21.6%). Confirmed cases have been reported mainly in Kinshasa (17), Kongo Central (37) and Kwango (16). Sylvatic cases were reported in Bas Uele (1), Kasai (1) and Tshuapa (1). Recently Lualaba province reported one (1) imported case.

In DRC, a mass preventive vaccination campaign against Yellow Fever is planned to start on 17 August. The campaign should cover 32 health districts (targeting approx. 7.6 million people) in Kinshasa and 15 health districts bordering Angola (targeting approx. 2.9 million people).

**Web sources:** [ECDC factsheet /WHO yellow fever page](#) | [WHO AFRO](#) | [WHO-DRC](#) | [PAHO](#) | [MoH Peru](#) | [ECDC updated risk assessment](#) | [DRC Health Cluster bulletin](#) | [PAHO update 26 July](#) |

### ECDC assessment

Yellow fever in an urban setting is a public health emergency that may result in a large number of cases. The outbreak in Angola appears to be declining, with no new confirmed cases in the last six weeks. In the DRC, control efforts are still ongoing. The risk of continuous spread in affected and non-affected countries across West-Central and East Africa is one of the main challenges with regard to control of the epidemic.

In Europe, the *Aedes aegypti* mosquito is present on the island of Madeira, Portugal. In week 30, vector activity is still considered low in Madeira according to the latest entomological situation report published by [local health authorities](#).

## Actions

ECDC published new [mosquito maps](#) on 3 August showing the geographical distribution of *Aedes* mosquitoes in Europe.

ECDC published an updated [risk assessment](#) on 14 July 2016.

ECDC published a [report on the assessment of yellow fever in Angola](#) on 5 July 2016.

An [EU mobile lab](#) has been deployed in the DRC under the European Medical Corps since 19 July 2016.

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

Opening date: 24 September 2012

Latest update: 12 August 2016

### Epidemiological summary

As of 11 August 2016, 1815 cases of MERS, including 698 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 MERS outbreak in the Middle East poses a low risk to the EU. Efforts to contain the nosocomial clusters in the affected countries are vital to prevent wider transmission. Although it is likely that zoonotic transmission is the starting point of most clusters, human-to-human transmission is the most common mode of transmission for MERS-CoV. Human-to-human transmission occurs mostly in healthcare settings and, to a much more limited extent, within communities, mainly within households. So far, the majority of cases have been reported from hospital outbreaks in Saudi Arabia, the United Arab Emirates and South Korea.

Most nosocomial transmissions occur when infection prevention and control precautions are applied sub-optimally and before a specific case is suspected or confirmed. Successfully preventing amplification of MERS-CoV infections associated with healthcare facilities depends on the effective implementation of infection prevention and control programmes.

