

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: 8 July 2016

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 West Nile fever (WNF)-affected areas and identify significant changes in the epidemiology of the disease.

→ Update of the week

During the past week, no new human cases of West Nile fever have been reported in EU Member States. In neighbouring countries, Russia reported its first case of the current transmission period in Rostov Oblast. As of 7 July 2016, no cases of West Nile fever in humans have been reported in the EU Member States and seven cases have been reported in neighbouring countries since the beginning of the 2016 transmission season.

Non EU Threats

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 8 July 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

One wild poliovirus case was reported last week in Pakistan. No new cases of circulating vaccine-derived poliovirus (cVDPV) or positive environmental samples were reported in the past week.

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

Opening date: 17 March 2016

Latest update: 8 July 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 currently reporting yellow fever outbreaks or sporadic cases not linked to the Angolan outbreak.

→Update of the week

Related outbreaks of yellow fever are ongoing in Angola with 3 552 suspected cases (as of 1 July 2016) and the Democratic Republic of Congo with 1 582 suspected cases (as of 1 July). Peru has been experiencing an outbreak of yellow fever since the beginning of the year, with 42 probable and 37 confirmed cases, including nine deaths (as of 6 July 2016).

Other countries (Brazil, Chad, Colombia, Ghana, Republic of Congo and Uganda) are currently reporting yellow fever outbreaks or sporadic cases not linked to the outbreak in Angola. In Ethiopia, all the 22 suspected yellow fever cases reported earlier from South Omo zone tested negative for yellow fever. In the monthly bulletin, the WHO Country office in Cameroon reports 944 suspected cases of yellow fever since the beginning of the year. Yellow fever cases in people who travelled from Angola have been reported in China, the Democratic Republic of the Congo, and Kenya.

WHO announced on 17 June 2016 that the Strategic Advisory Group of Experts (SAGE) on immunisation reviewed evidence that using one fifth of a standard dose protects against yellow fever for at least 12 months and possibly longer. WHO and partners are considering the use of this dose-sparing strategy to prevent transmission through a large-scale vaccination campaign.

Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013

Latest update: 8 July 2016

Chikungunya virus infections are being reported across an increasingly wider area of the world. An outbreak of chikungunya virus infection started in the Caribbean in December 2013, later spreading to the Americas and the Pacific region. In 2015, there were still outbreaks ongoing in these regions (especially in the Pacific region), but at a lower level compared with the same period last year. So far in 2016, no autochthonous cases of chikungunya virus infection have been detected in Europe. Introduction of the disease into Europe is possible in areas where there is a competent vector.

→Update of the week

Ongoing outbreaks are reported in the Caribbean, the Americas and the Pacific region.

Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015

Latest update: 8 July 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). As of 7 July 2016, WHO has reported 62 countries and territories with mosquito-borne transmission since 2015. There is now a scientific consensus that Zika virus is a cause of microcephaly and Guillain-Barré syndrome.

→Update of the week

During the past week, the Netherlands confirmed an imported case of Zika virus infection on the island of Saba and the first autochthonous case of Zika virus on the island of St Eustatius. Both islands have a special status as municipalities of the Netherlands.

Three cases of Zika virus infection have been detected in Guinea-Bissau on the island of Bubaque, in the archipelago of Bijagos. Guinea-Bissau becomes the second country in West Africa affected by the virus since 2015 (after Cape Verde).

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 8 July 2016

Dengue fever is one of the most prevalent vector-borne diseases in the world. It affects 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.

→Update of the week

There are several ongoing outbreaks of dengue fever across the globe.

