

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

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

Opening date: 13 October 2016

Latest update: 25 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

In week 46/2016 influenza activity remained at baseline intensity levels.

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

Opening date: 30 May 2016

Latest update: 25 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

During the past week, Italy reported six new cases, one in the newly affected province of Lodi and five in the already affected provinces of Mantova (4) and Milano (1). Two of these cases have the date of onset in the second week of November. No new cases were reported in the neighbouring countries.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 25 November 2016

Measles, a highly transmissible vaccine-preventable disease, is still endemic in some EU countries where vaccination uptake remains below the level required to interrupt the transmission cycle. Elimination of measles requires consistent vaccination uptake above 95% with two doses of measles vaccine in all population groups, strong surveillance and effective outbreak control measures. In 2015, 16 EU/EEA countries were above the measles vaccination coverage target of 95% for the first dose, and six countries for the second dose. Fourteen countries in the EU have coverage rates of less than 95% for the first dose and 20 countries for the second dose.

→Update of the week

Since the beginning of October 2016, measles outbreaks were reported in the United Kingdom and Romania. Outside of the EU, outbreaks were detected in Liberia and Sudan.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 25 November 2016

Rubella, caused by the rubella virus and commonly known as German measles, is usually a mild and self-limiting disease which often passes unnoticed. The main reason for immunising against rubella is the high risk of congenital malformations associated with rubella infection during pregnancy. All EU Member States recommend vaccination against rubella with at least two doses of vaccine for both boys and girls. The vaccine is given at the same intervals as the measles vaccine as part of the MMR vaccine. No new outbreaks have been detected in the EU since June 2015.

→Update of the week

No new outbreaks have been detected since June 2015.

Non EU Threats

Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015

Latest update: 25 November 2016

From 1 February to 18 November 2016, Zika virus infection and the related clusters of microcephaly cases and other neurological disorders constituted a public health emergency of international concern. Since 2015 and as of 24 November 2016, 71 countries and territories have reported evidence of mosquito-borne transmission of the virus, while 28 countries or territories have reported microcephaly and other central nervous system malformations in newborns potentially associated with Zika virus infection.

→Update of the week

The PHEIC regarding Zika virus infection, microcephaly and other neurological disorders was lifted on 18 November 2016. A sustained programme with dedicated resources will now be implemented to address the long-term nature of Zika virus infection and its associated consequences. In the USA, six new locally-acquired cases have been reported in Florida since the last CDTR and as of 22 November. In the ECDC map of countries and territories with autochthonous vector-borne transmission of Zika virus infection, the status of Pinellas County (Florida) changed to past transmission as no new cases have been reported in the past three months.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 25 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 November 2016, at the eleventh [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

One case of wild poliovirus and one WPV1 positive environmental sample was detected in the past week in Pakistan.

No new circulating vaccine-derived poliovirus (cVDPV) were reported in the past week.

II. Detailed reports

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

Opening date: 13 October 2016

Latest update: 25 November 2016

Epidemiological summary

Week 46/2016 (14–20 November 2016):

The positivity rate of influenza detections in the sentinel system crossed the 10% threshold.

However, despite increases across many countries, influenza activity remained at baseline intensity levels.

Season overview

This is the earliest week that the 10% threshold has been passed since the emergence of A(H1N1)pdm09 viruses in the 2009-2010 season, while in the last five seasons it was passed between weeks 49 and 51. Since week 40/2016, influenza A viruses have predominated, with most of those subtyped being A(H3N2). Few influenza-confirmed cases have been reported from hospital settings so far.

ECDC assessment

This week, despite increases across many countries, influenza activity remained at baseline intensity levels 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.

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

Opening date: 30 May 2016

Latest update: 25 November 2016

Epidemiological summary

Since the beginning of the 2016 transmission season and as of 25 November 2016, 210 cases of West Nile fever in humans have been reported in EU Member States. A total of 264 cases were reported from neighbouring countries.

