



COMMUNICABLE DISEASE THREATS REPORT

CDTR

Week 38, 15-21 September 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: 19 September 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

During the past week, 28 new WNF cases were detected in the EU: 13 from Greece, seven from Hungary, four from Romania and four from Italy.

In neighbouring countries, 75 new cases were reported from the following countries: Serbia (33), Russia (41) and Montenegro (1).

Non EU Threats

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

Opening date: 19 August 2013

Latest update: 19 September 2013

EU/EEA countries, as well as the rest of the WHO European Region, have been officially polio-free since 2002. Wild polio virus type 1 (WPV1) has been isolated in sewage and in the faeces of asymptomatic carriers in Israel in samples collected from 3 February to 25 August 2013. Detection of WPV in environmental samples is a signal of WPV transmission and consequently of great concern and highlights the potential for re-establishing transmission in Europe.

→ Update of the week

During the week leading up to 20 September 2013, no new positive samples have been detected.

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

Opening date: 24 September 2012

Latest update: 19 September 2013

Between April 2012 and 19 September 2013, 135 laboratory-confirmed cases, including 59 deaths, of acute respiratory disease caused by Middle East respiratory syndrome coronavirus (MERS-CoV), have been reported by national health authorities. MERS-CoV is genetically distinct from the coronavirus that caused the SARS outbreak. To date, all cases have either occurred in the Middle East or have had direct links to a primary case infected in the Middle East.

→Update of the week

Between 12 and 19 September, three new cases were reported by national health authorities, all in Saudi Arabia, including two deaths.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 19 September 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.

→Update 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.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 19 September 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 one currently affecting the Horn of Africa, pose serious challenges to this goal.

→Update of the week

As of 18 September 2013, globally the number of cases with wild poliovirus 1 (WPV1) infection was 264. The majority of cases occurred in the Horn of Africa where the number of reported cases has reached 184 (169 cases in Somalia, 15 cases in Kenya and 1 case in Ethiopia).

II. Detailed reports

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

Opening date: 3 June 2013

Latest update: 19 September 2013

Epidemiological summary

As of 19 September 2013, 167 human cases of West Nile fever have been reported in the EU and 436 cases in neighbouring countries since the beginning of the 2013 transmission season.

EU Member States

Croatia

Croatia has recorded 11 cases of WNV so far this year. Ten new probable cases were reported last week, one case from Medimurska county and nine cases from the Zagrebacka county, an area with one previous case report. In addition, the first probable case reported in Zagrebacka County on 23 August 2013 is now a confirmed case. For the remaining cases, final laboratory confirmation results are still pending.

Greece

Seventy-eight cases of West Nile virus (WNV) have been reported in Greece. The regions affected are Attiki (33), Imathia (2), Kavala (9), Thessaloniki (6), Xanthi (16), Kerkyra (1), Serres (5), Ileia (1), Pella (4) and one case was reported this week where the place of infection is not available at the moment.

Italy

Italy has reported 46 cases of WNV. The provinces affected are Modena (14), Rovigo (9), Verona (5), Reggio Emilia (4), Mantova (4), Bologna (2), Padova (1), Ferrara (5) and the newly affected provinces this week are Parma (1) and Cremona (1). No cases were reported from Cremona province in 2012.

Hungary

Hungary has reported 18 cases so far this year. The counties affected are: Fejer (2), Pest (3), Komaron (1), Békés (2), Budapest (3), Csongrád (2), Hajdú-Bihar (2), Jász-Nagykun-Szolnok (1) and the two newly affected counties this week are Heves (1) and Bács-Kiskun (1).

Romania

Romania has reported 14 cases of WNV. The counties affected are Braila (3), Ialomita (2), Iasi (2), Galati (2), Constanta (2), Tulcea (1) and the newly affected municipality of Bucuresti (2).

Neighbouring countries

Bosnia and Herzegovina

One case of WNF has been reported in Tuzlansko-podrinjski canton.

Israel

Fifty-six cases of WNV have been reported in Israel. The affected districts are Central (27), Haifa (17), Tel Aviv (11) and the newly affected Southern district (1).

Montenegro

Montenegro has reported two cases so far this year. One case in Podgorica region, an area suspected to be affected last year. The second case was recorded this week in the newly affected Cetinje region.

Serbia

Serbia has reported 210 cases of WNF from eight districts: Grad Beograd (124), Podunavski (12), Sremski (8), Juzno-backi (4), Juzno-banatski (36), Kolubarski (10), Macvanski (3), Branicevski district (2), Jablancki (1), Srednje-banatski (4), Severno-banacki (2), Moravicki (2), Severno-banatski (1) and the newly affected Zapadno-backi (1).

the former Yugoslav Republic of Macedonia

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

Russia

Russia has reported 165 cases of WNF from ten oblasts and one republic in Russia: Adygeya oblast (1), Astrakhanskaya oblast (61), Lipetskaya oblast (2), Rostovskaya oblast (8), Samarskaya oblast (9), Saratovskaya oblast (28), Volgogradskaya oblast (48), Voronezhskaya oblast (3), Belgorodskaya oblast (2), Kaluzhskaya oblast (1), Omskaya oblast (1) and the newly affected

Orenburgskaya oblast (1).

Ukraine

The first case for this year was reported in Zhytomyrs'ka oblast.

Websources: [ECDC West Nile fever risk maps](#) | [ECDC West Nile fever risk assessment tool](#) | [Volgograd oblast](#) | [Serbia MoH](#) | [Macedonian PH Institute](#) | [Croatia PHI](#) | [Israel MoH](#) |

ECDC assessment

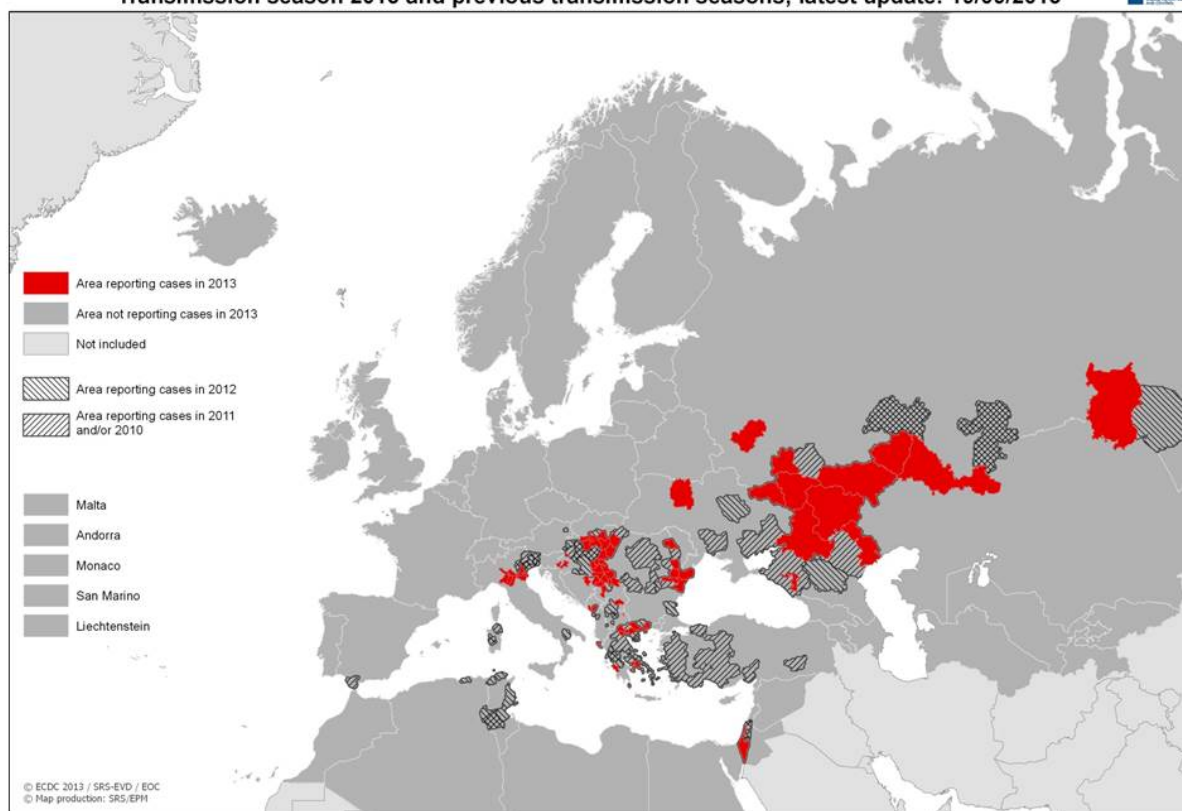
The 2013 season is progressing in comparable fashion to previous years in the EU and neighbouring countries. West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures are considered important for ensuring blood safety by the national health authorities when human 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 [West Nile fever risk maps](#) during the transmission season to inform blood safety authorities regarding affected areas.

ECDC published a West Nile fever [risk assessment tool](#) on 3 July 2013.

Reported cases of West Nile fever for the EU and neighbouring countries Transmission season 2013 and previous transmission seasons; latest update: 19/09/2013



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

Opening date: 19 August 2013

Latest update: 19 September 2013

Epidemiological summary

Wild poliovirus type 1 (WPV1) was first isolated from sewage samples collected between 7 and 13 April 2013 in Beer Sheva and Rahat in southern Israel. WPV1-specific analysis of samples indicated WPV1 introduction into that area in early February 2013. WPV1 has been detected in 96 sewage samples from 27 sampling sites all across Israel since then, indicating widespread transmission throughout the country. The strain is related to strains circulating in Pakistan and also to the strain detected in sewage from Cairo in December 2012. It is unrelated to the polioviruses circulating in the Horn of Africa.

In addition, as part of subsequent on-going stool sample survey activities, WPV1 has also been isolated in stool samples from 42 asymptomatic carriers. Israel has been free of indigenous WPV transmission since 1988. In the past, WPV has been detected in environmental samples collected in this region between 1991 and 2002 without occurrence of cases of paralytic polio in the area.

Three positive samples have also been collected from the West Bank and Gaza (the most recent on 20 August). Previous and subsequent specimens collected through environmental surveillance since 2002 in both Gaza and the West Bank have consistently

tested negative for the presence of WPV.

No case of paralytic polio has been reported in either Israel or the West Bank and Gaza.

Web sources: [MoH Israel](#) | [WHO DON](#)

ECDC assessment

The World Health Organization (WHO) estimates the risk of further international spread of WPV1 from Israel to remain moderate to high. ECDC is preparing a risk assessment on the situation in Israel and the Horn of Africa where there is an ongoing large outbreak of polio. The risk assessment will consider the risk of importation of wild poliovirus to the EU, and the risk of transmission within the EU.

Actions

Nationwide measures to prevent cases of poliomyelitis and stop the environmental spread of the virus have been adopted in Israel, including a supplementary immunisation activity with bivalent oral polio vaccine (OPV1 and 3) with the aim of boosting mucosal immunity levels in cohorts of children naïve to OPV in order to rapidly interrupt virus circulation.

ECDC supports WHO recommendations 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%. All travellers to and from polio-infected areas should 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.

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

Opening date: 24 September 2012

Latest update: 19 September 2013

Epidemiological summary

As of 19 September 2013, 135 laboratory-confirmed cases of MERS-CoV, including 59 deaths worldwide have been reported by national health authorities. All cases have either occurred in the Middle East or have had direct links to a primary case infected in the Middle East.

As of 19 September 2013, Saudi Arabia has reported 111 symptomatic or asymptomatic cases including 49 deaths, Jordan two cases, who both died, United Arab Emirates five cases including one fatality and Qatar three cases including one fatality. The reason for the discrepancy between the number of cases reported for Saudi Arabia here and on the official Saudi Ministry of Health website is being investigated.

Fourteen cases have been reported from outside the Middle East: in the UK (4), Italy (3), France (2), Germany (2) and Tunisia (3). In France, Italy, Tunisia and the United Kingdom, there has been local transmission among patients who have not been to the Middle East but have been in close contact with laboratory-confirmed or probable cases. Person-to-person transmission has occurred both among close contacts and in healthcare facilities. However, with the exception of a possible nosocomial outbreak in Al-Ahsa, Saudi Arabia, secondary transmission has been limited. Sixteen asymptomatic cases were reported by Saudi Arabia and two by the UAE. Seven of these cases were healthcare workers.

The Ministry of Health of Saudi Arabia updated its [Health Regulations](#) 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 [WHO guidelines for investigation](#) of cases of human infection with MERS-CoV were published in July 2013. On 30 July 2013, the MERS-CoV [Initial Interview Questionnaire of Cases](#) – 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

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East respiratory syndrome coronavirus.

On 18 September WHO has issued an [interim recommendation to laboratories and stakeholders](#) involved in laboratory testing for Middle East respiratory syndrome coronavirus (MERS-CoV).

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](#) | [Qatar SCH](#) | [Eurosurveillance article](#)

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. The source of infection and the mode of transmission have not been identified. 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 [rapid risk assessment](#) was published on 22 July 2013. The risk assessment is currently being updated.

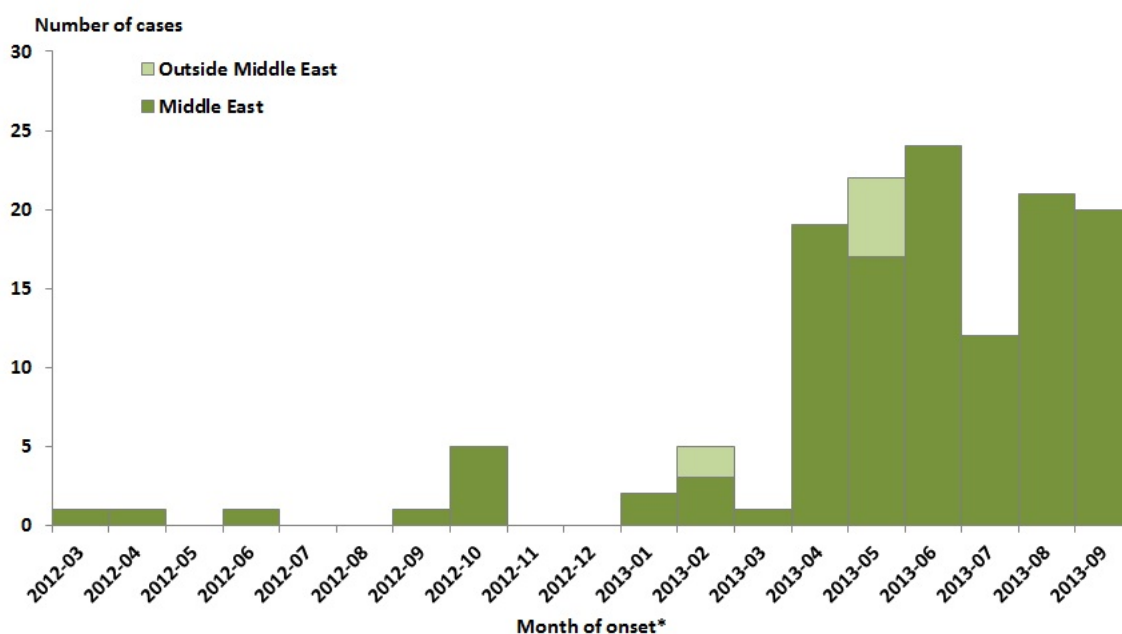
The results of an ECDC coordinated survey on laboratory capacity for testing the MERS-CoV in Europe were published in [EuroSurveillance](#).

ECDC published a [Public Health Development](#) on 27 August 2013 regarding the isolation of MERS-CoV from a bat sample.

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

Distribution of confirmed cases of MERS-CoV by month* and place of probable infection, March 2012 - 19 September 2013 (N=135)

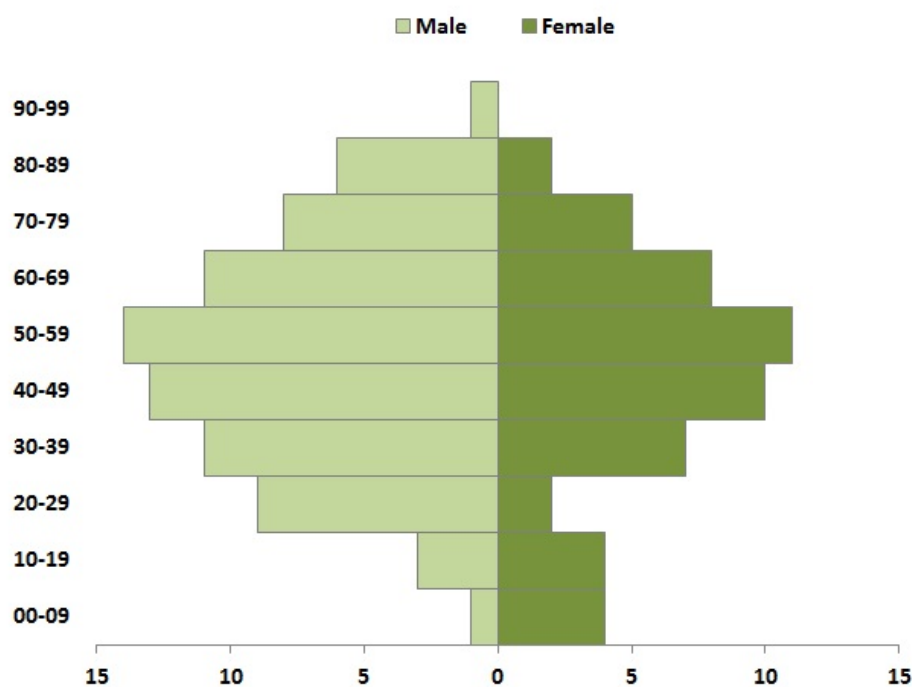
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* Where the month of onset is unknown the month of reporting has been used.

Distribution of confirmed cases of MERS-CoV, March 2012 - 19 September 2013 (n=130*)