II. Detailed reports

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

Opening date: 30 May 2016

Latest update: 8 July 2016

Epidemiological summary

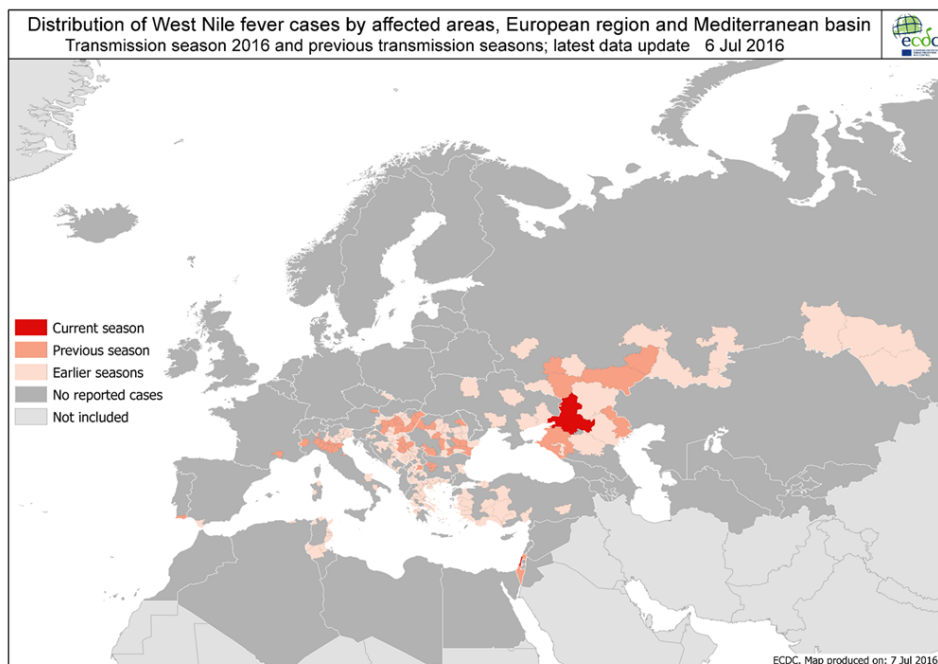
As of 7 July, no cases of West Nile fever in humans have been reported in the EU Member States and seven cases have been reported in neighbouring countries since the beginning of the 2016 transmission season.

ECDC assessment

West Nile fever 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 regarding WNF-affected areas.



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 8 July 2016

Epidemiological summary

In 2016, 19 cases of wild poliovirus type 1 (WPV1) have been reported, compared with 30 cases for the same period in 2015. The cases were detected in Pakistan (13 cases) and in Afghanistan (6 cases). As of 5 July 2016, three cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO in 2016, all from Laos. There were 11 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](#)

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[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 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.

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

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

Opening date: 17 March 2016

Latest update: 8 July 2016

Epidemiological summary

In **Angola**, between 21 January and 1 July 2016, the Angolan Ministry of Health notified 3 552 yellow fever cases, of which 875 were confirmed and 355 fatal (case fatality ratio: 10%), 117 of these being among confirmed cases (CFR: 13.4%). All provinces have reported cases.

Since the beginning of the year to 1 July 2016, **Democratic Republic of Congo** has reported 1 582 cases of yellow fever, including 68 confirmed cases, of which 59 had a recent travel history to Angola. Among the 1 582 cases, 75 have died since the beginning of the outbreak. Among the cases without recent travel history to Angola, autochthonous cases are reported in Kinshasa province (4), Kongo central (1) and Kwango (2). In addition, since the beginning of year, two independent sylvatic cases have been notified, one in Bas-Uele province and one in Tshuapa province. These two cases are not related to the current outbreak in Angola and other provinces in DRC

As of 7 July 2016 in **Republic of Congo**, 88 suspected cases have been reported, two of them vaccinated in December 2015 being identified as IGM positive.

In **Uganda**, health authorities reported 68 yellow fever cases between 26 March and 4 June 2016, of which seven were laboratory-confirmed and seven fatal.

Ghana has reported four suspected cases from two regions: three in Brong-Ahafo region and one from Volta region. Investigations are ongoing to determine the vaccination status of the cases and to rule out a link with Angola or DRC. These are most likely sylvatic cases as these areas are known to be endemo-epidemic for yellow fever.