Source: [ECDC WNF page](#)

ECDC assessment

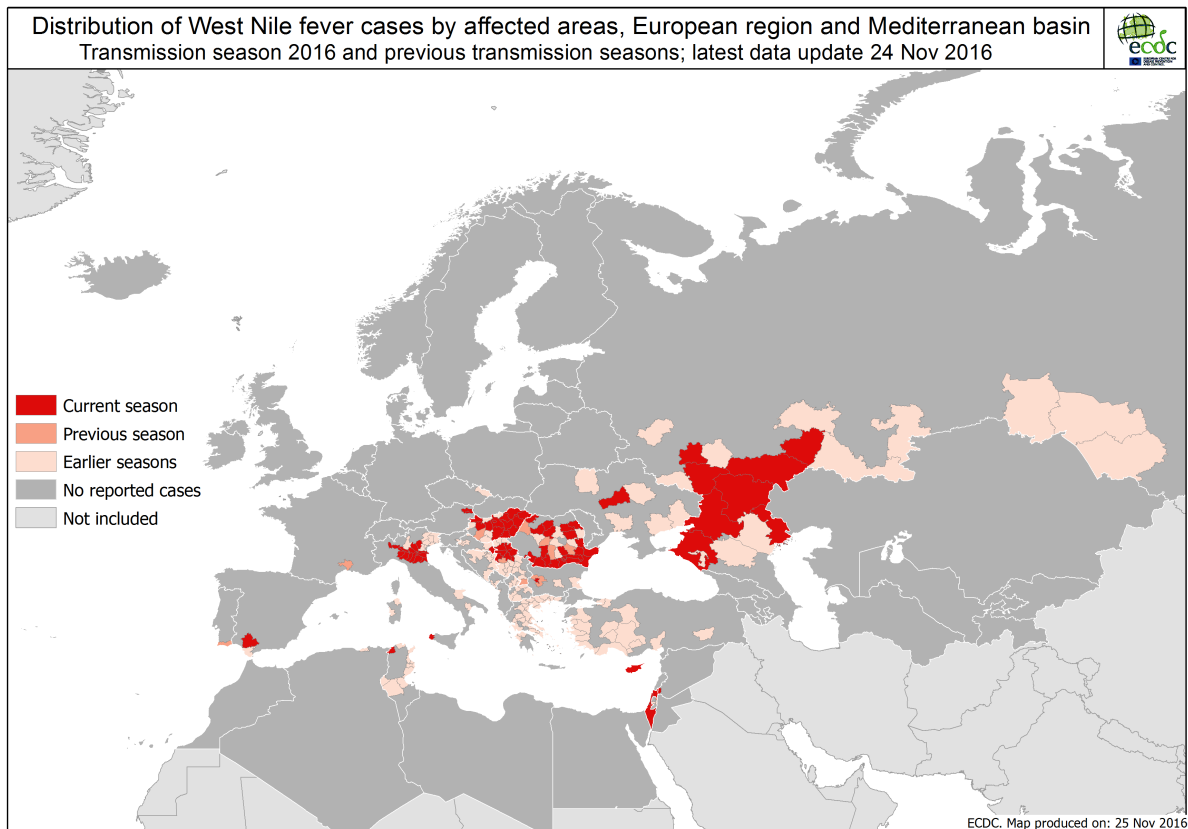
As expected at this time of the year, the weekly number of cases has started to decrease.

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



Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 25 November 2016

Epidemiological summary

EU/EEA Member States

UK, Scotland

Scottish health authorities report an ongoing measles outbreak in the Edinburgh area since the beginning of October. The latest report of 17 November shows that there has been one new confirmed case of measles in the past week, which raises the total to 18 confirmed cases. The outbreak has been ongoing since 12 October 2016 and the majority of cases are linked to Edinburgh University.

