

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 30 September 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 2014, 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 September, measles outbreaks were detected in Denmark, Romania and the United Kingdom. Outside of the EU, outbreaks were detected in Australia, Belarus and Japan.

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

Opening date: 30 May 2016

Latest update: 30 September 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 (WNF) and changes in the epidemiology of the disease.

→Update of the week

This week, 46 cases have been reported, 22 in the EU Member States and 24 cases in the neighbouring countries. Since the beginning of the 2016 transmission season and as of 29 September 2016, 171 cases of West Nile fever (WNF) in humans have been reported in the EU Member States and 229 cases in the neighbouring countries.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 30 September 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: 30 September 2016

Since 1 February 2016, Zika virus infection and the related clusters of microcephaly cases and other neurological disorders constitute a PHEIC. Since 2015, and as of 30 September 2016, there have been 68 countries and territories reporting mosquito-borne transmission of the virus. According to WHO and as of 30 September 2016, 21 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, 23 new locally-acquired cases have been reported in Florida since the last CDTR, bringing the cumulative number of locally-acquired cases to 115. In Asia, Singapore continues to report locally-acquired cases and the Philippines reported three new autochthonous cases, bringing the cumulative number to 12.

On 30 September 2016 [WHO](#) announced that Thailand confirmed two cases of Zika-related microcephaly. According to the [media](#), Thailand has confirmed 349 Zika cases since January, including 33 pregnant women.

Mosquito-borne Zika infections acquired by travellers returning from the Maldives were reported by Germany and Spain in the past week.

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

Opening date: 17 March 2016

Latest update: 30 September 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. The outbreak later spread to the neighbouring Democratic Republic of the Congo (DRC). Other countries (Brazil, Chad, Colombia, Ghana, Peru and Uganda) have recently reported yellow fever outbreaks or sporadic cases which are not reported as linked to the Angolan outbreak.

→Update of the week

In Africa, suspected cases continue to be reported from Angola and DRC. The vaccination campaigns are ongoing in both countries.

In the Americas, Brazil, Colombia and Peru have been reporting sylvatic yellow fever cases since the beginning of the year.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 30 September 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 eradicated worldwide.

→Update of the week

No cases of wild poliovirus type 1 (WPV1) were reported to WHO in the past week. One WPV1 environmental positive sample was reported in the past week in Pakistan.

A circulating vaccine-derived poliovirus type 2 (cVDPV2) has been isolated from stool specimen collected on 26 August 2016 in Monguno Local Government Area, Borno state in Nigeria. The sample was taken from a healthy household contact of a WPV1 case.

A regional outbreak response in north-eastern Nigeria continues to be implemented with bivalent oral polio vaccine (OPV) and inactivated polio vaccine (IPV). Nigeria has been reclassified as a country affected by endemic transmission of WPV1 alongside Pakistan and Afghanistan.

II. Detailed reports

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 30 September 2016

Epidemiological summary

EU/EEA Member States

Denmark

A school-aged girl was diagnosed at the end of August 2016 with measles in Copenhagen. She went on a trip to Thailand and was hospitalised in Copenhagen following her return. She was diagnosed with measles while being hospitalised. While infectious, she attended school, visited a recreational club, a general practitioner and the hospital. Contact tracing identified two non-vaccinated exposed adults who were given measles post-exposure prophylaxis. Genotyping of urine samples from 29 August identified the D8 strain, matching the measles strain currently circulating in Asia, including Thailand.

Romania

On 21 September 2016, the Ministry of Health of Romania issued a press release stating that in the first eight months of 2016 there were 675 confirmed measles cases in 23 districts, including three deaths. Two were confirmed measles cases and one case is awaiting confirmation. The deaths occurred in children aged under one year, too young to have been vaccinated against measles. MMR vaccination coverage has decreased from 94.4% in 2008 to 88.3% in 2015.

The UK

Wales

In September, Public Health Wales confirmed an outbreak of measles in Carmarthenshire with nine cases, all linked to a summer festival. Six of the cases are thought to be directly linked to a patient who contracted the virus while at the Green Gathering environmental festival in Chepstow last month.

Since the beginning of July, there have also been measles cases in Swansea, Neath Port Talbot, Pembrokeshire and Powys. All cases have links to festivals in England and Wales.

London and East of England

Public Health England reports that since the beginning of February 2016, a number of cases of measles have been confirmed across London and the East of England (Cambridge, Essex and Hertfordshire), predominantly in unimmunised adolescents and adults (aged 14 to 40 years) without a history of recent travel. Many of these cases have been admitted to acute medical wards without isolation including one in intensive care. Samples from 10 cases have been genotyped at the UK reference laboratory in Colindale and nine are the same genotype D8 strain, indicating a common source. The other case (from London) is also a D8 genotype but of a different strain.