Guinea has reported 136 suspected cases since January 2016.

Chad reported a sylvatic case of yellow fever that had symptom onset on 15 January 2016.

According to the WHO weekly report, as of 30 June, two suspected cases have been reported in **Republic of Congo** (Bouenza department). This department is bordering DRC. The laboratory results are pending.

In **Ethiopia**, the samples from the 22 suspected cases turned out to be negative for yellow fever by ELISA. However, for 19 of the cases, further testing is still on-going.

Colombia has reported a sylvatic case of yellow fever with symptom onset on 19 May 2016.

In **Brazil**, one sporadic fatal yellow fever case was reported in São Paulo state in March 2016. The case did not have a history of yellow fever vaccination.

As of 7 July 2016, authorities in **Peru** have reported 42 probable and 37 confirmed cases including nine deaths. The majority of cases have been reported from Junin department (58 cases). This outbreak is not related to the current African outbreaks.

Web sources: [ECDC factsheet /WHO yellow fever page](#) | [WHO AFRO](#) | [WHO-DRC](#) | [PAHO](#) | [MoH Peru](#) | [ECDC updated risk assessment](#) | [WHO Situation report 30 June 2016](#) | [Cameroon monthly bulletin](#) | [Ethiopian weekly bulletin](#)

ECDC assessment

Yellow fever in an urban setting is a public health emergency that may result in a large number of cases. Despite the beginning of a downward trend in the number of newly reported cases, the outbreak of Yellow fever in Angola remains a major concern, mainly in relation to:

- continuous transmission in some provinces (Huila, Benguela)
- some challenges to vaccination activities (i.e. shortage of syringes)
- the need to reinforce surveillance systems in some of the affected areas.

In DRC, the main challenges are currently:

- serious shortage of reagents, both IGM and PCR, for laboratory confirmation of cases
- vaccine disposal and implementation of vaccination campaigns.

The risk of continuous spread in affected and non affected countries in West-Central and East Africa remains as one of the main concerns for the control of this epidemic.

In Europe, the *Aedes aegypti* mosquito is present on the island of Madeira, Portugal, where the season will soon be suitable for mosquito activity. However, in week 26 vector activity was still considered low in Madeira, according to the latest entomological situation report published by [local health authorities](#).

Outbreaks of yellow fever have never been reported in Asia, but local conditions with a large distribution of *Aedes aegypti*, the main vector of urban yellow fever in Africa and in South America, are suitable for urban yellow fever outbreaks. In DRC, the confirmation of the autochthonous circulation in the capital is a major concern as Kinshasa is highly populated, as is Brazzaville, the capital of Republic of the Congo, which is located across the Congo River.

Actions

More than eleven million people in Angola have been vaccinated through a large-scale vaccination campaign since the beginning of February, using vaccines mobilised through the yellow fever vaccine emergency stockpile made available through the International Coordinating Group for Vaccine Provision, with support from both Gavi, the UN Central Emergency Response Fund and a vaccine donation from Brazil. Vaccination campaigns have been completed in 11 health zones in Kinshasa and Kongo Central

ECDC published a [rapid risk assessment](#) on 25 March 2016 and an updated [risk assessment](#) on 30 May 2016.

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

Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013

Latest update: 8 July 2016

Epidemiological summary

Europe

No autochthonous cases of chikungunya virus infection have been reported in EU Member States so far in 2016.

Americas

Since the beginning of the year and as of 24 June 2016, the [Pan American Health Organization](#) (PAHO) has reported 149 263 suspected and confirmed cases, including 17 deaths, in the Americas and Caribbean region. This is an increase of 33 964 suspected and confirmed cases, including two deaths, since the last update on 24 May. The most affected countries are Brazil (83 678), Colombia (16 747), Bolivia (15 888), Honduras (10 333), and El Salvador (5 115).

Caribbean

Four confirmed cases of chikungunya virus infection have been reported in Trinidad and Tobago so far this year, according to media.

Pacific

There is an ongoing but waning outbreak in Fiji, according to the Pacific Public Health Surveillance Network.

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

ECDC assessment

Outbreaks are still ongoing in the Caribbean and Americas and Pacific but at a lower level compared with the same period last year. Continued vigilance is needed to detect imported cases of chikungunya in tourists returning to the EU from these regions.

Europe is vulnerable to the autochthonous transmission of chikungunya virus. The risk for onward transmission in Europe is linked to importation of the virus by viraemic patients in areas with competent vectors (*Aedes albopictus* in mainland Europe, primarily around the Mediterranean, and *Aedes aegypti* on Madeira). Autochthonous transmission from an imported viraemic chikungunya case is possible during the summer season in the EU.

Actions

ECDC monitors the global chikungunya situation on a monthly basis.

Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015

Latest update: 8 July 2016

Epidemiological summary

EU/EEA imported cases:

Since week 45/2015, fourteen countries (Austria, Belgium, Czech Republic, Denmark, Finland, France, Italy, Luxembourg, Malta, Norway, Slovenia, Spain, Sweden and the UK) reported 862 travel-associated Zika virus infections through The European Surveillance System.

As of 7 July 2016, ECDC has detected 1 028 imported cases through epidemic intelligence activities. This information is aggregated from official EU/EEA public health authorities websites but is not based on a systematic reporting surveillance system hence cannot be considered exhaustive.

EU's Outermost Regions and Territories

As of 7 July 2016:

Guadeloupe: 20 070 suspected cases have been detected, an increase of 2 650 suspected cases since last week. The weekly number of cases is not decreasing yet.

French Guiana: 8 715 suspected cases have been detected, an increase of 260 since last week. The weekly number of cases has been increasing compared to the previous three weeks.

Martinique: 32 400 suspected cases have been reported, an increase of 640 since last week. The weekly number of cases has been stable over the last four weeks.

St Barthélemy: 185 suspected cases have been detected, an increase of 55 suspected cases since last week. The weekly number of cases is still increasing.

St Martin: 1 260 suspected cases have been detected, an increase of 165 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 6 July 2016, microcephaly and other central nervous system (CNS) malformations associated with Zika virus infection or suggestive of congenital infection have been reported by thirteen countries or territories. In the EU, Spain (2) and Slovenia (1) reported congenital malformations associated with Zika virus infection after travel in the affected areas. Cases have also been

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detected in the EU's Outermost Regions and Territories in Martinique, French Guiana and French Polynesia.

Fifteen countries and territories worldwide reported an increased incidence of Guillain-Barré syndrome (GBS) and/or laboratory confirmation of a Zika virus infection among GBS cases.

Brazil: Between October 2015 and 7 July 2016, Brazil reported 8 301 suspected cases of microcephaly and other nervous system disorders suggestive of congenital infection; this is an increase of 136 cases since the last update; 1 656 are confirmed cases of microcephaly, 255 of which are laboratory-confirmed for Zika virus infection, according to the [Ministry of Health](#). However, the Ministry of Health, reports that this figure does not adequately represent the total number of cases related to the virus.

WHO updated its guidance about '[Infant feeding in areas of Zika virus transmission](#)':

WHO recommends that infants born to mothers with suspected, probable or confirmed Zika virus infection, or who reside in or have travelled to areas of ongoing Zika virus transmission, should be fed according to normal infant feeding guidelines. In light of the evidence available, the benefits of breastfeeding for the infant and mother outweigh any potential risk of Zika virus transmission through breast milk.

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 and [maps](#) with information on countries or territories which have reported confirmed autochthonous cases of Zika virus infection.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 8 July 2016

Epidemiological summary

Europe

No autochthonous dengue cases have been reported so far in 2016.

Asia

The weekly number of dengue cases in **Singapore** has been steadily rising for the past three weeks, according to the [National Environment Agency](#) (NEA). In total, nearly 9 174 dengue cases, including five deaths, have been reported since the start of the year. This is almost double the number of cases compared to the same time period last year. The NEA is anticipating an upward trend in the number of new cases reported in the coming months.

In the **Philippines**, the number of dengue fever cases was 41 per cent higher during the first six months of 2016 compared to the same time period last year (52 177 cases in 2016 compared to 36 972 cases in 2015). In addition, dengue-related deaths have also increased, with 207 deaths reported in 2016 compared to 129 in 2015 during the same time period, according to [media](#) quoting the Ministry of Health.

During the first six months of this year, **Sri Lanka** notified more than 20 000 dengue cases, according to [media](#) quoting the Ministry of Health. This is higher than in previous years when the average number of cases reported in the first six months of the year was around 15 000. So far in 2016, Colombo remains the most affected area and accounts for 31 percent of all cases.

In **Bangladesh**, Dhaka reported an increase in dengue fever cases in June but a similar trend has been observed over the last 10 years. However, for the first six months of the year, 286 dengue fever cases were notified in the capital which is higher than in recent years, including 2015, when the highest number of cases in a decade was reported, according to [media](#).

In **India**, high dengue activity has been reported in the states of Kerala, Karnataka, Maharashtra and Tamil Nadu during the past month. New Delhi has recorded around 30 cases so far this year, according to [media](#).

Caribbean

Trinidad and Tobago has reported 13 cases of dengue so far this year, according to [media](#) quoting the Ministry of Health.

Americas

In Central America, **Costa Rica** has approved the use of the quadrivalent vaccine, Dengvaxia, to help protect people living in endemic areas aged between 9 and 45 years, according to [media](#). Costa Rica is now the fifth country worldwide to approve the vaccine along with Mexico, Brazil, El Salvador and the Philippines.

In South America, **Brazil** reports a downward trend in the number of dengue cases reported nationally since March which is different to the observed trend in previous years. The number of cases also peaked at the end of February this year, which is much earlier than expected as in previous years the highest dengue incidence occurred in April or May, according to the [Ministry of Health](#). So far in 2016 (January-May), **Peru** has recorded 22 009 cases of dengue fever nationally which is higher than the number of cases reported during the same time period in 2015, according to PAHO. The departments with the highest incidence are La Libertad, Piura, Ayacucho, Lambayeque and Loreto. In addition, vector activity has been detected in areas not previously affected and autochthonous cases of dengue have now been reported in areas such as Lima and Ica.

Pacific region and Australia

There is an increasing outbreak of DENV-1 in **New Caledonia**. Since 1 September 2015 and as of 28 June 2016, 358 cases have been reported. There is an ongoing outbreak of DENV-1 in **French Polynesia** with 40 confirmed cases reported in week 23, including two which required hospitalisation. There are decreasing or ongoing outbreaks of DENV-3 in **Samoa** and the **Solomon Islands**, according to the [Pacific Public Health Surveillance Network](#).

In **Australia**, as of 28 June 2016, there were 1 195 laboratory-confirmed dengue cases reported nationally. The number of cases reported in May is lower than previous months in 2016 but generally in line with the seasonal trend observed during the period 2011-2015. Recent dengue outbreaks in Torres Strait and Cairns have been declared over by local health authorities, according to [Queensland Health](#).

Africa

No data available.

Web sources: [ECDC Dengue](#) | [Healthmap Dengue](#) | [MedISys](#) | [ProMed Asia and Pacific](#) |

ECDC assessment

Introduction and autochthonous transmission of dengue fever in Europe is possible where and when competent vectors are present. This underlines the importance of surveillance and vector control in European countries that have competent vectors.

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](#).

ECDC monitors the dengue situation worldwide on a monthly basis.

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