Romania – update

As of 18 November, 1 308 cases of measles have been reported since the beginning of 2016. These cases are either laboratory

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confirmed, or had an epidemiological link to a laboratory-confirmed case. The highest notification rates are in infants and young children. Six deaths have been notified in 2016. Thirty of 42 districts have reported cases, with Arad the most affected (363 cases). Vaccination activities are ongoing in order to cover communities with suboptimal vaccination coverage. As of 18 November, 3 215 children have been vaccinated.

Rest of the world

Liberia

The Margibi County Health Team has confirmed the second outbreak of measles in the county in 2016. In the first three weeks of October, the Firestone Health District has reported 15 cases of measles, four were confirmed positive and six negative. The rest of the results are still pending.

Between January and October 2016, the county has reported 253 cases of measles in the four health districts, with a case fatality rate of 0.79 percent.

Sudan

Since the beginning of 2016 and as of 13 November 1 842 measles cases including at least 19 deaths (case-fatality rate 1.03%) have been reported in the Weekly Epidemiological Bulletin Integrated Disease Surveillance and Response (IDSR) in the Republic of South Sudan.

Web sources: [ECDC measles and rubella monitoring](#) | [ECDC/Euronews documentary](#) | [MedISys Measles page](#) | [EUVAC-net ECDC](#) | [ECDC measles factsheet](#) | [NPHI Romania](#) | [NHS Lothian - Edinburgh](#)

ECDC assessment

Measles is targeted for elimination in Europe. Elimination is defined as the absence of endemic cases in a defined geographical area for a period of at least 12 months, in the presence of a well performing surveillance system. Regional elimination can be declared after 36 or more months of the absence of endemic measles or rubella in all Member States.

Although progress has been made towards elimination, it has not yet been achieved. According to the results of the 5th Regional Verification Commission meeting for the elimination of measles and rubella in Europe, held 24-26 October 2016, 24 countries in the region have been judged to have eliminated measles.

Web source: [WHO-EU](#)

Actions

ECDC monitors measles transmission and outbreaks in the EU and neighbouring countries through enhanced surveillance and epidemic intelligence activities.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 25 November 2016

Epidemiological summary

No new outbreaks have been detected in the EU since June 2015.

Web sources: [ECDC measles and rubella monitoring](#) | [ECDC rubella factsheet](#) | [WHO epidemiological brief summary tables](#) | [WHO epidemiological briefs](#) | [Progress report on measles and rubella elimination](#) | [European Regional Verification Commission for Measles and Rubella Elimination \(RVC\) \(2016\)](#)

