



COMMUNICABLE DISEASE THREATS REPORT

CDTR

Week 34, 18-24 August 2013

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary EU Threats

West Nile virus - Multistate (Europe) - Monitoring season 2013

Opening date: 3 June 2013

Latest update: 22 August 2013

West Nile fever (WNF) is a mosquito-borne disease which causes severe neurological symptoms in a small proportion of infected people. During the transmission season between June and November, 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. During the 2012 season, 244 probable and confirmed cases were reported in the EU, and 693 cases in neighbouring countries.

→Update of the week

Between 16 and 22 August, 12 new cases were detected in the EU: Nine from Greece and three from Italy.

In neighbouring countries, 57 new cases were reported from the following countries: Israel (7), Montenegro (1), Russia (17), Serbia (32).

Non EU Threats

New! Poliovirus - Israel- Detection of WPV1 in environmental samples and healthy individuals

Opening date: 19 August 2013 Latest update: 22 August 2013

After the initial alert in June 2013, Israel has detected 67 wild poliovirus type 1 (WPV1) positive sewage samples from 24 sampling sites, collected from 3 February 2013 to 4 August 2013. As part of subsequent ongoing stool sample survey activities WPV1 has also been isolated in stool samples from 42 carriers, representing 4.4% of all collected samples. No cases of paralytic polio have been reported. In addition to routine acute flaccid paralysis surveillance, public health authorities have expanded the surveillance to all age groups, have increased enterovirus surveillance and are screening aseptic meningitis cases for polio. A nationwide polio immunisation campaign with bivalent oral polio vaccine started on 18 August 2013 for children up to the age of nine years. WHO estimates the risk of further international spread of WPV1 from Israel to remain moderate to high and recommends that all travellers to be fully vaccinated.

→Update of the week

Initially restricted to southern Israel, wild poliovirus type 1 (WPV1) has now also been detected in a sewage sample from central Israel.

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

Opening date: 24 September 2012 Latest update: 19 August 2013

Between April 2012 and 16 August 2013, 94 laboratory-confirmed cases, including 47 deaths, of an acute respiratory disease were acknowledged by WHO. The new virus, named Middle East respiratory syndrome coronavirus (MERS-CoV), is genetically distinct from the coronavirus that caused the SARS outbreak. Cases have originated in Saudi Arabia, Qatar, Jordan and the United Arab Emirates (UAE). In addition, cases have occurred in Germany, the United Kingdom, Tunisia, France and Italy in patients who were either transferred for care or returned from the Middle East. The MERS-CoV reservoir has not been established, nor is it clear how transmission occurs.

→Update of the week

Since 17 August 2013, seven new cases have been reported by national health authorities. Six cases were reported in Saudi Arabia which brings the number of cases reported in Saudi Arabia to 80. One new case was reported by Qatar health authorities on 20 August 2013. Two deaths occurred in previously reported 31- and 55-year-old cases in Saudi Arabia. These cases have not been acknowledged by WHO yet.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 22 August 2013

Polio, a crippling and potentially fatal vaccine-preventable disease mainly affecting children under five years of age, is close to being eradicated from the world after a significant global public health investment and effort. Outbreaks such as the ongoing one in the Horn of Africa pose serious challenges to this goal.

→Update of the week

The outbreak in the Horn of Africa affects now 108 cases of WPV1 in Somalia, 12 in Kenya and 1 in Ethiopia. In addition, in Israel, WPV1 has been isolated in 68 sewage samples across the country and 42 carriers of the virus have been identified in subsequent stool sampling surveys.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 22 August 2013

Dengue fever is one of the most prevalent vector-borne diseases in the world, affecting an estimated 50-100 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 recent 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.

→Undate of the week

So far in 2013, no autochthonous dengue cases have been reported in European countries apart from sporadic cases in Madeira in January.

II. Detailed reports

West Nile virus - Multistate (Europe) - Monitoring season 2013

Opening date: 3 June 2013 Latest update: 22 August 2013

Epidemiological summary

As of 22 August 2013, 42 human cases of West Nile fever have been reported in the EU and 176 cases in neighbouring countries since the beginning of the 2013 transmission season.

EU Member States

Austria

One confirmed case in the area of Sankt Pölten.

Greece

Thirty-five cases of WNF have been reported in Greece. The regions affected are Attiki (20), Imathia (1), Kavala (4), Thessaloniki (4) and Xanthi (4). For two cases reported this week the place of infection is still not available.

Italy

Four cases of WNF have been reported in Italy. The regions affected are Rovigo province (1), Ferrara (1), Modena (2).

Hungary

Hungary reported one case of WNF in Pest county. This area had already been affected in 2012.

Romania

Romania reported one case of WNF in Galati county, area affected in 2011 and 2010.

Neighbouring countries

Israel

Thirty-three cases have been reported in the Central, Haifa and Tel Aviv districts.

Montenegro

Montenegro reported its first case this year in Podgorica region, an area already suspected to be affected last year.

Russia

Seventy cases of WNF have been reported in from nine oblasts in Russia: Adygeya oblast (1), Astrakhanskaya oblast (20), Lipetskaya oblast (2), Rostovskaya oblast (4), Samarskaya oblast (8), Saratovskaya oblast (8), Volgogradskaya oblast (24), Voronezhskaya oblast (1) and the newly affected Belgorodskaya oblast (2).

Serbia

Seventy-one cases of WNF have been reported from eight districts of Serbia: Grad Beograd (50), Podunavski (4), Sremski (3), Juzno-backi (1), Juzno-banatski (8), Kolubarski (3), Macvanski (1) and the newly affected Branicevski district (1).

The former Yugoslav Republic of Macedonia

One case has been reported in Kocani (Eastern Macedonia).

Websources: ECDC West Nile fever risk maps | ECDC West Nile fever risk assessment tool | Keelpno Greece | Astrakhanskaya oblast | Volgograd oblast | Saratovskaya oblast | Israel MoH | Serbia MoH | Macedonian PH Institute | OIE 1 | OIE 2 |

ECDC assessment

The 2013 season has started and is progressing in comparable fashion to previous years in EU and neighbouring countries. West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures are 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 to humans.

Actions

ECDC produces weekly <u>West Nile fever risk maps</u> during the transmission season to inform blood safety authorities regarding affected areas.

ECDC published a West Nile fever <u>risk assessment tool</u> on 3 July 2013.

New! Poliovirus - Israel- Detection of WPV1 in environmental samples and healthy individuals

Opening date: 19 August 2013 Latest update: 22 August 2013

Epidemiological summary

In Israel, wild poliovirus type 1 (WPV1) was isolated from sewage samples collected on 9 April 2013 in Rahat, southern Israel. Preliminary analyses indicated that the strain is related to the strains circulating in Pakistan and the strain detected in sewage from Cairo in December 2012. The strain is not related to virus currently affecting the Horn of Africa. WPV1 has now been detected in 68 sewage samples from 24 sampling sites in southern and central Israel, collected from 3 February 2013 to 4 August 2013. As part of subsequent ongoing stool sample survey activities WPV1 has also been isolated in stool samples from 42 carriers, representing 4.4% of all collected samples. No cases of paralytic polio have been reported in the country.

Israel has been free of indigenous WPV transmission since 1988. In the past, wild poliovirus has been detected in environmental samples collected in this region between 1991 and 2002 without occurrence of cases of paralytic polio in the area. Specimens collected through environmental surveillance since 2002 in both Gaza and the West Bank have consistently tested negative for the presence of WPV.

A supplementary immunisation activity (SIA) with bivalent oral polio vaccine (OPV1 and 3) started in parts of southern Israel during the week of 5 August, and was expanded nationwide on 18 August for all children up to the age of nine years. The objective of these SIAs with OPV is to boost mucosal immunity levels in cohorts of children naïve to OPV to rapidly interrupt virus circulation.

