EU Threats

Mass gathering monitoring - Commonwealth Games- Scotland 2014
Opening date: 11 June 2014  Latest update: 24 July 2014

In collaboration with Health Protection Scotland ECDC has enhanced its monitoring activities during the Commonwealth Games: an international, multi-sport event involving athletes from the Commonwealth nations. The Games are taking place from 23 July to 3 August 2014 in Glasgow, Edinburgh and the surrounding areas, and near Carnoustie on Scotland’s east coast. Around one million spectators and 6 500 athletes and officials are expected to attend the event.

➤ Update of the week
During the past week, ECDC has not detected any events of public health significance to the Games.

West Nile virus - Multistate (Europe) - Monitoring season 2014
Opening date: 3 June 2014  Latest update: 31 July 2014

West Nile fever (WNF) is a mosquito-borne disease which causes severe neurological symptoms in a small proportion of infected people. 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 regarding 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 the EU. In neighbouring countries, Russia reported six cases in Samarskaya oblast and Serbia reported two new cases, one confirmed case from the City of Belgrade and one probable case from Juzno-backi district.

Non EU Threats

Outbreak of Ebola Virus Disease - West Africa - 2014
Opening date: 22 March 2014  Latest update: 31 July 2014

An ongoing outbreak of Ebola virus disease (EVD) in West Africa has been affecting Guinea, Liberia and Sierra Leone since December 2013. Since April 2014, there has been a new wave of transmission in all three affected countries, and the outbreak continues to evolve at an alarming pace. This is the largest ever documented outbreak of EVD, unprecedented in both the number of cases and deaths. It is also the largest outbreak in terms of geographical spread.

➤ Update of the week
Since the last CDTR on 24 July 2014, the affected countries have reported 230 new cases and 69 new fatalities.

On 29 July 2014, WHO was notified of a probable EVD case in Nigeria. The case travelled by air and arrived in Lagos, Nigeria, on 20 July via Lomé, Togo, and Accra, Ghana and was symptomatic at the time of arrival. Fifty-nine contacts (15 from among the airport staff and 44 from the hospital) have been identified. This is the first probable case detected in Nigeria.

On 16 July 2014, WHO established a sub-regional outbreak coordination centre in Conakry, Guinea, to better meet the needs for controlling the outbreak, as a follow-up action to the Emergency Ministerial meeting held by WHO in Accra, Ghana on 2–3 July 2014. The centre will consolidate and harmonise technical support to West African countries and will assist with resource mobilisation.

On 31 July 2014, WHO announced that it had scaled up its response and launched a new joint USD 100 million response plan as part of an intensified international, regional and national campaign to bring the outbreak under control.

US-CDC, France and Germany have issued advice to travellers to defer non-essential travel to the three affected countries.

Middle East respiratory syndrome- coronavirus (MERS CoV) - Multistate
Opening date: 24 September 2012 Latest update: 31 July 2014
Since April 2012, 853 cases of MERS-CoV infection have been reported by local health authorities worldwide, including 331 deaths. To date, all cases have either occurred in the Middle East, have direct links to a primary case infected in the Middle East, or have returned from this area. The source of the virus remains unknown but the pattern of transmission points towards an animal reservoir in the Middle East from which humans sporadically become infected through zoonotic transmission.

Chikungunya outbreak - The Caribbean, 2013-2014
Opening date: 9 December 2013 Latest update: 31 July 2014
An outbreak of chikungunya virus infection has been ongoing in the Caribbean since December 2013. The outbreak has spread to North, Central and South America. There have been more than 470,000 probable and confirmed cases in the region, including 26 fatalities so far. Several EU countries are reporting imported cases from the affected areas.

Dengue - Multistate (world) - Monitoring seasonal epidemics
Opening date: 20 April 2006 Latest update: 31 July 2014
Dengue fever is one of the most prevalent vector-borne diseases, affecting 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. The dengue outbreak in the Autonomous Region of Madeira, Portugal, in October 2012 further underlines the importance of surveillance and vector control in other European countries.

During 2014, no autochthonous dengue cases have been reported in Europe.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks
Opening date: 8 September 2005 Latest update: 31 July 2014
Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission stops and the world is polio-free. According to the World Health Organization (WHO), polio transmission currently occurs in ten countries of the world. Polio was declared a public health emergency of international concern (PHEIC) on 5 May 2014.
During the past week, three new infections with wild poliovirus 1 (WPV1) have been reported in Pakistan.
II. Detailed reports

Mass gathering monitoring - Commonwealth Games- Scotland 2014

Epidemiological summary

Athlete from Sierra Leone admitted to hospital
Source: Media

A male athlete from the Sierra Leone team was admitted to a Glasgow hospital last week after feeling unwell and doctors tested him for various conditions, including Ebola. He subsequently tested negative for Ebola virus infection. According to Public Health Scotland, he was of low clinical suspicion from the outset. The latest algorithm for care was followed which resulted in him being tested, as well as isolated and he subsequently tested negative.