ECDC assessment

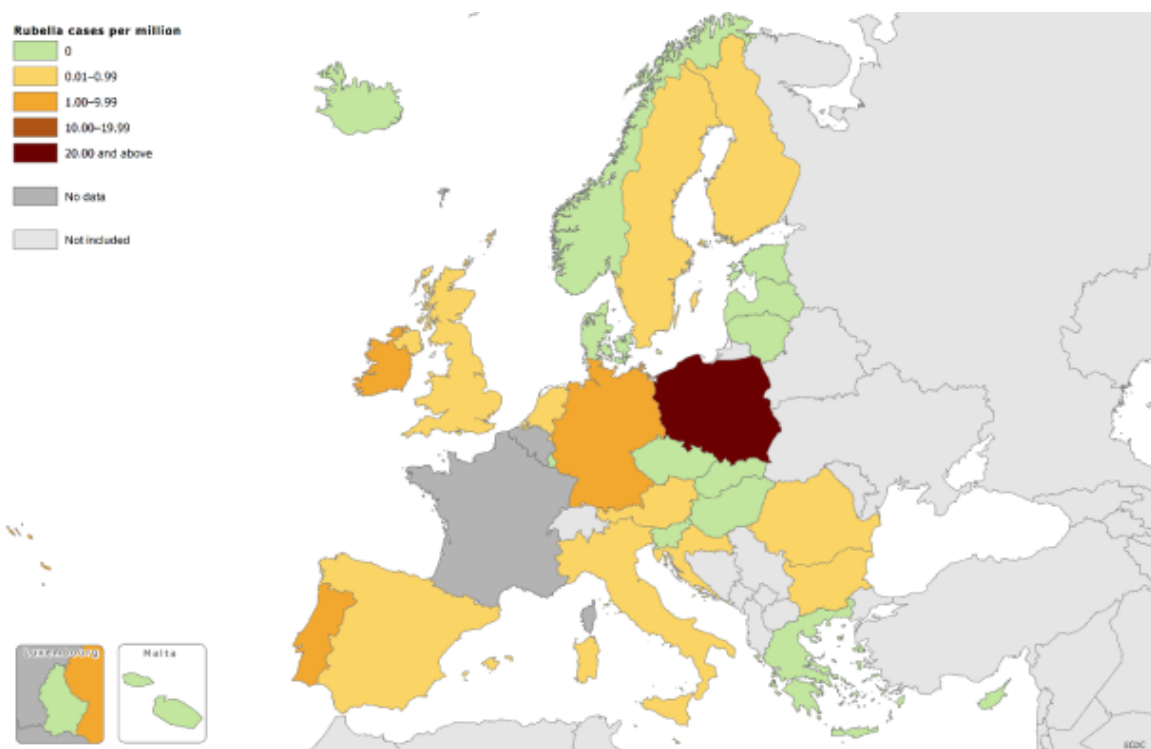
The World Health Organization (WHO) has targeted the elimination of measles and rubella in the 53 Member States of the WHO European Region. Elimination is defined as the absence of endemic cases in a defined geographical area for a period of at least 12 months, in the presence of a well-performing surveillance system. Regional elimination can be declared after 36 or more months of the absence of endemic measles or rubella in all Member States of the WHO European Region. Although progress has been made towards elimination, this goal has not yet been achieved. The 5th Regional Verification Commission meeting was held 24-26 October 2016. According to the results, 24 countries in the WHO EURO region have been judged to have eliminated rubella.

Web source: [WHO-EU](#)

Actions

ECDC closely monitors rubella transmission in Europe by analysing the cases reported to The European Surveillance System and through its epidemic intelligence activities. Twenty-four EU and two EEA countries contribute to the enhanced rubella surveillance. The purpose of the enhanced rubella surveillance is to provide regular and timely updates on the rubella situation in Europe in support of effective disease control, increased public awareness, and the achievement of rubella and congenital rubella elimination target.

Rubella notification rate (cases per million) by country, 1 July 2015 – 30 June 2016, EU/EEA



Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015

Latest update: 25 November 2016

Epidemiological summary

1. Update on the public health emergency of international concern

The fifth meeting of the Emergency Committee (EC) convened by the Director-General under the International Health Regulations (IHR) regarding Zika virus infection, microcephaly and other neurological disorders was held on 18 November 2016. The EC originally recommended a public health emergency of international concern (PHEIC) on 1 February 2016 on the basis of an extraordinary cluster of microcephaly and other neurological disorders reported in Brazil, following a similar cluster in French Polynesia and geographic and temporal association with Zika virus infection which required urgent and coordinated and research. Because research has now demonstrated the link between Zika virus infection and microcephaly, the EC felt that a robust longer-term technical mechanism was now required to manage the global response and research agenda. Although Zika virus infection and its associated consequences remain a significant enduring public health challenge requiring intense action, it does no longer represent a PHEIC as defined under the IHR. The EC recommended that a sustained programme of work with dedicated resources should be implemented to address the long-term nature of the disease and its associated consequences. Based on this advice, the Director-General declared the end of the PHEIC.

2. Update on number of cases

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Worldwide

For the first time in the past week, no new country or territory reported mosquito-borne Zika virus infections. Since 2015 and as of 24 November 2016, 71 countries and territories have reported evidence of mosquito-borne transmission of the virus. Since February 2016 and as of 24 November 2016, 12 countries or territories have reported evidence of person-to-person transmission of the virus, probably via sexual route.