Rest of the world

Belarus

The WHO Regional Office for Europe reported a measles outbreak in Brest city, Belarus in August 2016. The first case had onset of disease on 10 July 2016, and as of 26 August, 35 cases have been detected, 14 of which have been laboratory confirmed. The measles virus genotype D8 Frankfurt Main was identified in some of the specimens. All cases are among non-immunised people, and two-thirds are between one and nine years old. All cases are citizens of Kyrgyzstan, Russia or Tajikistan, and are temporarily in Brest, endeavoring to reach Poland.

Japan

According to the media, quoting the National Institute of Infectious Diseases (NIID), Japan has had 115 confirmed measles cases in 2016 by 11 September. Ninety-six of the cases occurred since mid-August, in comparison to 35 cases in 2015. Officials were investigating reports of several cases at a Justin Bieber concert held in Chiba Prefecture in August 2016 as well as among workers at Kansai International Airport. Many of those infected at the airport work at counters for international flights.

WHO had announced in March 2015 that Japan had eradicated measles after a measles outbreak seven years earlier infected more than 10 000 people.

Australia

South Australian health authorities issued a measles alert to urge travellers to be fully immunised against measles prior to travelling to South East Asia after a third case of measles was confirmed after returning from the region.

Tanzania

An outbreak of measles is reported in Dodoma with seven cases as of 26 September 2016.

Other news

On 27 September, the Pan American Health Organization/World Health Organization (PAHO/WHO) declared the region of the Americas free of measles. The declaration of measles elimination was made by the International Expert Committee for Documenting and Verifying Measles, Rubella, and Congenital Rubella Syndrome Elimination in the Americas. The announcement came during the 55th Directing Council of WHO/PAHO.

Web sources: [ECDC measles and rubella monitoring](#) | [ECDC/Euronews documentary](#) | [MedISys Measles page](#) | [EUVAC-net ECDC](#) | [ECDC measles factsheet](#) | [4th Meeting of the European Regional Verification Commission for Measles and Rubella Elimination \(RVC\) \(2016\)](#)

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. At the fourth meeting of the Regional Verification Commission for measles and rubella in October 2015, as of the end of 2014, endemic measles transmission had been interrupted in 32 Member States. Based on its conclusions for the period 2012–2014, the RVC could for the first time verify interruption over a 36-month period, and thereby declare that 21 Member States have eliminated measles.

Actions

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

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

Opening date: 30 May 2016

Latest update: 30 September 2016

Epidemiological summary

During the past week, Hungary has reported five new cases, one in the newly affected county of Csongrad and four in the three previously affected counties of Fejer (1), Hajdu-Bihar (1) and Pest (2). Italy has reported 14 new cases, four in the newly affected provinces of Novara (1), Trapani (1) and Vicenza (2) and 10 in the three previously affected provinces of Bologna (1), Mantova (4), Modena (1), Ravenna (2) and Rovigo (2).

Romania has reported three new cases from the three previously affected counties of Bacau, Constanta and Galati.

In the neighbouring countries, Israel has reported eight new cases, all in the previously affected areas of Central district (3), Haifa (1), Northern district (2), Southern district (1) and Tel Aviv (1).

Russia has reported 14 confirmed cases in the previously affected oblasts of Astrakhan (1), Saratov (8) and Voronezh (5).

Serbia has reported two new confirmed cases in the previously affected South Banat district.