Assessment: Several suspected cases have been reported in visitors or travellers returning from outside of the affected area, so far all have been tested negative.

Actions

ECDC is sharing information with relevant public health partners regarding this event. ECDC is carrying out enhanced epidemic intelligence activities during the Games, including adaptation of the information sources monitored, use of a targeted and systematic screening approach, and tailored tools (i.e. MedISys).

West Nile virus - Multistate (Europe) - Monitoring season 2014

Epidemiological summary

As of 31 July 2014, no human cases of West Nile fever have been reported in the EU. Twenty-five cases have been reported from neighbouring countries since the beginning of the 2014 transmission season. Thirteen cases have been reported by Bosnia and Herzegovina in Republika Srpska in the following municipalities: Banja Luka (4), Trebinje (1), Novi Grad (1), Kljuc (1), Krupa na Uni (1), Mrkonjic Grad (1), Gornji Ribnik (1), Teslic (1), Laktasi (1) and Prijedor (1). In addition, one case, reported in Prijedor in a patient from Austria, is still under investigation as the place of infection is still unknown. Serbia has reported five cases of West Nile fever in the following regions: City of Belgrade (2), Juzno-backi district (2) and Nisavski district (1). Russia has reported seven cases in the following oblasts: Samarskaya (6) and Belgorodskaya (1).

In Croatia, West Nile virus has been detected in a horse on a farm near Osijek, according to OIE.

Web sources: ECDC West Nile fever | ECDC West Nile fever risk assessment tool | West Nile fever maps

ECDC assessment

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

Actions

Since week 23, ECDC has been producing weekly West Nile fever (WNF) risk maps during the transmission season to inform blood safety authorities regarding WNF affected areas.
Epidemiological summary

The following distribution and classification of cases (as of 27 July 2014) is based on the best available information reported by ministries of health through the World Health Organization’s Regional Office for Africa:

- **Guinea:** 460 cases (336 confirmed, 109 probable, and 15 suspected) including 339 deaths;
- **Liberia:** 329 cases (100 confirmed, 128 probable, and 101 suspected) including 156 deaths;
- **Sierra Leone:** 533 cases (473 confirmed, 38 probable, and 22 suspected) including 233 deaths;
- **Nigeria:** one probable case has died.

As of 27 July 2014, the cumulative number of cases attributed to EVD in the four countries stands at 1,323 including 729 deaths.

**Web sources:** Reliefweb map | WHO/AFRO outbreak news | WHO Ebola Factsheet | ECDC Ebola health topic page | ECDC Ebola and Marburg fact sheet | Risk assessment guidelines for diseases transmitted on aircraft | EID "Undiagnosed Acute Viral Febrile Illnesses, Sierra Leone" | NEJM 16 April article

**ECDC assessment**

This is the largest outbreak of EVD reported so far and also the first documented outbreak of EVD in West Africa. The origin of the outbreak is unknown. The outbreak, after an apparent slowdown, has intensified again in the last few weeks, with an upsurge of EVD cases. Community resistance, inadequate treatment facilities and insufficient human resources in certain affected areas are among the challenges currently faced by the three countries in responding to the EVD outbreak.

Transmission requires direct contact with blood, secretions, organs or other bodily fluids of dead or living infected persons or animals. Therefore the risk of infection is still considered very low if precautions are strictly followed. However, the increase in the number of new EVD cases in recent weeks, the urban transmission, and the fact that not all chains of transmission are known, is increasing the likelihood of visitors and travellers coming into contact with infected/ill persons. The risk of exposure in healthcare facilities for EU residents and visitors to the affected areas is related to the implementation of effective infection transmission control measures in these settings and the nature of the care required. Recent reports of transmission to healthcare workers in different healthcare settings indicate that effective infection control measures are not being thoroughly implemented across healthcare facilities in the region.
Actions

An epidemiological update was posted on 17 July 2014 on the ECDC website.

ECDC published an update of its rapid risk assessment on 9 June. A new update is being completed and should be communicated to Member State authorities shortly.

ECDC provided guidance to Member States for EU travellers to and from the affected countries.

Distribution of the reported confirmed, suspected and probable cases of EVD by week, in Guinea, Sierra Leone and Liberia, from week 48/2013 to week 31/2014 (as of 27 July 2014)

Source: Adapted from WHO, Week 31 is incomplete

Middle East respiratory syndrome- coronavirus (MERS CoV) - Multistate

Opening date: 24 September 2012  Latest update: 31 July 2014

Epidemiological summary

Since April 2012, and as of 31 July 2014, 853 cases of MERS-CoV have been reported by local health authorities worldwide, including 331 deaths.