USA

In the USA, six new locally-acquired cases of Zika virus infection have been reported in Florida since the last CDTR and as of 22 November 2016. As of this date, 236 locally-acquired and 950 travel-related cases have been reported in Florida.

EU/EEA imported cases

Since June 2015 (week 26), 20 countries (Austria, Belgium, the Czech Republic, Denmark, Finland, France, Hungary, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom) have reported 1 996 travel-associated Zika virus infections through The European Surveillance System (TESSy). Over the same time period, eight EU/EEA Member States reported 99 Zika cases among pregnant women.

EU's outermost regions and overseas territories

As of epidemiological week 46, the overall number of cases has been decreasing in the affected French overseas regions and collectivities, with about 20 suspected cases reported in Martinique, 45 in French Guiana, less than 25 in Guadeloupe, 10 in St Barthelemy and 50 in St Martin.

3. Update on microcephaly and/or central nervous system malformations potentially associated with Zika virus infection

No new country or territory reported microcephaly and other central nervous system (CNS) malformations or Guillain-Barré syndrome (GBS) cases potentially associated with Zika virus infection for the first time in the past week.

As of 24 November 2016, 28 countries or territories have reported microcephaly and other CNS malformations in newborns potentially associated with Zika virus infection. Brazil reports the highest number of cases. As of 24 November 2016, 19 countries or territories have reported GBS potentially associated with Zika virus infection.

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.

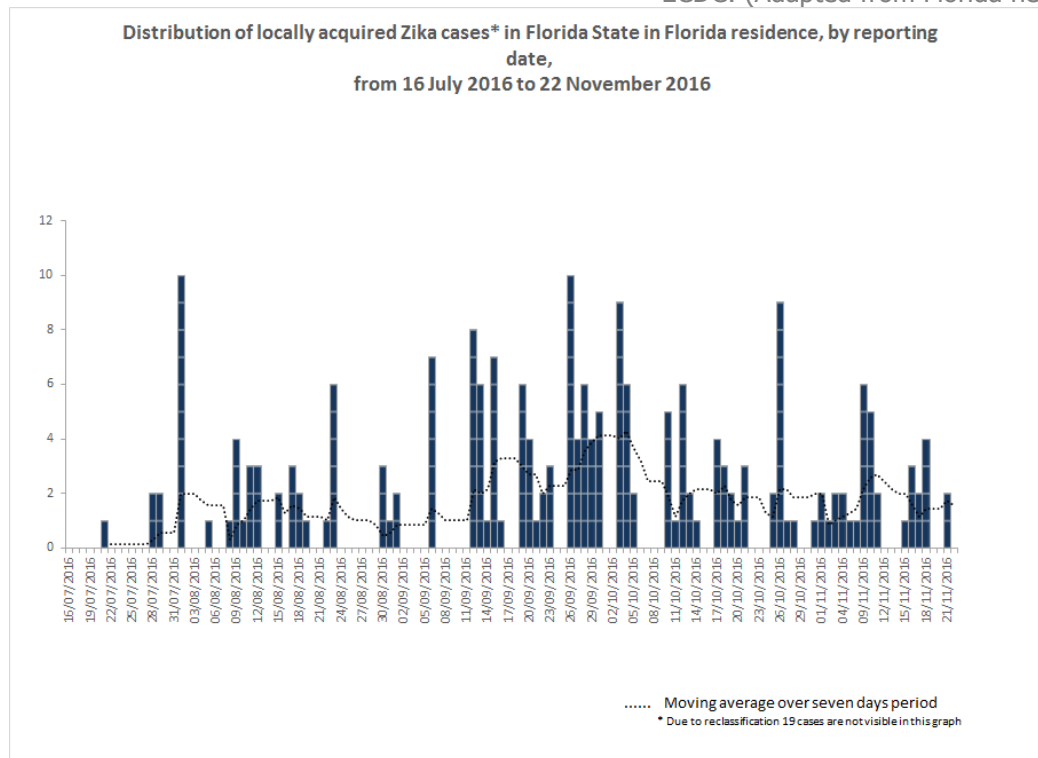
Actions

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 levels (NUTS3).