ECDC assessment

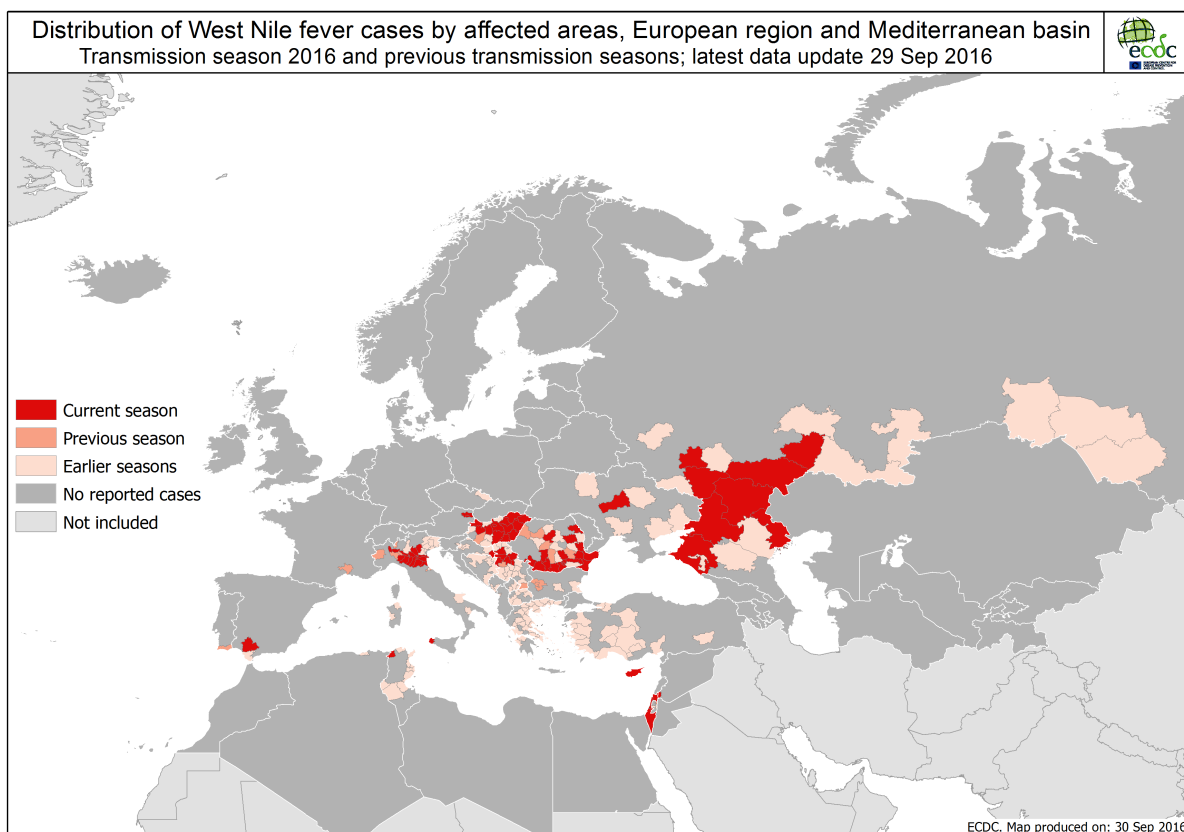
Although there has been a notable peak in WNV transmission in the EU in the past few weeks, the overall number of cases is still within the historical range of values.

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, 2016

ECDC



Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 30 September 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](#)

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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.

According to a meeting report by the European Regional Verification Commission for Measles and Rubella Elimination (RVC), in the period 2012–2014 endemic rubella transmission was interrupted in 32 Member States of the WHO European Region, among which 20 Member States eliminated rubella.

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.

Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015

Latest update: 30 September 2016

Epidemiological summary

1. Update on number of cases

The USA

Twenty-three locally-acquired cases have been recorded in Florida over the past week. To date, 115 locally-acquired and 705 imported cases of Zika have been reported in Florida. The distribution of the locally-acquired cases is as follows: 106 in Miami-Dade, seven in Palm beach, one in Pinellas and one in Broward.

Singapore

As of 28 September 2016, the Singapore National Environment Agency (NEA) recorded 396 locally-acquired Zika virus infection, 11 cases in the past week.

The Philippines

On 26 September, the Philippines reported three new autochthonous cases, bringing the total to 12. Therefore, this country is now appearing as 'widespread transmission' on the ECDC map.

Maldives

On 29 September, WHO reported mosquito-borne Zika virus infections in German and Spanish travellers returning from the Maldives.

EU/EEA imported cases:

Since November 2015 (week 45), 19 countries (Austria, Belgium, the Czech Republic, Denmark, Finland, France, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom) have reported 1 660 travel-associated Zika virus infections through The European Surveillance System (TESSy). Over the same time period, seven EU countries reported 80 Zika cases among pregnant women.

EU's Outermost Regions and Territories

As of 22 September 2016:

Martinique: 36 260 suspected cases have been reported, an increase of 160 since the previous week. The weekly number of cases is stable.

French Guiana: 9 740 suspected cases have been detected, an increase of 77 cases since the previous week. The weekly number of cases is stable.

Guadeloupe: 30 130 suspected cases have been detected, an increase of 290 suspected cases since the previous week. The weekly number of cases is stable.

St Barthélemy: 725 suspected cases have been detected, an increase of 55 suspected cases since the previous week. The weekly number of cases is stable.

St Martin: 2 350 suspected cases have been detected, an increase of 85 suspected cases since the previous week. The weekly number of cases is stable.

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 30 September 2016, microcephaly and other central nervous system (CNS) malformations associated with Zika virus infection or suggestive of congenital infection have been reported by 21 countries or territories. Brazil reports the highest number of cases. Eighteen 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 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 30 August 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.

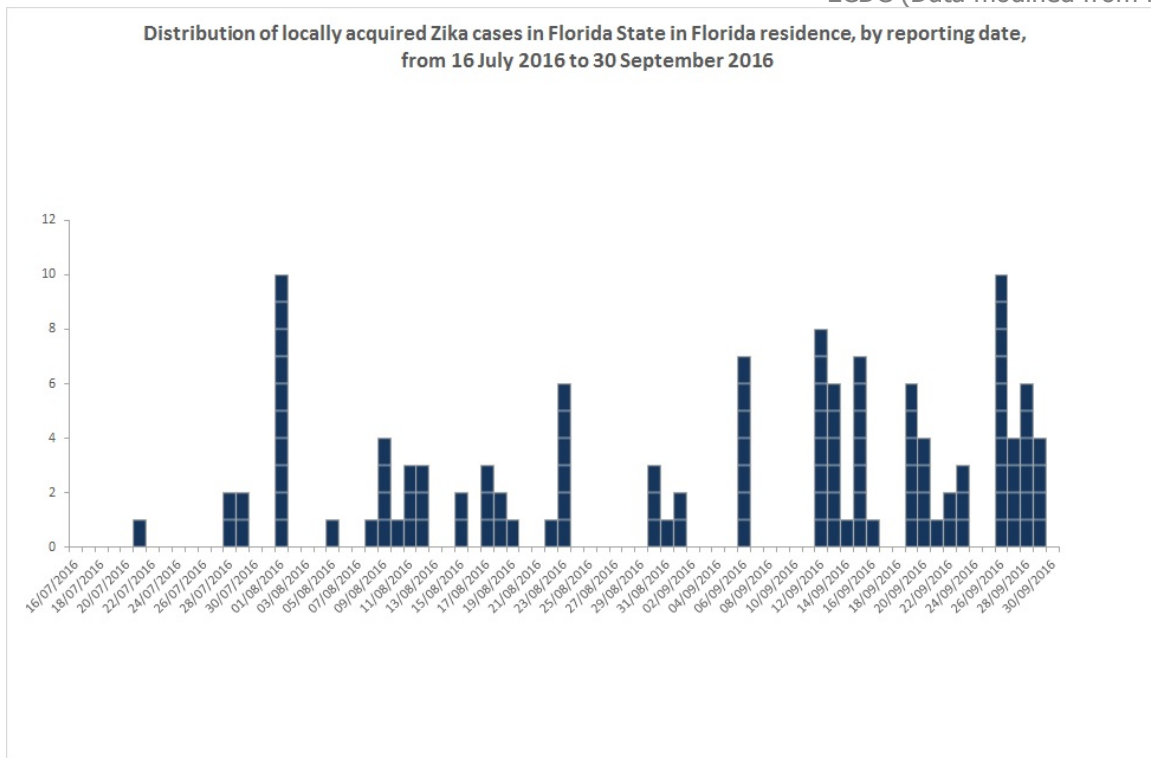
Actions

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).

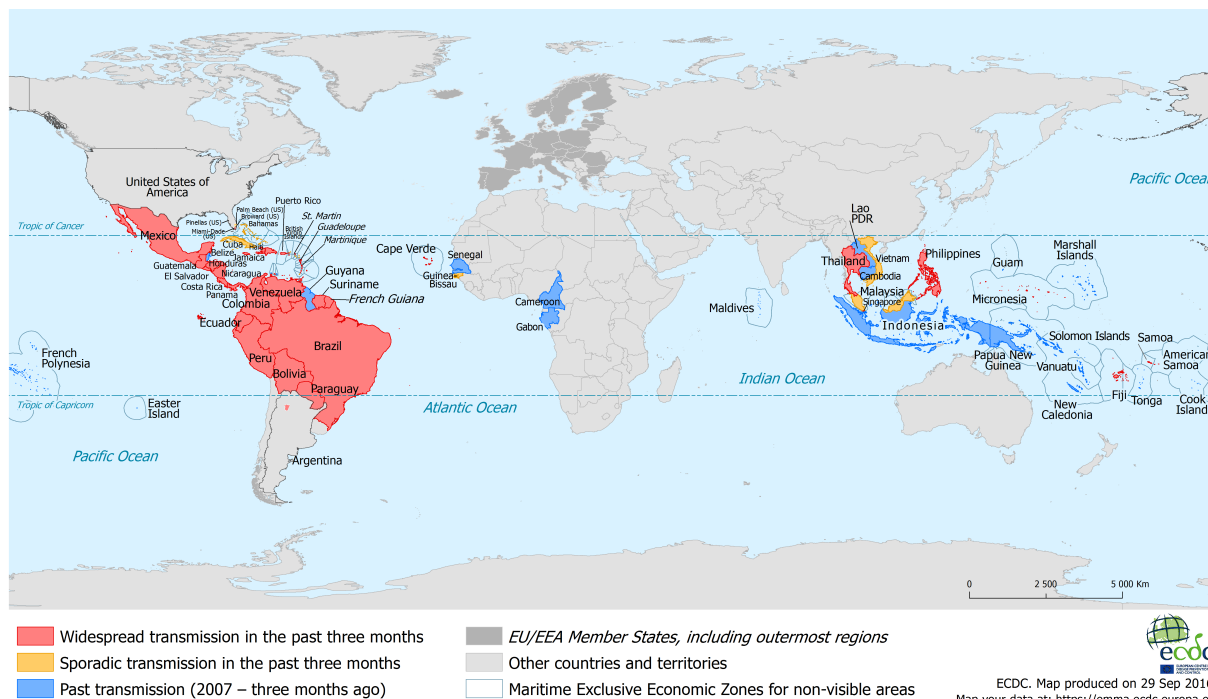
Distribution of locally acquired Zika cases in Florida State (US), by reporting date, from 16 July 2016 to 30 September 2016

ECDC (Data modified from Florida and media)



Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past three months, as of 29 September 2016

ECDC



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

Opening date: 17 March 2016

Latest update: 30 September 2016

Epidemiological summary

Angola

According to WHO, between 26 August and 15 September 2016, Angola reported 79 suspected yellow fever cases and two deaths, bringing the number of suspected cases to 4 120, including 373 deaths (CFR: 9.1%). The last confirmed case had symptom onset on 23 June. Three suspected yellow fever cases were discarded as having recent vaccination history. Phase II of the vaccination campaign has been prepared and will begin shortly in 12 districts in nine provinces.

Democratic Republic of the Congo (DRC)

Since the start of the year and as of 18 September 2016, DRC reported 2 770 suspected cases from eight of the 26 provinces. Seventy-six confirmed cases were identified with 16 deaths (CFR: 21%). Of the 76 confirmed cases, 13 are autochthonous. The last confirmed non-sylvatic case had symptom onset on 12 July. Nine cases are under investigation, eight in Kinshasa province and one in Tshuapa province. Twelve cases are under investigation including the first notified case reported in Sud Ubangi

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province in Bominenge Health Zone.

The reactive vaccination campaign in Feshi and Mushenge Health Zones in Kwango province should begin soon.

Brazil

Since the beginning of 2016 and up to the end of August, Brazil reported three cases of yellow fever, two autochthonous and one imported from Angola. The autochthonous cases were reported in Bady Bassit in São Paulo state and in the state of Goiás.

Colombia

In Colombia, between the beginning of 2016 and the first week of September, 17 sylvatic yellow fever cases have been reported (five laboratory-confirmed and 12 probable). The confirmed yellow fever case in the department of Vaupés is the first documented yellow fever case in that department. Four of the five confirmed cases died.

Furthermore, between April and May 2016, three Municipalities in the Department of Meta (La Macarena, Puerto Concordia, and Puerto Rico) reported epizootics in non-human primates. The municipality of La Macarena is an area where there is significant influx of foreign and domestic tourists.

Peru

In Peru, up to the end of August 2016, there were 85 sylvatic yellow fever cases, of which 62 were confirmed and 23 were probable. Out of the 25 departments in Peru, cases have been reported in eight of them, with the department of Junin reporting most of the cases (57 cases). The sylvatic yellow fever outbreak in Junin is confined to 11 districts of the provinces of Chanchamayo and Satipo.

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

ECDC assessment

The continuing detection of suspected and laboratory-confirmed cases demonstrates that active surveillance is functioning well in some areas. Nevertheless, it is important to note the inherent difficulties in surveillance and laboratory confirmation capacities. It remains possible that detection of cases could be delayed in some remote areas.

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.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 30 September 2016

Epidemiological summary

To date in 2016, 26 cases of wild poliovirus type 1 (WPV1) have been reported, compared with 44 for the same period in 2015. The cases were detected in Pakistan (14), Afghanistan (9) and Nigeria (3). As of 20 September 2016, three cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO in 2016, all from Laos. There were 14 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.

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