Confirmed cases and deaths by region

Middle East

Saudi Arabia: 721 cases/298 deaths
United Arab Emirates: 73 cases/9 deaths
Qatar: 7 cases/4 deaths
Jordan: 18 cases/5 deaths
Oman: 2 cases/2 deaths
Kuwait: 3 cases/1 death
Egypt: 1 case/0 deaths
Yemen: 1 case/1 death
Lebanon: 1 case/0 deaths
Iran: 5 cases/2 deaths

Europe
UK: 4 cases/3 deaths
Germany: 2 cases/1 death
France: 2 cases/1 death
Italy: 1 case/0 deaths
Greece: 1 case/1 death
Netherlands: 2 cases/0 deaths

Africa
Tunisia: 3 cases/1 death
Algeria: 2 cases/1 death

Asia
Malaysia: 1 case/1 death
Philippines: 1 case/0 deaths

Americas
United States of America: 2 cases/0 deaths

Web sources: ECDC’s latest rapid risk assessment | ECDC novel coronavirus webpage | WHO | WHO MERS updates | WHO travel health update | WHO Euro MERS updates | CDC MERS | Saudi Arabia MoH

ECDC assessment
The source of MERS-CoV infection and the mode of transmission have not been identified, but the continued detection of cases in the Middle East indicates that there is a persistent source of infection in the region. Dromedary camels are a host species for the virus, and many of the primary cases in clusters have reported direct or indirect camel exposure. Almost all of the recently reported secondary cases, many of whom are asymptomatic or have only mild symptoms, have been acquired in healthcare settings. There is therefore a continued risk of cases presenting in Europe following exposure in the Middle East, and international surveillance for MERS-CoV cases is essential.

The risk of secondary transmission in the EU remains low and can be reduced further through screening for exposure among patients presenting with respiratory symptoms (and their contacts) and strict implementation of infection prevention and control measures for patients under investigation.

Actions
ECDC published an epidemiological update on 2 July 2014.
The last rapid risk assessment was published on 2 June 2014.
ECDC is closely monitoring the situation in collaboration with WHO and EU Member States.
Figure 1. Distribution of MERS CoV infections by week of reporting, September 2012 - 31 July 2014 (n=853)
Chikungunya outbreak - The Caribbean, 2013-2014
Opening date: 9 December 2013 Latest update: 31 July 2014

Epidemiological summary

As of 25 July 2014, 474,880 suspected and confirmed cases of chikungunya virus infection have been reported from the affected countries and territories in the Caribbean and the rest of the Americas, including 26 fatalities. For the breakdown of figures please see the latest WHO PAHO update.

Several EU/EFTA countries have reported imported cases of chikungunya infection in patients with travel history to the affected areas: France, Greece, Italy, the Netherlands, Spain and Switzerland.

Web sources: PAHO update | ECDC Chikungunya | CDC Factsheet | Medisys page | CARPHA interactive chikungunya map

ECDC assessment

Epidemiological data indicate that the outbreak, which started in Saint Martin (FR), is still expanding and has reached Central and South America. Increasing case numbers have been observed from most of the affected areas. The vector is endemic in the region, where it also transmits dengue virus. Further spread of the outbreak is to be expected.

Vigilance is recommended for the occurrence of imported cases of chikungunya in tourists returning to the EU from the
Caribbean, including awareness among clinicians, travel clinics and blood safety authorities.

**Actions**
ECDC updated its [Rapid Risk Assessment](#) and published it on the website on 27 June 2014.

**Chikungunya in the Caribbean as of 25 July 2014**

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

| Opening date: 20 April 2006 | Latest update: 31 July 2014 |

**Epidemiological summary**

**Europe:** No autochthonous cases have been reported so far in 2014.

**Asia:** As of 25 July 2014, 378 confirmed cases of dengue fever have been recorded in Taiwan so far this year compared with around 200 cases during the same time period in 2013, according to [media](#) quoting the Taiwan Center for Disease Control. Among the 378 reported cases, 276 were locally-acquired and 102 were imported. Malaysia is experiencing a large increase in the number of dengue cases in 2014. So far this year, 50,804 dengue cases have been recorded up to 17 July, compared to 14,582 cases for the same period last year. In addition, 94 deaths have been reported, compared to only 29 deaths in 2013.

In China, an outbreak of dengue fever has been reported in Nansha district, Guangzhou, in Guangdong Province. Forty-six cases have been recorded since 11 July. All of the patients experienced mild symptoms and no serious or fatal cases have been reported so far.

**Pacific:** According to the Pacific Public Health Surveillance Network (PACNET), there are currently several ongoing dengue outbreaks occurring in the Pacific including French Polynesia, Tuvalu, Solomon Islands and Fiji. As of 21 July 2014, 334 cases had been reported in New Caledonia since September 2013. The number of recent cases is declining. Nauru is currently experiencing a dengue serotype-3 outbreak. Tonga has reported six dengue cases. The age range of cases is 16-39 years. The cases are all from Tongatapu with Nuku’alofa district. American Samoa is issuing a health alert after reporting around 100 suspected dengue cases.
Americas: In Central America, Honduras had recorded 10 574 cases up to 28 July 2014. Dengue serotypes 1, 2 and 3 are all circulating. In South America, dengue fever cases continue to rise in Venezuela with more than 32 168 cases recorded between 13 and 20 July, compared to 26 457 cases during the same period last year, according to media quoting the Ministry of Health.

Africa: A dengue outbreak in Tanzania which started in February and has infected 1 384 people to date continues to decline, according to media quoting the Ministry of Health. The most affected area during this outbreak has been Dar as-Salaam. In recent years, dengue outbreaks have previously occurred in Tanzania (July 2010 and June 2013). In Mayotte, although the number of new confirmed cases of dengue fever has been declining over the past three weeks, there is still active virus circulation on the island. Since the beginning of the year, 504 cases of dengue fever have been reported, according to the Indian Ocean Health Agency.

Web sources: ECDC Dengue | Healthmap Dengue | MedISys | ProMED America, Asia, Pacific |

ECDC assessment
ECDC monitors individual outbreaks, seasonal transmission patterns and inter-annual epidemic cycles of dengue through epidemic intelligence activities in order to identify significant changes in disease epidemiology. Of particular concern is the potential for the establishment of dengue transmission in Europe. Before the 2012 outbreak in the Autonomous Region of Madeira, local transmission of dengue was reported for the first time in France and Croatia in 2010. Imported cases continue to be detected in European countries, highlighting the risk of locally acquired cases occurring in countries where the competent vectors are present.

Actions
ECDC has published a technical report on the climatic suitability for dengue transmission in continental Europe and guidance for invasive mosquitoes’ surveillance.

Since week 28/2013, ECDC has been monitoring dengue on a bi-weekly basis.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks
Opening date: 8 September 2005 Latest update: 31 July 2014

Epidemiological summary
During the past week, three new infections with wild poliovirus 1 (WPV1) have been reported, all from Pakistan.

Worldwide, 131 cases have been reported to WHO so far in 2014, compared with 170 for the same time period in 2013. In 2014, nine countries have reported cases: Pakistan (102 cases), Afghanistan (8 cases), Equatorial Guinea (5 cases), Nigeria (5 cases), Somalia (4 cases), Cameroon (3 cases), Iraq (2 cases), Syria (1 case), and Ethiopia (1 case).

Equatorial Guinea has been added to the list of ‘virus-exporting countries’ which should now implement a set of Temporary Recommendations recently issued by the Director-General of the World Health Organization under the International Health Regulations (2005). These recommendations call for the vaccination of all residents and long-term visitors prior to international travel. The addition of Equatorial Guinea to the list follows the detection of wild poliovirus genetically linked to the current outbreak in Cameroon in a sewage sample collected near Sao Paulo, Brazil.

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet

ECDC assessment
Europe is polio-free. The last polio cases within the current EU borders were reported from Bulgaria in 2001. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

Genetic sequencing indicated that the five cases reported in 2014 from Equatorial Guinea are linked to the ongoing outbreak in Cameroon. A national emergency action plan to respond to the polio outbreak has been developed by the Ministry of Health in Equatorial Guinea and polio partner agencies and is now being implemented.

The recent importation to Brazil from Equatorial Guinea demonstrates that all regions of the world continue to be at risk of exposure to wild poliovirus until polio eradication is completed globally.
The confirmed circulation of WPV in several countries and the documented exportation of WPV to other countries support the fact that there is a potential risk for WPV being re-introduced into the EU/EEA. The highest risk of large poliomyelitis outbreaks occurs in areas with clusters of unvaccinated populations, people living in poor sanitary conditions, or a combination of the two.

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? | WHO statement on the meeting of the International Health Regulations Emergency Committee concerning the international spread of wild poliovirus, 5 May 2014

Actions

ECDC follows 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 into the EU.

Following the declaration of polio as a PHEIC, ECDC has updated its risk assessment. ECDC has also prepared a background document of travel recommendations for the EU.
The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.