COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 26, 26 June-2 July 2016

All users

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: 1 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 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 or neighbouring countries. As of 30 June 2016, no cases of West Nile fever in humans have been reported in the EU Member States and six cases in neighbouring countries, since the beginning of the 2016 transmission season.

Non EU Threats

Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015 Latest update: 1 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 29 June 2016, WHO reports 61 countries and territories with continuing mosquito-borne transmission. There is now a scientific consensus that Zika virus is a cause of microcephaly and Guillain-Barré syndrome.

➔Update of the week

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

During the past week, no new country or territory has reported mosquito-borne Zika virus transmission.

In the USA, the Florida Department of Health confirmed the first Zika-related case of microcephaly in a child born in Florida whose mother had a travel-related case of Zika. The mother, a citizen of Haiti, came to Florida to deliver her baby.

According to the media, Tobago recorded its first confirmed case of Zika in a pregnant woman.

Publications

Nature published an article about dengue virus sero-cross-reactivity driving antibody-dependent enhancement of infection with Zika virus.

Eurosurveillance published an article which examined Zika virus RNA presence in serum, whole-blood and urine samples from six Israeli travellers symptomatic for Zika virus disease. Whole-blood samples were positive for as late as two months (58 days) post-symptom onset, longer than for urine (26 days) and serum (3 days).

Lancet published 'Congenital Zika virus syndrome: a case series of the first 1 501 live births with complete investigation'.

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

Opening date: 17 March 2016 Latest update: 1 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. The neighbouring Democratic Republic of Congo (DRC) officially declared a yellow fever outbreak linked to the one in Angola. In the past week, one case has been reported from Kasai province in the Democratic Republic of Congo, the first case in this province.

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 3 464 suspected cases (as of 27 June) and the Democratic Republic of Congo with 1 307 suspected cases (as of 23 June). 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 19 June 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.

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 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.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 1 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, in 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

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

One wild poliovirus case was reported this week in Pakistan.

Public health risks - Multistate - Refugee movements

Opening date: 4 November 2015 Latest update: 1 July 2016

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

➔Update of the week

No outbreaks were detected in refugee populations during the past week.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

II. Detailed reports

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

Opening date: 30 May 2016 Latest update: 1 July 2016

Epidemiological summary

As of 30 June, no cases of West Nile fever in humans have been reported in the EU Member States and six cases in neighbouring countries, since the beginning of the 2016 transmission season.

ECDC assessment

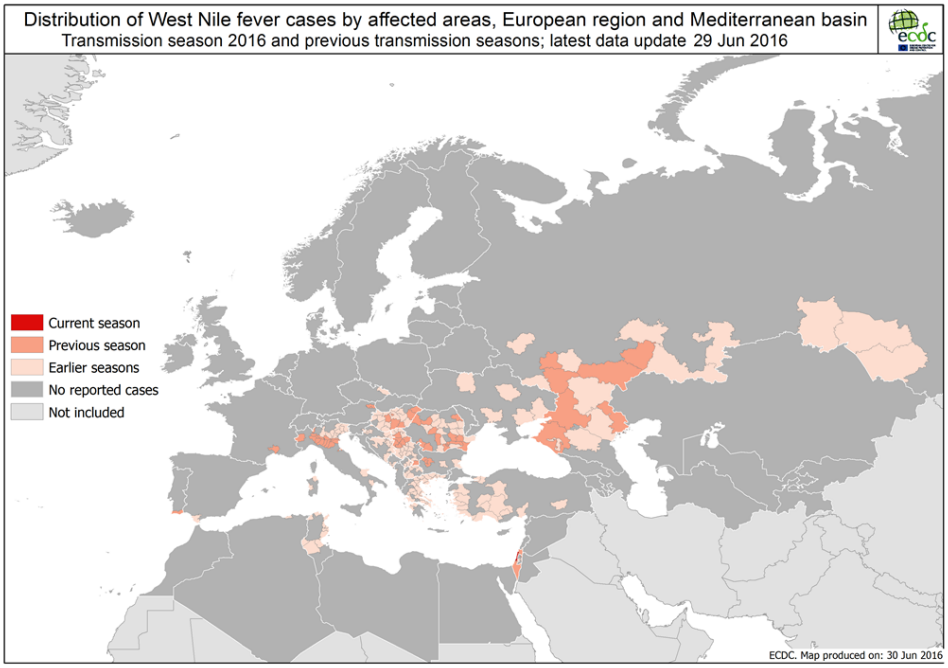
West Nile fever in humans is a notifiable disease in the EU. National health authorities consider the implementation of control measures important for ensuring blood safety when human cases of West Nile fever occur. In accordance with the EU blood directive, efforts should be made to defer blood donations from affected areas with ongoing virus transmission.

Actions

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

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides



Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015 Latest update: 1 July 2016

Epidemiological summary

EU/EEA imported cases:

Since week 45/2015, ten countries (Belgium, Czech Republic, Denmark, Finland, France, Italy, Malta, Slovenia, Spain and the UK) reported 783 travel-associated Zika virus infections through The European Surveillance System.