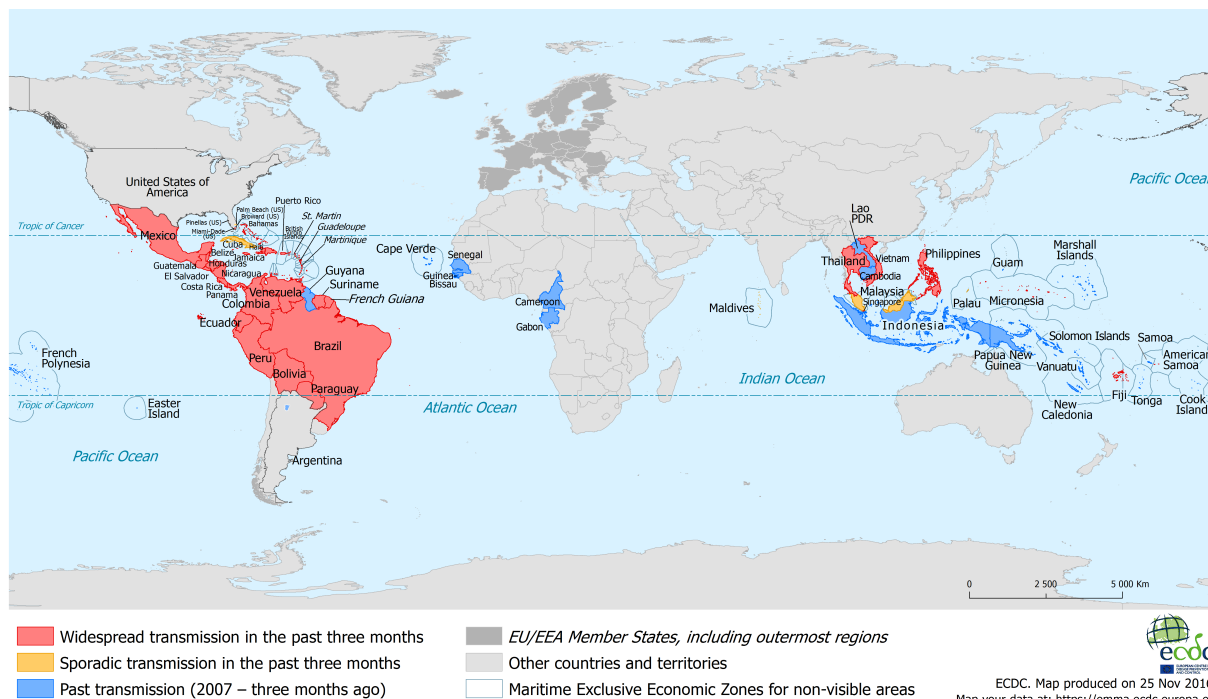
Distribution of locally acquired Zika cases in Florida State (US), by reporting date, from 16 July 2016 to 22 November 2016

ECDC: (Adapted from Florida health department and media)



Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past three months, as of 24 November 2016

ECDC



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 25 November 2016

Epidemiological summary

As of 23 November 2016, 33 cases of WPV1 have been reported to WHO in 2016, compared with 58 for the same period in 2015. The cases were detected in Pakistan (17), Afghanistan (12) and Nigeria (4). Three cases of cVDPV have been reported in 2016, compared with 20 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

Continued detection of positive environmental samples throughout 2016 in Pakistan confirms that virus transmission remains geographically widespread across the country, despite strong improvements in response measures. The last locally-acquired wild

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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.