## 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 country of reporting, March 2012 – 11 August 2016 (n=1 815)

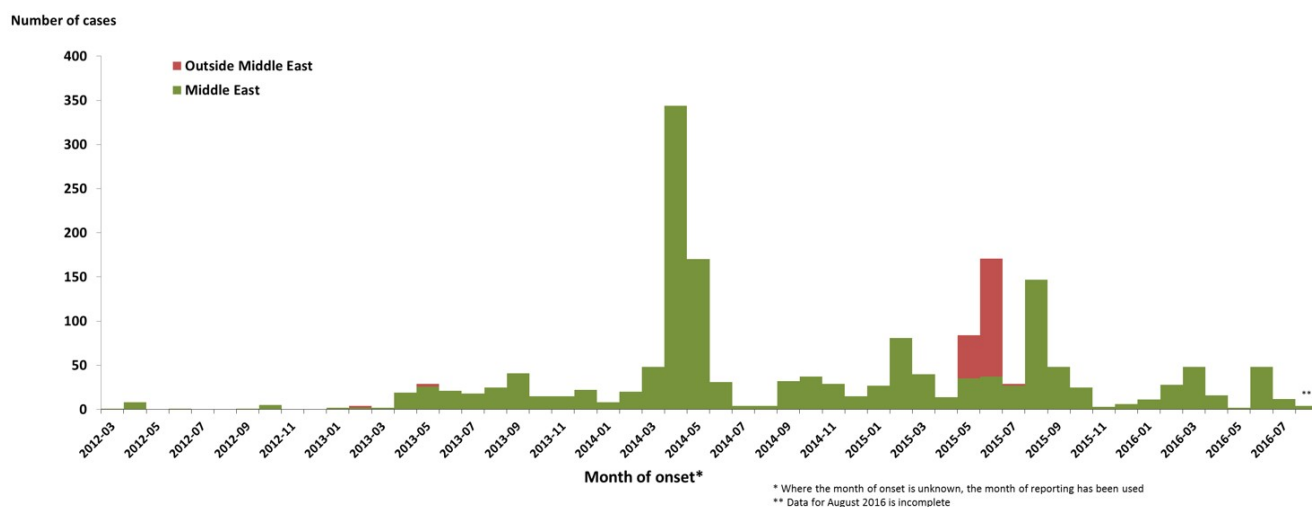
ECDC

Region	Country	Number of cases	Number of deaths
Middle East	Saudi Arabia	1445	610
	United Arab Emirates	84	12
	Qatar	16	5
	Jordan	35	14
	Oman	7	3
	Kuwait	4	2
	Egypt	1	0
	Yemen	1	1
	Lebanon	1	0
	Bahrain	1	0
Europe	Iran	6	2
	Turkey	1	1
	UK	4	3
	Germany	3	2
	France	2	1
	Italy	1	0
	Greece	1	1
	Netherlands	2	0
Africa	Austria	1	0
	Tunisia	3	1
Asia	Algeria	2	1
	Malaysia	1	1
	Philippines	3	0
	South Korea	185	38
	China	1	0
Americas	Thailand	2	0
	United States of America	2	0
	<b>Global</b>	<b>1815</b>	<b>698</b>



## Distribution of confirmed cases of MERS-CoV by first available date, and probable place of infection, March 2012 – 11 August 2016 (n=1 815)

ECDC



## Public health risks - Multistate - Refugee movements

Opening date: 4 November 2015

Latest update: 12 August 2016

### Epidemiological summary

Emerging episodes of communicable diseases have been reported to affect refugee populations, including acute respiratory tract infections, louse-borne relapsing fever, cutaneous diphtheria, scabies, measles, meningococcal meningitis, shigellosis, typhoid fever, hepatitis A, tuberculosis and malaria.

### ECDC assessment

Refugees are currently not a public health threat to Europe with regard to communicable diseases, but they are a priority group for communicable disease prevention and control efforts as they are more vulnerable.

[WHO, UNHCR and UNICEF](#) jointly recommend that refugees, asylum seekers and migrants – irrespective of their legal status – should have non-discriminatory, equitable access to healthcare services, including vaccines and vaccination. They should be provided with timely immunisation against vaccine-preventable diseases, particularly measles and polio. All countries should have effective disease surveillance and reporting systems, outbreak investigation ability and case management and response capacity.

### Actions

ECDC has published:

- an [RRA](#) on the risk of communicable disease outbreaks in refugee populations in the EU/EEA
- an updated [RRA](#) on louse-borne relapsing fever among migrants in the EU/EEA

- an [RRA](#) on cutaneous diphtheria among recently-arrived refugees and asylum seekers in the EU
- an [RRA](#) on the risk of importation and spread of malaria and other vector-borne diseases associated with the arrival of migrants in the EU
- an [RRA](#) on shigellosis among refugees in the EU.

ECDC, in collaboration with Member States, the European Commission and WHO, continues to closely monitor the situation to rapidly identify and assess potential communicable disease threats.

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

Opening date: 8 September 2005

Latest update: 12 August 2016

### Epidemiological summary

In 2016, 21 cases of wild poliovirus type 1 (WPV1) have been reported so far, compared with 36 for the same period in 2015. The cases were detected in Pakistan (13) and Afghanistan (6) and Nigeria (2). As of 4 August 2016, three cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO in 2016, all from Laos. There were 12 cVDPV cases during the same period in 2015.

**Web sources:** [Polio eradication: weekly update](#) | [MedISys Poliomyelitis](#) | [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 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.

Following the detection of the cases of circulating vaccine-derived poliovirus type 1 in Ukraine, ECDC published a rapid risk assessment on its [website](#).

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