Sources: MoH Israel | WHO DON

ECDC assessment

The World Health Organization (WHO) estimates the risk of further international spread of wild poliovirus type 1 (WPV1) from Israel to remain moderate to high. ECDC is preparing a risk assessment on the situation in Israel, Somalia and the region. The risk assessment will consider the risk of importation of wild poliovirus to the EU, and the risk of transmission within the EU.

Actions

WHO recommended that all countries, in particular those with frequent travel and contacts with polio-infected countries, strengthen surveillance for cases of acute flaccid paralysis (AFP), in order to rapidly detect new poliovirus importations and facilitate a rapid response. Countries should also analyse routine immunisation coverage data to identify subnational gaps in population immunity to guide catch-up immunisation activities and thereby minimise the consequences of new virus introduction. Priority should be given to areas at high risk of importations and where OPV3/DPT3 coverage is <80%. WHO's International Travel and Health recommends that all travellers to and from polio-infected areas be fully vaccinated against polio. Three countries remain endemic for indigenous transmission of WPV: Nigeria, Pakistan and Afghanistan. Additionally, in 2013, the Horn of Africa is affected by an outbreak of WPV (See global polio monitoring threat).

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

Opening date: 24 September 2012 Latest update: 19 August 2013

Epidemiological summary

As of 16 August 2013, 94 laboratory-confirmed cases of MERS-CoV, including 47 deaths worldwide have been acknowledged by WHO. All cases have either occurred in the Middle East or have had direct links to a primary case infected in the Middle East.

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As of 22 August, Saudi Arabia has reported 80 cases (six of these still pending WHO acknowledgement), including 41 deaths (two pending WHO acknowledgement), the UAE has reported five, Jordan two cases, both of which died and Qatar one case. Thirteen cases have been reported from outside the Middle East: in the UK (4), Italy (3), France (2), Germany (2) and Tunisia (2). In France, Italy, Tunisia and the United Kingdom, there has been local transmission among patients who have not been to the Middle East but had been in close contact with laboratory-confirmed or probable cases. Person-to-person transmission has occurred both among close contacts and in healthcare facilities, but, with the exception of a nosocomial outbreak in Al-Ahsa, Saudi Arabia, secondary transmission has been limited. Eight asymptomatic cases were reported by Saudi Arabia and two by the UAE. Six of these cases were healthcare workers.

On 9 July, WHO established an <u>Emergency Committee</u> to advise WHO's Director-General on the status of the current situation concerning MERS-CoV. On 17 July, the second meeting of the Emergency Committee under the International Health Regulations (2005) was held by teleconference. It concluded unanimously that with the information now available, and by using a risk assessment approach, the conditions for a Public Health Emergency of International Concern have not been met.

The Ministry of Health of Saudi Arabia updated its <u>Health Regulations</u> for travellers to Saudi Arabia for the Umrah and Hajj pilgrimage regarding MERS-CoV and now recommends that the elderly, those with chronic diseases, pilgrims with immune deficiency, malignancy and terminal illnesses, pregnant women and children coming for Hajj and Umrah this year should postpone their journey.

WHO published a travel advice on MERS-CoV for pilgrimages on 25 July 2013.

The <u>WHO guidelines for investigation</u> of cases of human infection with MERS-CoV were published in July 2013. On 30 July 2013, the MERS-CoV <u>Initial Interview Questionnaire of Cases</u> – Guide for the interviewer was published to support the investigators.

On 21 August 2013, WHO published a joint report of a mission to Riyadh, 4-9 June 2013 together with Saudi Arabia on Middle East respiratory syndrome coronavirus.

Web sources: ECDC RRA Update 22 July | ECDC novel coronavirus webpage | WHO | WHO MERS updates | WHO travel health update | WHO Euro MERS updates | CDC MERS | Saudi Arabia MoH |

ECDC assessment

The continued detection of MERS-CoV cases in the Middle East indicates that there is an ongoing source of infection present in the region. There is therefore a continued risk of cases occurring in Europe associated with travel to the area. Surveillance for cases is essential, particularly with expected increased travel to Saudi Arabia for the Hajj in October.

The risk of secondary transmission in the EU remains low and could 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

The latest ECDC <u>rapid risk assessment</u> was published on 22 July 2013.

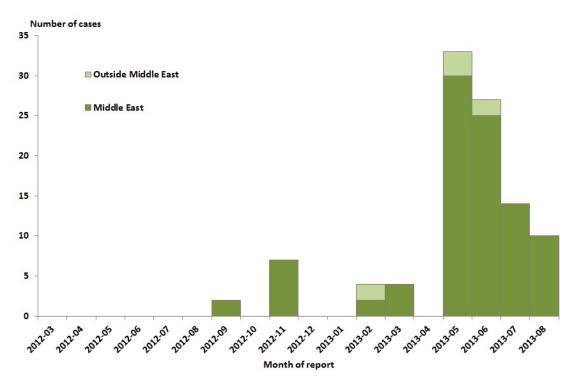
The results of an ECDC coordinated survey on laboratory capacity for testing the MERS-CoV in Europe were published in <u>EuroSurveillance</u>.

ECDC published a <u>Public Health Development</u> on 12 August 2013 regarding <u>a comparative serological study</u> on MERS in camels and other animals.

ECDC is closely monitoring the situation in collaboration with WHO and the EU Member States.

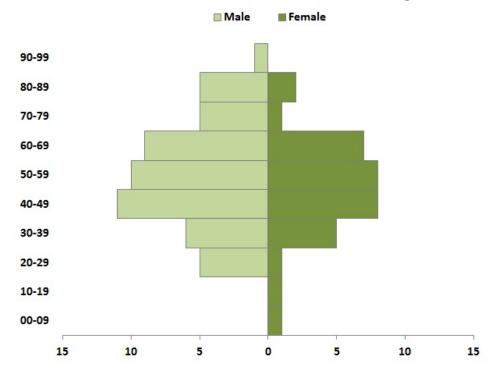
Distribution of confirmed cases of MERS-CoV by month of reporting and place of probable infection, March 2012 - August 2013 (n=101)

ECDC SRS

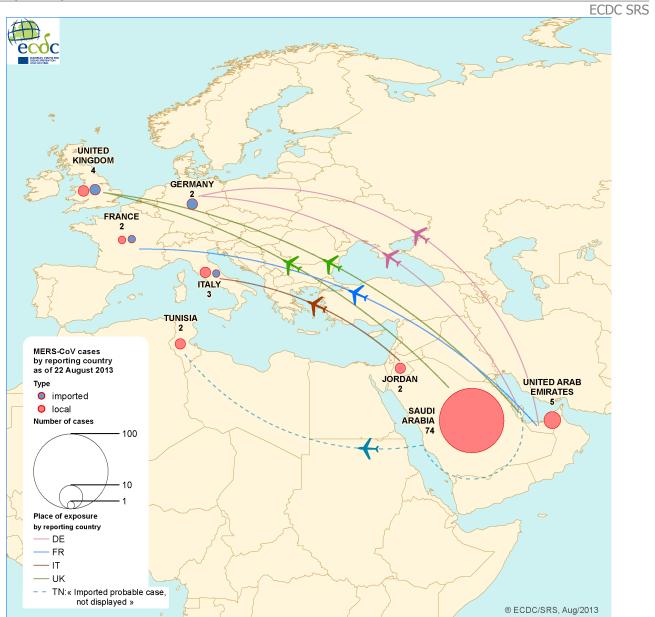


Distribution of confirmed cases of MERS-CoV, March 2012 - August 2013 (n=86*)

ECDC SRS *15 cases for which age or sex data is missing have been excluded



Distribution of MERS-CoV cases (WHO confirmed) by place of reporting as of 22 August 2013 (n=94)



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 22 August 2013

Epidemiological summary

Worldwide, 192 cases of poliomyelitis have been reported (up to 20 August 2013) compared with 123 for the same period in 2012. Five countries have reported cases in 2013: Afghanistan (4), Pakistan (24), Nigeria (43), Somalia (108), Kenya (12) and Ethiopia (1).

The majority (121), occurred in three non-endemic countries facing an outbreak with WPV1 that started in May 2013: Somalia, Kenya and Ethiopia. Those 121 cases of acute flaccid paralysis with poliovirus suggest that thousands of asymptomatic people in the region carry the virus.

Outbreak response measures across the region continue to be implemented. Five campaigns have been carried out in Somalia, vaccinating four million people. The large majority of the cases are in southern and central Somalia, where more than 600 000 children are particularly vulnerable to polio. On 18 July, one confirmed case was reported also from the northern Sool region.

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The affected area in Kenya is the Dadaab area of North Eastern province, an area with almost half a million Somali refugees and where nearly 50% of children remain under-immunised (compared to less than 5% in Kenya as a whole).

The confirmation of the case in Ethiopia underscores the risk this outbreak continues to pose to countries across the region. Supplementary immunisation activities (SIAs) had already been conducted in the region, an immunisation campaign is being conducted in response to the case and additional SIAs are planned in the coming months.

Ongoing circulation of the virus in Israel has been detected through sewage sampling and subsequent fecal sampling of healthy individuals. Please refer to the specific section on Israel in this report for details.

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet | WHO mission to Israel | Somalia Humanitarian Bulletin

ECDC assessment

The last polio cases in the EU occurred in 2001 when three young Bulgarian children of Roma ethnicity developed flaccid paralysis caused by WPV. Investigations showed that the virus originated from India. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when WPV1 imported from Pakistan caused an outbreak of 460 reported cases. The last indigenous WPV case in Europe was in Turkey in 1998. An outbreak in the Netherlands in a religious community opposed to vaccinations caused two deaths and 71 cases of paralysis in 1992.

Actions

ECDC follows reports on polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identify events that increase the risk of re-introduction of wild poliovirus into the EU.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 22 August 2013

Epidemiological summary

Asia: Laos, Malaysia, New Caledonia and Singapore have reported more cases in 2013 than 2012 for the same time period. There has also been an increase of cases in the Philippines and Vietnam. French Polynesia is also experiencing increased dengue levels. In Thailand there have been 81 763 dengue fever cases in 2013. Sixteen provinces report high numbers of patients and as the outbreak is becoming difficult to contain, health campaigns are being set up. Thailand's rainy season, running from May to September, is a high risk period. In Pakistan a slow increase of cases has been seen, leading to 549 cases reported in Sindh province. In Karachi the number of cases has risen to 646 since the beginning of the year. In India (Pune, Maharashtra state), there have been 44 cases in July; and overall six deaths in 2013. In Sri Lanka, 20 216 cases have been observed since the beginning of the year.

North America, Central America and South America: In the United States, three confirmed cases of locally-acquired dengue fever were detected in Florida, in Martin and St. Lucie County residents. After an investigation, it appears that the exposure was from local mosquitoes. Locally-acquired dengue is rare in the United States (previous case was reported in 2011). In Mexico, the number of dengue cases increased by 61% compared with 2012. Since January, 32 deaths and over 16 000 cases have been recorded. In Costa Rica, there have been 2 055 cases in 2013. In September 2012 there were 8480 cases. In Honduras, after the declared state of emergency on 30 July 2013, there have been overall 15 546 cases and 17 deaths. In the Dominican Republic there have been, as of 8 August 2013, 7975 cases and at least two deaths. In Brazil, many areas are affected, and fatalities are being reported, to name just a few: Ceara state reports 40 077 cases, and 21 deaths. In Mato Grosso state, 40 462 cases and 30 deaths have been recorded in 2013. Minas Gerais state reports 255 272 cases and 99 deaths.

Africa: The dengue epidemic in Angola, which started on 12 March 2013 has reached 1008 cases and is affecting four provinces (Kwanza Sul, Uige, Luanda and Malanje). No further update on this outbreak found.

Websources: ECDC Dengue | WHO Dengue update | WHO epidemiological curve | Healthmap Dengue |

ECDC assessment

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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 are being 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 <u>report</u> on the climatic suitability for dengue transmission in continental Europe and <u>guidance for invasive mosquitoes' surveillance</u>.

From week 28 onwards, ECDC has been monitoring dengue on a biweekly basis.

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