I. Executive summary

EU Threats

New! Meningitis case related to a mass gathering event - World Youth Day - Poland - 2016
Opening date: 4 August 2016  Latest update: 5 August 2016

On 2 August, a fatal case of meningitis was reported in a 19-year-old Italian citizen who attended the World Youth Day in Krakow, Poland, from 26 to 31 July 2016. More than three million people were gathered at this event.

West Nile virus - Multistate (Europe) - Monitoring season 2016
Opening date: 30 May 2016  Latest update: 5 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 West Nile fever (WNF)-affected areas and identify significant changes in the epidemiology of the disease.

➔ Update of the week

During the past week, two new cases have been reported in the EU Member States. Romania reported one confirmed case in Ialomita and one probable case in Olt. In neighbouring countries, Serbia reported its first three cases of the current transmission season in the newly affected districts of South Banat (2) and Mava (1).

As of 28 July, the National Reference Centre for Exotic Diseases (CESME) in Italy reported that five pools of mosquitoes were positive for West Nile virus in Sardinia, Lombardy and Emilia Romagna.

Non EU Threats

New! Summer Olympic and Paralympic Games - Brazil - 2016
Opening date: 1 August 2016  Latest update: 5 August 2016

The 2016 Summer Olympic Games will take place in Brazil from 5 to 21 August 2016, 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 in previous similar events, ECDC has enhanced its epidemic intelligence activities in relation to the event.

➔ Update of the week
On 2 August, media reported that four members of Australia's women's Olympic water polo team have been put in isolation for 48 hours as a precautionary measure after suffering from gastroenteritis on their way to Rio de Janeiro.

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

**Opening date: 16 November 2015**  **Latest update: 5 August 2016**

Since 1 February 2016, Zika virus infection and the related clusters of microcephaly cases and other neurological disorders constitute a public health emergency of international concern (PHEIC). Since 2015, and as of 4 August 2016, WHO has reported 65 countries and territories with mosquito-borne transmission. There is now a scientific consensus that Zika virus is a cause of microcephaly and Guillain-Barré syndrome. As of 3 August 2016, 14 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**

On 1 August, the Florida Department of Health in US confirmed four autochthonous Zika virus cases through local mosquitoes in Miami-Dade and Broward counties. As of 4 August, the Florida Department of Health (DOH) has identified 15 locally-acquired Zika cases in Florida who likely acquired the infection through a mosquito bite. The DOH believes that active transmission of the Zika virus is still only occurring in one small area of Miami-Dade County. Among the 15 cases, six are asymptomatic and were identified as a result of the door-to-door community survey that the DOH is conducting.

The US CDC has issued travel advice for people who live in or travelled to Wynwood in Miami any time after 15 June. Pregnant women have been advised not to travel to this neighbourhood.

In addition, the US CDC has published an official health advisory on guidance for 'Travel and Testing of Pregnant Women and Women of Reproductive Age for Zika Virus Infection Related to the Investigation for Local Mosquito-borne Zika Virus Transmission in Miami-Dade and Broward Counties, Florida'. The CDC is also recommending Zika testing for all pregnant women in the continental United States at prenatal visits in their first and second trimesters.

On 3 August, the Ministry of Health in Cuba reported two cases of locally-acquired Zika in the city of Hoguin. In Vietnam, the Ministry of Health reported one case of locally-acquired Zika virus in Phu Yen Province.

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

**Opening date: 17 March 2016**  **Latest update: 5 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**

As of week 30, the number of suspected and confirmed cases continues to decline in Angola. According to WHO, as of 27 July there were 2 051 suspected cases and 76 confirmed cases, including 95 deaths, reported in the Democratic Republic of Congo (DRC).

**Dengue - Multistate (world) - Monitoring seasonal epidemics**

**Opening date: 20 April 2006**  **Latest update: 5 August 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.
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 than during 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 being reported in the Americas and the Pacific region.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks
Opening date: 8 September 2005  Latest update: 5 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
During the past week, no new wild poliovirus cases or circulating vaccine-derived poliovirus cases have been reported to WHO.
**II. Detailed reports**

**New! Meningitis case related to a mass gathering event - World Youth Day - Poland - 2016**

**Opening date:** 4 August 2016  
**Latest update:** 5 August 2016

**Epidemiological summary**

On 2 August, a fatal case of meningitis was reported in a 19-year-old Italian citizen who attended the World Youth Day in Krakow, Poland, from 26 to 31 July 2016. On her way back to Italy between 31 July and 1 August whilst travelling through Austria, she started to feel unwell and was admitted to a hospital in Vienna where she died from meningitis a few hours later.

All passengers on the bus who were part of the Italian travel group received antibiotic prophylaxis. According to the Tuscan Health Department in Italy, the 19-year-old Italian citizen spent one week at the "Punta Ala" camp site in Maremma just before leaving for Poland on 24 July. As a precautionary measure, all guests who stayed at the camp site during the period 21-23 July have been offered chemoprophylaxis. All close contacts in Poland have also received prophylaxis according to national guidelines.

**ECDC assessment**

The risk assessment for those potentially having been exposed and the administration of chemoprophylaxis should be carried out according to national guidelines and recommendations.

**Actions**

ECDC is monitoring this event through epidemic intelligence.

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

**Opening date:** 30 May 2016  
**Latest update:** 5 August 2016

**Epidemiological summary**

As of 4 August 2016, five cases of West Nile fever in humans have been reported in the EU Member States and 22 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 about WNF-affected areas.
New! Summer Olympic and Paralympic Games - Brazil - 2016
Opening date: 1 August 2016
Latest update: 5 August 2016

Epidemiological summary

Host country - Brazil
No major health events were detected.

Europe and rest of the world
In addition to the weekly summary, no further events with relevance for Rio 2016 were detected.

The Olympic Games officially start 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/or 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.

Zika - Multistate (world) - Monitoring global outbreaks
Opening date: 16 November 2015  Latest update: 5 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 1 136 travel-associated Zika virus infections through The European Surveillance System (TESSy).

EU’s Outermost Regions and Territories
As of 4 August 2016:

Guadeloupe: 26 520 suspected cases have been detected, an increase of 1 060 suspected cases since last week. The weekly number of cases has decreased compared to the previous week.

French Guiana: 9 330 suspected cases have been detected, an increase of 110 since last week. The weekly number of cases is decreasing compared to the previous week.

Martinique: 34 310 suspected cases have been reported, an increase of 415 since last week. The weekly number of cases is declining.

St Barthélemy: 370 suspected cases have been detected, an increase of 60 suspected cases since last week. The virus is still actively circulating.

St Martin: 1 835 suspected cases have been detected, an increase of 105 suspected cases since last week. The weekly number of cases has decreased slightly compared to the previous week.

Update on microcephaly and/or central nervous system (CNS) malformations potentially associated with Zika virus infection
As of 3 August 2016, microcephaly and other central nervous system (CNS) malformations associated with Zika virus infection or suggestive of congenital infection have been reported by 14 countries or territories. Brazil has reported the highest number of cases.

Fifteen 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 now 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).

Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past three months, as of 4 August 2016

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

Opening date: 17 March 2016  Latest update: 5 August 2016

Epidemiological summary
In Angola, since 5 December 2015 and as of 28 July 2016, there have been 3,818 suspected cases, of which 879 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 in 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 27 July 2016, the Democratic Republic of Congo (DRC) has reported 2,051 suspected and 76 confirmed cases, including 95 reported deaths, according to WHO. Cases have been reported in 26 health districts of five provinces (Kinshasa, Kwango, Tshuapa, Kongo Central et Bas-Uele).

WHO has supported the deployment of a mobile laboratory from the European Union to the DRC for a period of three months providing testing capacity in Kahembe, Kwango province. The team consists of five international and two national laboratory scientists who can test 50 to 100 samples on site reducing the need to transport them over long distances. The mobile lab is supported by the European Civil Protection and Humanitarian Aid Operations (ECHO) Emergency Response Coordination Centre in collaboration with the Global Outbreak Alert and Response Network and the Emerging and Dangerous Laboratory Network. In addition to the mobile lab, two laboratory experts from Institut Pasteur, Paris, arrived in Democratic Republic of the Congo on 17 July to provide additional technical capacity.


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 is still of concern, despite the number of cases decreasing. The outbreak is not under control in DRC. The risk of spread to other countries remains one of the greatest challenges for the current epidemic.

In the DRC, the main challenges are currently:

- a serious shortage of reagents, both IGM and PCR, for the laboratory confirmation of cases
- cold chain management
- vaccine supply
- vaccine disposal and implementation of vaccination campaigns.

The risk of continuous spread in affected and non-affected countries in West-Central and East Africa is one of the main concerns with regard to control of the epidemic.

In Europe, the Aedes aegypti mosquito is present on the island of Madeira, Portugal. In week 29, 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 autochthonous circulation in the capital is a major concern as Kinshasa is highly populated, as is Brazzaville, the capital of the Republic of the Congo, which is located across the Congo River.

Actions

ECDC published new mosquito maps on 3 August showing the geographical distribution of Aedes mosquitoes in Europe.


ECDC published a report on the assessment of yellow fever in Angola on 5 July 2016.

On 20 July, the European Commission's Directorate-General for Health and Food Safety acknowledged that the EU mobile lab is
ready for deployment in DRC under the European Medical Corps. The mobile laboratory is provided by Germany via the Bernhard Nocht Institute for Tropical Medicine. The laboratory technicians are from Germany and Italy. The team will stay in the Kahemba District Hospital in Kwango province for an initial duration of two months.

**Dengue - Multistate (world) - Monitoring seasonal epidemics**

**Epidemiological summary**

**Europe**

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

**Asia**

As of 12 July 2016, 180 cases of dengue fever have been reported in China. This is higher than the number of cases reported during the same period in the previous four years (2012-2015). From week 23 to 27 in Singapore, the number of weekly cases has been steadily increasing since week 28, according to the National Environmental Agency (NEA). In Malaysia, the number of dengue cases in week 27 was 1,512, a decrease from 2,017 cases reported in the previous week. The cumulative number of cases in 2016 is 59,294, slightly less than the 62,648 cases reported during the same time period in 2015.

In India, there has been a recent surge in dengue cases reported in the capital Delhi, with 40 cases recorded between weeks 29 and 30. So far this year, 90 cases have been reported in Delhi, according to media sources.

Vietnam has reported a significant increase in dengue fever cases during the first seven months of the year compared to the same period in 2015. Between January and July, around 45,000 cases were reported nationally, including 14 deaths, compared to 21,154 cases and 12 deaths in 2015, according to media quoting the Ministry of Health. In Thailand, more than 25,000 cases of dengue fever, including 20 deaths, have been reported across all 77 provinces so far this year. The most affected provinces are Maehongsorn, Rayong, Pangnga, Bangkok and Trad, according to media. As of 15 July, there were 1,966 cases of dengue with nine deaths reported in Lao PDR in 2016. The number of cases in 2016 is increasing and is following a similar seasonal trend to 2012.

**America**

Since the beginning of the year and as of 29 July 2016, the Pan American Health Organization (PAHO) has reported more than two million confirmed and probably cases, including 610 deaths, in the Americas and Caribbean region. Brazil accounts for 76% of all reported cases in the region.

In Argentina, the number of reported dengue fever cases has increased dramatically so far in 2016 compared to the past ten years, according to media. As of 29 July 2016, 76,272 probable and 40,649 confirmed cases have been reported up to week 28, according to PAHO. The cumulative number of cases in the past ten years is as follows: 2015 (4774/108 probable/confirmed cases), 2014 (3,270/490), 2013 (9,294/2,921), 2012 (2,764), 2011 (2,133), 2010 (1,183), 2009 (2,735), 2008 (43), 2007 (222) and 2006 (245).

**Pacific region and Australia**

There are ongoing or decreasing outbreaks of DENV-1 in New Caledonia and French Polynesia, according to the Pacific Public Health Surveillance Network. In Samoa, as of 17 July there have been 1,405 dengue cases recorded since May 2015. The DENV-3 outbreak was at its peak around August 2015 with an increased number of cases in January 2016. However, the number of cases has been steadily declining since.

In Australia, as of 25 July 2016, 1,429 laboratory-confirmed dengue cases have been reported nationally. The number of cases reported in 2016 has been decreasing since March and is following the same seasonal trend from 2011-2015. A dengue outbreak was declared in Cairns and Hinterland on 28 July, following the detection of two locally-acquired DENV-2 cases, according to Queensland Health.

**Africa**

No data available.

**Web sources:** ECDC Dengue | Healthmap Dengue | MedISys | WPRO | ProMED Americas | Pacific Public Health Surveillance Network

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

**Actions**

ECDC monitors the dengue situation worldwide on a monthly basis.

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

**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 29 July 2016, the Pan American Health Organization (PAHO) has reported 214,547 suspected and confirmed cases, including 28 deaths, in the Americas and Caribbean region. This is an increase of 65,311 suspected and confirmed cases and one death since the last update on 24 June. The most affected countries are Brazil (137,808), Colombia (17,898), Bolivia (20,158), Honduras (13,524), and El Salvador (5,351).

**Pacific**

As of 22 July, there was an ongoing outbreak of chikungunya in Fiji although this was decreasing, according to the Pacific Public Health Surveillance Network.

**Africa**

Since 28 May 2016, there has been an ongoing outbreak of chikungunya in Mandera town in Kenya. Since the beginning of the outbreak, Medicines Sans Frontier (MSF) are reported to have treated around 1,150 patients. On 14 July 2016, MSF announced that the number of cases has declined and the outbreak was under control.

During the month of May in 2016, Somalia reported 11 sporadic cases of Chikungunya from its capital city Mogadishu. This is the first time that Somalia has reported human cases of Chikungunya virus, according to EMRO.

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

**ECDC assessment**

Outbreaks are still ongoing in the Americas and Pacific but at a lower level than during 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 of 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 published new mosquito maps on 3 August 2016 showing the geographical distribution of *Aedes* mosquitoes in Europe.

ECDC monitors the global chikungunya situation on a monthly basis.

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

**Epidemiological summary**

In 2016, 19 cases of wild poliovirus type 1 (WPV1) have been reported so far, compared with 34 for the same period in 2015. The
cases were detected in Pakistan (13) and Afghanistan (6). 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.