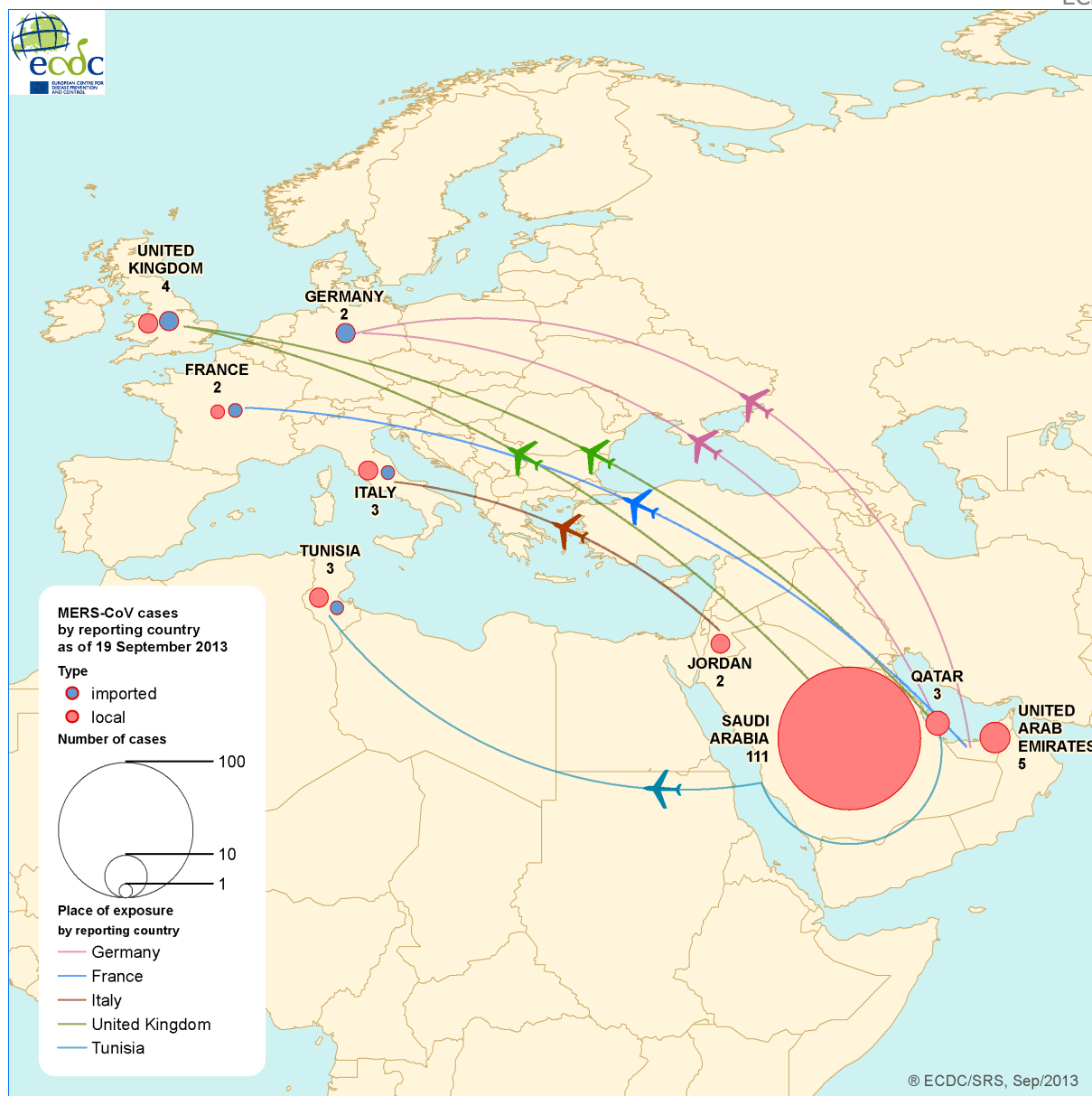
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*5 cases for which age or sex data is missing have been excluded

Distribution of MERS-CoV cases by place of reporting as of 19 September 2013

ECDC SRS



Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 19 September 2013

Epidemiological summary

Europe: Since the last update in May 2013, the [Portuguese Directorate General of Health](#) has reported nine probable cases of dengue fever in Madeira, all of which have been under laboratory investigation. Of these nine cases, only two were laboratory confirmed and both cases were imported from Venezuela. Since the outbreak was considered under control by the Portuguese Directorate General of Health on 3 March 2013, no new cases of autochthonous dengue fever have been reported on the island.

Asia: Dengue activity is variable. Australia, Lao PDR, Malaysia and Singapore have reported more cases in 2013 than 2012 for the same time period. The recent trend has increased in the Philippines, Singapore and Vietnam and decreased in Australia, Cambodia and Malaysia. In Pakistan, the number of new dengue cases reported in the Karachi province has decreased in recent weeks. India has reported more than 22 000 cases of dengue fever since the beginning of the year. In China, as of 3 September, 581 dengue cases have been reported in Xishuangbanna, Dai Autonomous Prefecture, south Yunnan Province since a dengue outbreak was first reported on 15 August 2013. The majority of these cases are autochthonous.

Caribbean: In Puerto Rico, 10 471 suspected cases and 39 confirmed cases of dengue haemorrhagic fever (DHF) have been reported so far in 2013. DENV-1 and DENV-4 are the predominant serotypes. The dengue outbreak in Martinique is still ongoing. Cases have been reported in 29 of the island's 34 communes. Since the beginning of 2013, the predominant serotype has been DENV-2. Surveillance indicators suggest that the dengue epidemic in Guadeloupe remains active, although the number of new cases has stabilised in the past weeks, according to [InVS](#). The predominant serotype is DENV-4, which has not circulated in Guadeloupe for several years. The Dominican Republic has reported 9 306 cases since the beginning of 2013. Overall, the number of new dengue cases reported across the regions seems to be either decreasing or stabilising.

The Pacific: As of 14 September 2013, New Caledonia has reported 10 532 cases. The weekly trend has decreased based on the three week moving average and remained low. French Polynesia continues to report dengue activity. As of 6 September, 384 cases have been reported since February 2013. The predominant serotype circulating is DENV-1, while DENV-3 accounts for one-third of the cases.

Americas: In North America, the United States has recorded 18 autochthonous cases of dengue fever in Florida to date. The [Florida Department of Health \(FDH\)](#) reports that all the cases were acquired in the Rio and Jensen Beach area of Martin County. In Central America, according to media reports, the number of new dengue cases has slightly decreased in Costa Rica and Honduras during the past weeks. In South America, the province of Minas Gerais in Brazil has recorded 11 000 new cases in the past two weeks. In Paraguay, as of 13 September, 130 000 cases and 232 deaths have been recorded. French Guiana has reported 15 250 cases since the beginning of the epidemic in September 2012. All four serotypes are co-circulating and the predominant serotype is DENV-2. The recent trend indicates that the number of cases is slightly decreasing in the central areas of the country.

Websources: [ECDC Dengue](#) | [Healthmap Dengue](#) | [MedISys](#) | [ProMED Asia update](#) | [ProMED Americas update](#) | [WPRO update](#) | [CDC Dengue](#) | [InVS](#)

ECDC assessment

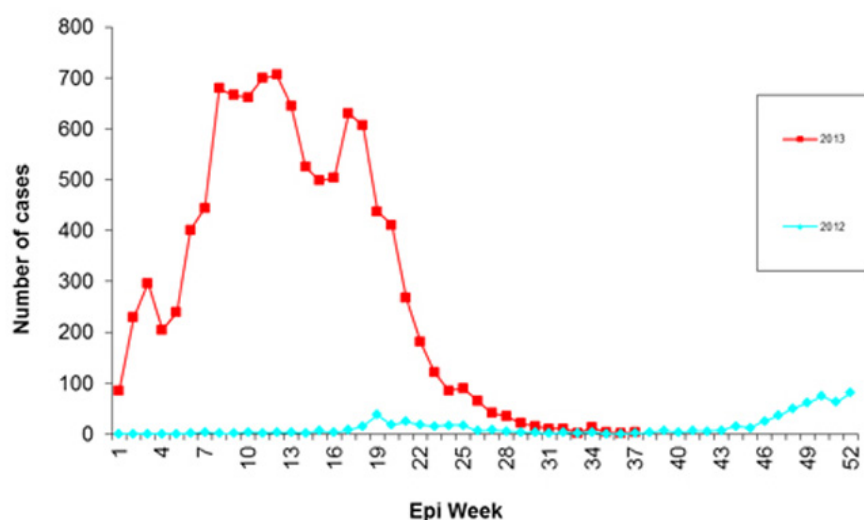
South-East Asia, Central America and the Caribbean appear to be experiencing a severe season this year.

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 [report](#) on the climatic suitability for dengue transmission in continental Europe and [guidance for invasive mosquitoes' surveillance](#).

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

Dengue in NEC, 2012-2013

New Caledonia as of 16 September in 2013
 (Source: Pacific Public Health Surveillance Network)

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 19 September 2013

Epidemiological summary

Worldwide, as of 18 September 2013, 264 cases of poliomyelitis have been reported to WHO compared with 145 for the same period in 2012. Six countries have reported cases in 2013: Afghanistan (4), Pakistan (28), Nigeria (47), Somalia (169), Kenya (15) and Ethiopia (1).

The majority of WPV1 cases (70%), were reported in three non-endemic countries in the Horn of Africa currently experiencing an outbreak with WPV1 that started in May 2013: Somalia, Kenya and Ethiopia. Outbreak response measures across the region continue to be implemented. Five campaigns have been carried out in Somalia which have vaccinated 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. The affected area in Kenya is the Dadaab area of North Eastern province with almost half a million Somali refugees, where nearly 50% of children, remain under-immunised.

Ongoing circulation of WPV1 in Israel has been detected through sewage sampling and subsequent faecal 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

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identify events that increase the risk of re-introduction of wild poliovirus into the EU.

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