As of 30 June 2016, ECDC has detected 929 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.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

EU's Outermost Regions and Territories

As of 30 June 2016:

Guadeloupe: 17 820 suspected cases have been detected, an increase of 2 620 suspected cases since last week. The weekly number of cases is not decreasing yet.

French Guiana: 8 450 suspected cases have been detected, an increase of 380 since last week. The weekly number of cases has been increasing compared to the previous three weeks.

Martinique: 31 760 suspected cases have been reported, an increase of 790 since last week. The weekly number of cases has been stable over the last four weeks.

St Barthélemy: 130 suspected cases have been detected, an increase of 25 suspected cases since last week. The weekly number of cases is still increasing.

St Martin: 1 095 suspected cases have been detected, an increase of 110 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 29 June 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 detected in the EU's Outermost Regions and Territories in Martinique, French Guiana and French Polynesia.

Fourteen 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 30 June 2016, Brazil has reported 8 165 suspected cases of microcephaly and other nervous system disorders suggestive of congenital infection; this is an increase of 229 cases since the last update; 1 638 are confirmed cases of microcephaly, 270 of which are laboratory-confirmed for Zika virus infection.

Web sources: ECDC Zika Factsheet | PAHO | Colombian MoH | Brazilian MoH | Brazilian microcephaly case definition |SAGE MOH Brazil

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

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.

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

Opening date: 17 March 2016 Latest update: 1 July 2016

Epidemiological summary

In **Angola**, as of 27 June 2016, 3 464 cases and 353 deaths have been reported since the beginning of the outbreak in December 2015. Of these, 868 are confirmed. Despite extensive vaccination efforts, circulation of the virus persists and the risk for exportation to other countries with close ties to Angola still exists. Mass vaccination campaigns have taken place in all districts of Luanda, seven districts of Benguela, five districts of Cuanza Sul, five districts of Huambo, three districts of Huila, and two of Uige. A new vaccination phase will start on 29 June and will target six districts with local transmission and four districts bordering the DRC.

As of 23 June 2016, the **Democratic Republic of Congo** notified 1 307 suspected cases, of which 68 are confirmed, and 75 deaths. Cases have been reported in 22 health zones in five provinces. Of the 68 confirmed cases, 59 were imported from Angola, two are sylvatic and seven are autochthonous (four in Kinshasa province, one in Kongo central province and two in Kwango province). In the past week, one case has been reported from Kasai province in Democratic Republic of Congo for the first time.

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 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.

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

Republic of Congo reported two suspected cases of yellow fever in Bouenza department last week. Further investigations and laboratory analysis are needed to assess whether they are confirmed cases, their vaccination status and their link to Angola.

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 19 June 2016, **Peruvian** authorities have reported 42 probable and 37 confirmed cases including nine deaths. The majority of cases have been reported from Junin department. 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 23 June 2016

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 remains of high concern due to:

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

- persistent local transmission in Luanda despite the vaccination campaign
- the continued extension of the outbreak to new provinces and new districts
- the high risk of spread to neighbouring countries
- suspicion of ongoing transmission in hard-to-reach areas like Cabinda
- inadequate surveillance systems capable of identifying new foci or areas of cases emerging.

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, last week, 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 well as Brazzaville, the capital of Republic of the Congo, which is located across the Congo River.

Actions

More than ten 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 Gavi, the UN Central Emergency Response Fund, and a vaccine donation from Brazil.

One EPIET fellow is currently deployed in DRC.

ECDC published a rapid risk assessment on 25 March 2016 and an updated risk assessment on 30 May 2016.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 1 July 2016

Epidemiological summary

In 2016, 18 cases of wild poliovirus type 1 (WPV1) have been reported, compared with 29 cases for the same period in 2015. The cases were detected in Pakistan (12 cases) and in Afghanistan (six cases).

As of 30 June 2016, three cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO in 2016, all from Laos. There were two 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 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

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

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.

Public health risks - Multistate - Refugee movements

Opening date: 4 November 2015 Latest update: 1 July 2016

Epidemiological summary

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

ECDC assessment

Refugees are currently not a public health threat to Europe with regard to communicable diseases, but they are a priority group for communicable disease prevention and control efforts as they are more vulnerable.
WHO, UNHCR and UNICEF jointly recommend that refugees, asylum seekers and migrants – irrespective of their legal status – should have non-discriminatory, equitable access to healthcare services, including vaccines and vaccination. They should be provided with timely immunisation against vaccine-preventable diseases, particularly measles and polio. All countries should have effective disease surveillance and reporting systems, outbreak investigation ability and case management and response capacity.

Actions

One MEDEPIET arrived for a mission in Greece on 27 June 2016.

An ECDC expert opinion on the public health needs of irregular migrants, refugees or asylum seekers across the EU's southern and south-eastern borders was published on the ECDC website in September 2015.
ECDC published:

- an RRA on the risk of communicable disease outbreaks in refugee populations in the EU/EEA
- an updated RRA on louse-borne relapsing fever amongst migrants in the EU/EEA
- an RRA on cutaneous diphtheria among recently arrived refugees and asylum seekers in the EU
- an RRA on the risk of importation and spread of malaria and other vector-borne diseases associated with the arrival of migrants in the EU
- an RRA on shigellosis among refugees in the EU.

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

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

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

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides