

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: 31 October 2013

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. As of 31 October 2013, 226 human cases of West Nile fever have been reported in the EU and 557 cases in neighbouring countries since the beginning of the 2013 transmission season.

→Update of the week

During the past week, two new cases were reported in the EU, whose dates of onset are both in August. Hungary reported one new case in Fejér county and Italy reported one new case in the province of Brescia.

In neighbouring countries, no new cases were detected.

#### Influenza - Multistate (Europe) - Monitoring 2013-2014 season

Opening date: 4 October 2013

Latest update: 24 October 2013

Following the 2009 pandemic, influenza transmission in Europe has returned to its seasonal epidemic pattern, with peak activity seen during winter months. ECDC monitors influenza activity in Europe during the winter seasons and publishes the results on its website in the Weekly Influenza Surveillance Overview.

→Update of the week

This week, all 27 reporting countries experienced low intensity of clinical influenza activity.

### Non EU Threats

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

Opening date: 24 September 2012

Latest update: 31 October 2013

Since April 2012, 149 laboratory-confirmed cases, including 63 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 24 and 31 October 2013, three additional cases have been reported from the Kingdom of Saudi-Arabia from the Eastern Region. All three cases had several comorbidities. The two male cases are still in intensive care, while the female case died. One of the male cases was a healthcare worker.

On 29 October 2013 the World Health Organization (WHO) was informed that in Qatar a case was found during contact tracing, a 23-year-old man was identified as a close contact of a previously laboratory-confirmed case as part of the epidemiological investigation. He is a worker in the animal barn owned by the previously laboratory-confirmed case. The man developed mild symptoms of illness and is in good condition. Preliminary investigations revealed that he did not recently travel outside the country.

On 29 October 2013 in Oman, the first case of the MERS coronavirus was recorded in the country. A 68 year old patient suffering from chronic diseases is under intensive treatment at one of the local referral hospitals.

## Cholera - Mexico - Monitoring outbreak 2013

Opening date: 14 October 2013

Latest update: 31 October 2013

Since August of this year, there has been an ongoing outbreak of cholera in Mexico, affecting five provinces, with 176 reported cases, including one death.

→Update of the week

During the past week, five new cases were reported in Mexico: one in the state of San Luis Potosi and four in Veracruz.

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

Opening date: 8 September 2005

Latest update: 31 October 2013

Polio, a crippling and potentially fatal vaccine-preventable disease affecting mainly children under the age of five, is close to being eradicated from the world after a significant global public health investment and effort. However, outbreaks, such as the one currently affecting the Horn of Africa and a recently reported cluster of acute flaccid paralysis in Syria pose serious challenges to this goal.

→Update of the week

Five new wild polio virus type 1 (WPV1) cases were reported to the World Health Organization during the past week.

## Outbreak of poliomyelitis - Syria -2013

Opening date: 22 October 2013

Latest update: 29 October 2013

A cluster of children affected by acute flaccid paralysis (AFP) was detected in early October 2013 in Deir Al Zour province in the Syrian Arab Republic and is currently being investigated. Wild poliovirus was last reported in Syria in 1999. This cluster increases the risk for the importation of wild polio virus to the EU/EEA and further re-establishment and transmission in the Member States.

→Update of the week

On 29 October 2013 WHO published additional details on the [Global Alert and Response](#) site. Following reports of a cluster of 22 acute flaccid paralysis (AFP) cases on 17 October 2013 in the Syrian Arab Republic, wild poliovirus type 1 (WPV1) has been confirmed from ten of the cases under investigation.

## Wound botulism in people who inject drugs (PWID) - Norway- 2013

Opening date: 28 October 2013

Latest update: 31 October 2013

On 18 October, the Norwegian Institute of Public Health reported two suspected cases of wound botulism in people who inject drugs (PWID). As of 28 October, there are two confirmed and four suspected cases reported among PWID residing in the Oslo area or in neighbouring municipalities. Most cases have reported intramuscular injection of heroin. This is the largest outbreak of wound botulism ever identified in Norway.

→Update of the week

As of 31 October, Norway has reported two confirmed and four suspected cases of wound botulism in PWID.

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

Opening date: 20 April 2006

Latest update: 31 October 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.

## II. Detailed reports

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

Opening date: 3 June 2013

Latest update: 31 October 2013

#### Epidemiological summary

As of 31 October 2013, 226 human cases of West Nile fever have been reported in the EU and 557 cases in neighbouring countries since the beginning of the 2013 transmission season.

#### EU Member States

##### **Croatia**

Croatia has recorded 16 cases of West Nile virus (WNV) so far this year. The affected areas are Zagrebacka county (8), Medimurska county (1) and Zagreb (7).

##### **Greece**

Eighty-six cases of WNV have been reported in Greece. The regions affected are Attiki (36), Imathia (3), Kavala (11), Thessaloniki (6), Xanthi (16), Kerkyra (1), Serres (8) Ileia (1) and Pella (4).

##### **Italy**

Italy has reported 68 cases (39 neuroinvasive and 29 non-neuroinvasive) of WNV. The provinces affected are Modena (16), Rovigo (10), Verona (7), Reggio Emilia (5), Mantova (7), Bologna (2), Padova (1), Ferrara (6), Parma (3), Cremona (1), Treviso (5), Venezia (2), Foggia (1), Lodi (1) and Brescia (2).

##### **Hungary**

Hungary has reported 31 cases so far this year. The counties affected are: Fejér (3), Pest (5), Komaron (1), Békés (2), Budapest (6), Csongrád (3), Hajdú-Bihar (2), Jász-Nagykun-Szolnok (3), Heves (3), Bács-Kiskun (2) and Szabolcs-Szatmár-Bereg (1).

##### **Romania**

Romania has reported 24 cases of WNV. The counties affected are Braila (4), Ialomita (3), Iasi (2), Galati (2), Constanta (2), Tulcea (3), Bucuresti (2), Ilof (1) Mures (1), Bacau (2) and Sibiu (2).

#### Neighbouring countries

##### **Bosnia and Herzegovina**

Three cases of WNF have been reported so far this year, two cases in Tuzlansko-podrinjski canton and one case in Modrica canton.

##### **Israel**

Sixty-three cases of WNV have been reported in Israel. The affected districts are Central (30), Haifa (19), Tel Aviv (11) and the Southern district (3)

##### **Montenegro**

Montenegro has reported four cases to date. Three cases in the Podgorica region and one case in the Cetinje region.

##### **Serbia**

Serbia has reported 302 cases of WNF from seventeen districts: Grad Beograd (171), Podunavski (15), Sremski (11), Juzno-backi (20), Juzno-banatski (48), Kolubarski (10), Macvanski (6) Branicevski (3), Jablancki (1), Srednje-banatski (6), Severno-backi (3), Moravicki (2), Severno-banatski (1), Zapadno-backi (1), Zlatiborski (1), Pomoravski (1), Rasinski (1) and Sumadijski (1).

##### **the former Yugoslav Republic of Macedonia**

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

##### **Russia**

Russia has reported 177 cases of WNF from ten oblasts and one republic in Russia: Adygeya oblast (1), Astrakhanskaya oblast (69), Lipetskaya oblast (2), Rostovskaya oblast (8), Samarskaya oblast (9), Saratovskaya oblast (30), Volgogradskaya oblast (49), Voronezhskaya oblast (4), Belgorodskaya oblast (2) Kaluzhskaya oblast (1), Omskaya oblast (1) and Orenburgskaya oblast (1).

##### **Ukraine**

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

**Tunisia**

Tunisia has reported six cases since the beginning of the transmission season in July. The five affected governorates are Gabes (2), Mahdia (1), Monastir (1), Nabeul (1) and Sousse (1).

**Web sources:** [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**

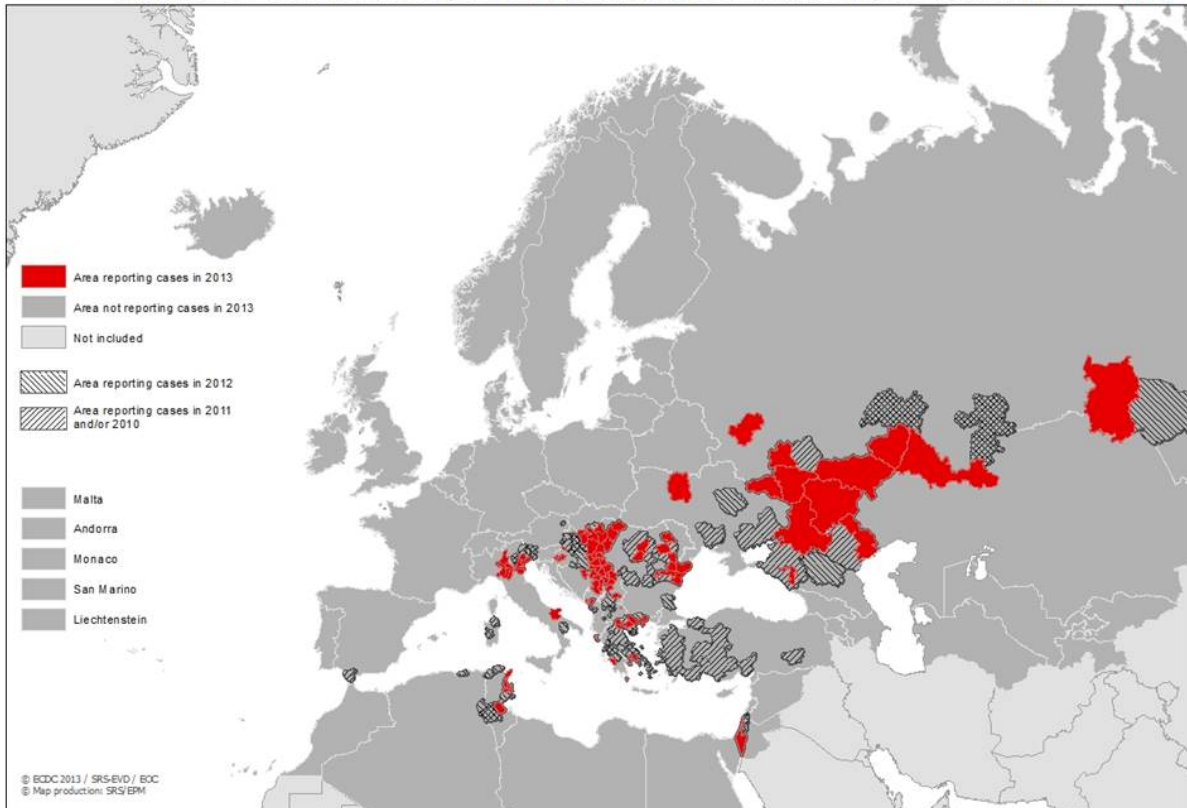
The 2013 season is progressing in comparable fashion to previous years in the EU and neighbouring countries. West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures are important for ensuring blood safety by the national health authorities when human cases 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: 31/10/2013



## Influenza - Multistate (Europe) - Monitoring 2013-2014 season

Opening date: 4 October 2013

Latest update: 24 October 2013

### Epidemiological summary

During week 43/2013:

- All 27 reporting countries experienced low intensity of clinical influenza activity.
- Of 351 sentinel specimens tested by 21 countries, four specimens (1%) were positive for influenza virus.
- Three hospitalised laboratory-confirmed influenza cases were reported by the UK.

Websources: [WISO](#) | [ECDC Seasonal influenza](#) | [CDC Seasonal influenza](#)

### ECDC assessment

During the first few weeks of the 2013–2014 influenza season, there has been no evidence of sustained influenza activity in Europe.

## Actions

ECDC will be producing the weekly influenza surveillance overview on a weekly basis.

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

Opening date: 24 September 2012

Latest update: 31 October 2013

### Epidemiological summary

As of 31 October 2013, there have been 149 laboratory-confirmed cases of MERS-CoV worldwide, including 63 deaths. All cases have either occurred in the Middle East or have had direct links to a primary case infected in the Middle East.

Saudi Arabia has reported 124 symptomatic and asymptomatic cases including 52 deaths, Jordan two cases, who both died, United Arab Emirates five cases, including one fatality, Qatar five cases, including two deaths and Oman one case.

Twelve cases have been reported from outside the Middle East: in the UK (4), France (2), Tunisia (3), Germany (2) and Italy (1).

In France, 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 before the Umrah and Hajj pilgrimage regarding MERS-CoV. This year, the pilgrimage took place from 13 to 18 October. No new cases were reported in Saudi Arabia during that period.

WHO has convened an Emergency Committee under the International Health Regulations (IHR), comprising international experts from all WHO Regions, in September 2013 to advise the Director-General on the current situation. The Emergency Committee unanimously advised that, with the information now available, and using a risk-assessment approach, the conditions for a Public Health Emergency of International Concern (PHEIC) have not at present been met.

**Web sources:** [ECDC RRA Update 26 September](#) | [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](#) | [Eurosurveillance article 26 September](#) | [Oman 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. 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.

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 26 September 2013.

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.

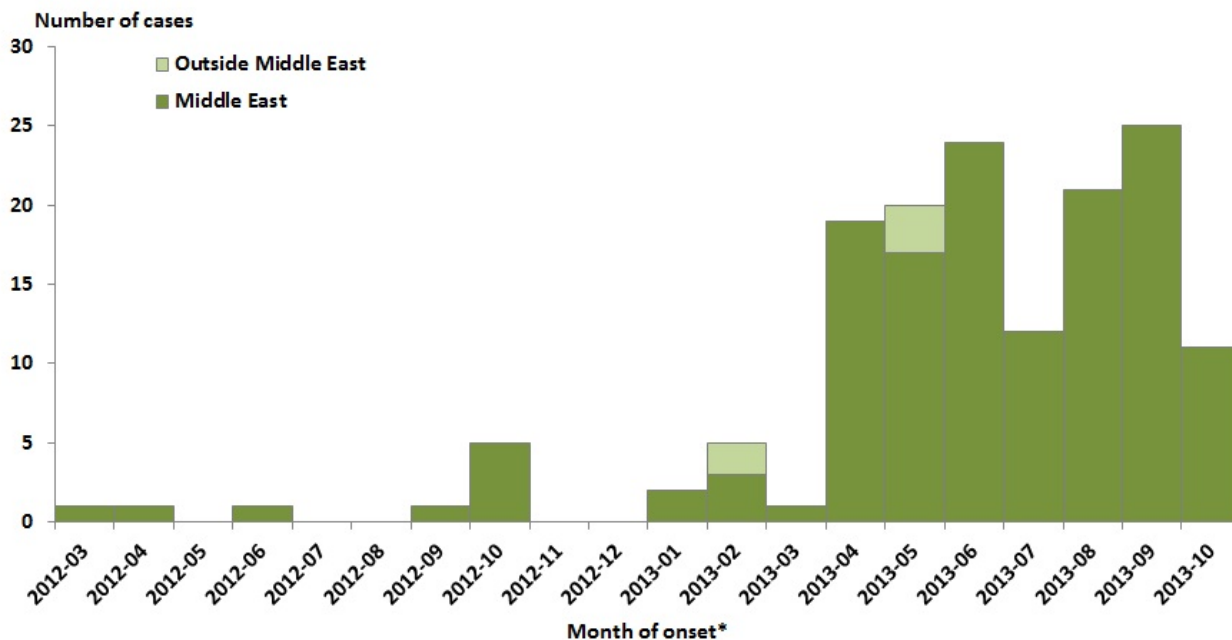
The first 133 cases are described in [EuroSurveillance](#) published on 26 September 2013.

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 - 31 October 2013 (N=149)

ECDC SRS



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

Distribution of confirmed cases of MERS-CoV by age and gender, March 2012 - 31 October 2013 (n=144\*)

ECDC SRS

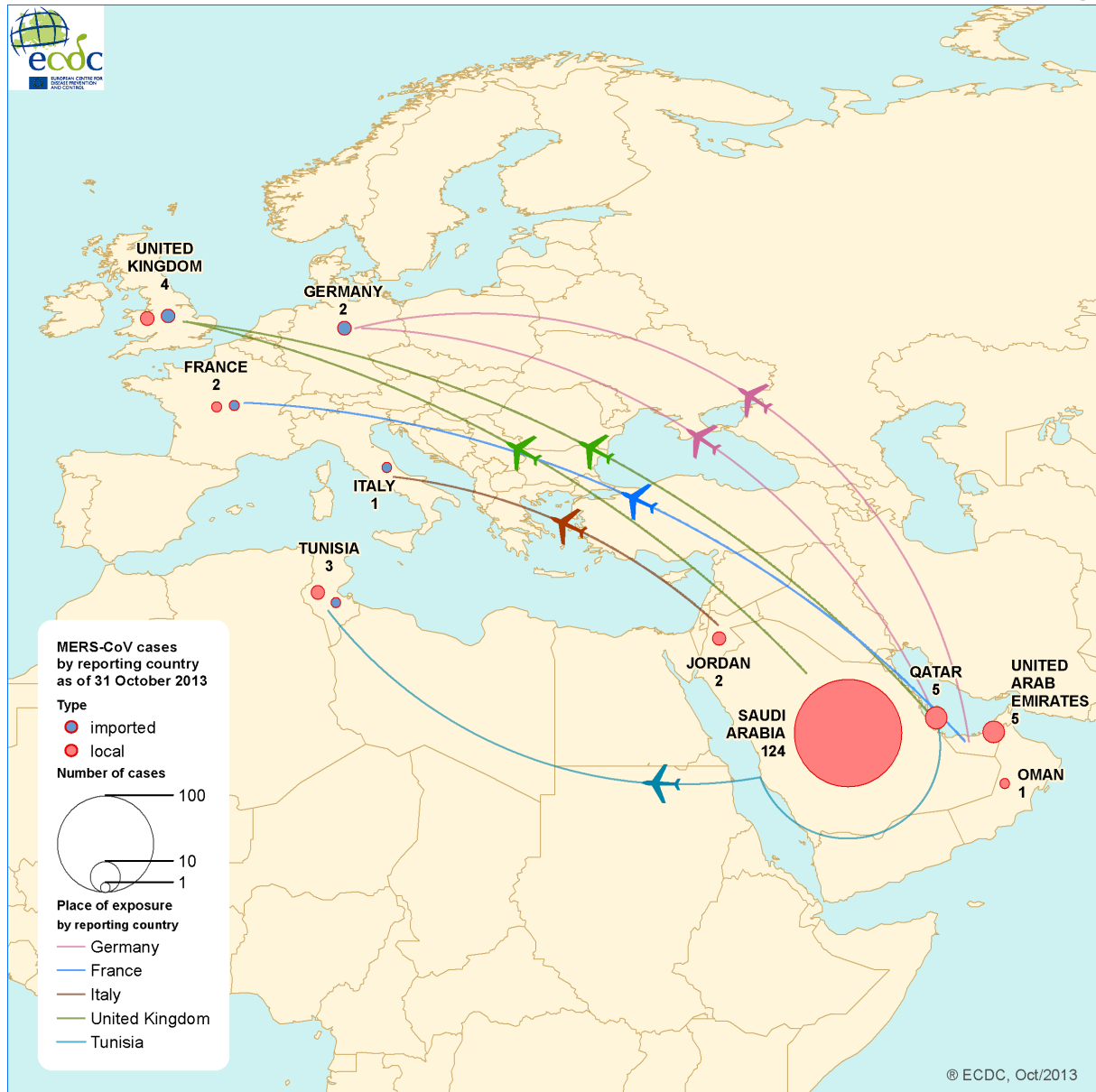


\*5 cases for which age or sex data is missing have been excluded



## Distribution of MERS-CoV cases by place of reporting as of 31 October 2013

ECDC SRS



## Cholera - Mexico - Monitoring outbreak 2013

Opening date: 14 October 2013

Latest update: 31 October 2013

## Epidemiological summary

As of 28 October 2013, Mexico has reported 176 confirmed cases, including one death, of infection with *Vibrio cholerae* O:1 Ogawa toxigenic. The affected areas include the Federal District (2 cases), the state of Hidalgo (157 cases), the state of Mexico (9 cases), the state of San Luis Potosi (2 case) and the state of Veracruz (6 cases). Eighty-nine of the total confirmed cases are women and 87 are men. Fifty-seven cases have been hospitalised.

An antimicrobial susceptibility test for *Vibrio cholerae* O1 Ogawa toxigenic was conducted by the Institute of Epidemiological Diagnostics and Reference (InDRE) which demonstrated that the bacterium was susceptible to doxycycline and chloramphenicol, with reduced susceptibility to ciprofloxacin and resistance to trimethoprim/sulfamethoxazole.

The current strain is different from the one that circulated in Mexico during 1991-2001. However, the genetic profile of the bacterium obtained from patients in Mexico presents high similarity (95%) with the strain that is currently circulating in three Caribbean countries (Haiti, Dominican Republic and Cuba).

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Investigation results are indicating that river water is the source of contamination for the affected persons in the state of Hidalgo.

**Web sources:** [PAHO epidemiological alert on 1 October](#) | [PAHO epidemiological alert 12 October](#) | [PAHO epidemiological alert 26 September 2013](#) | [WHO DON](#)

### ECDC assessment

This is the first sustained autochthonous transmission of cholera recorded in Mexico since the 1991-2001 endemic period. Travellers to Mexico and to the other affected countries in the region (Cuba, the Dominican Republic and Haiti) should be aware of preventive hygiene measures and seek advice from travel medicine clinics prior to their departure, to assess their personal risk. In addition, physicians in the European Union should consider the diagnosis of cholera in returning travellers from these countries presenting with compatible symptoms. Upon diagnosis, notification to the relevant public health authorities is essential.

### Actions

ECDC published an [epidemiological update](#) on 10 October.

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

Opening date: 8 September 2005

Latest update: 31 October 2013

### Epidemiological summary

In the past week, five new WPV1 cases were reported to WHO: one case in Afghanistan, three cases in Pakistan and one case in Cameroon. This is the first WPV case in Cameroon since 2009. No new WPV cases were reported from the Horn of Africa. Ethiopia and Somalia have deployed permanent vaccination points at all major entry points.

Worldwide, as of 23 October 2013, 301 cases of poliomyelitis have been notified to WHO compared with 175 for the same period in 2012. Eight countries have recorded cases in 2013: Somalia (174), Nigeria (49), Pakistan (46), Kenya (14), Afghanistan (8), Ethiopia (6), South Sudan (3) and Cameroon (1).

In August 2013, although no case of paralytic polio was reported, WPV1 was detected in 96 sewage samples from 27 sampling sites in Israel indicating widely spread transmission.

In early October 2013, a cluster of acute flaccid paralysis (AFP) cases was detected in Deir Al Zour province in the Syrian Arab Republic. For more information about this cluster, please refer to the dedicated section.

**Web sources:** [Polio Eradication: weekly update](#) | [MedISys Poliomyelitis](#) | [ECDC Poliomyelitis factsheet](#) | [WHO mission to Israel](#) | [Somalia Humanitarian Bulletin](#)

### ECDC assessment

Europe is declared polio free. The last polio cases in the EU occurred in 2001 in Bulgaria with a WPV that 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.

The recent detection of WPV in environmental samples in Israel and the suspected cases in Syria highlight the risk of re-importation in Europe. Recommendations are provided in the recent risk assessments produced by ECDC:

[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?](#)

### 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. The threat is followed on a bi-weekly basis.

## Outbreak of poliomyelitis - Syria -2013

Opening date: 22 October 2013

Latest update: 29 October 2013

### Epidemiological summary

On 19 October 2013, WHO announced a 'hot' cluster of AFP cases in Deir Al Zour province in Syria, located 250 km from Damascus in the east of the country along the Iraqi border. The cluster consists of 22 cases and the age distribution was five cases under one year old, 13 cases one-to-two years old and four cases over two years old. The first cases were detected in early October. Wild poliovirus type 1 (WPV1) has been isolated from ten of the cases under investigation. Final genetic sequencing results are pending to determine the origin of the isolated viruses.

The Syrian Arab Republic and the neighbouring countries began planning and implementation of a large-scale outbreak response before the cases were laboratory confirmed. On 24 October 2013 a comprehensive supplementary immunisation activity was launched in Syria, with a target to vaccinate 1.6 million children against polio, measles, mumps and rubella, in both government-controlled and contested areas. WHO anticipates a larger-scale outbreak response across the Syrian Arab Republic and neighbouring countries in early November 2013, and this to last for at least six to eight months depending on the area and based on evolving epidemiology. In the meantime a surveillance alert has been issued for the region to actively search for additional potential cases.

Web sources: [WHO DON](#) | [ECDC RRA](#) |

### ECDC assessment

As a result of the ongoing conflict in Syria, public health services are failing, vaccination coverage has dropped dramatically, sanitary conditions have deteriorated, displaced people are living under crowded conditions and there are large movements of people. These are all conditions that favour the spread of infectious and vaccine-preventable diseases.

The probability is very high that the cluster of cases of acute flaccid paralysis in Deir Al Zour province in Syria is caused by wild-type poliovirus. Confirmation of a polio outbreak in Deir Al Zour province would signal widespread transmission of poliovirus in Syria and possibly in the areas bordering Syria. This cluster of cases, if confirmed, increases the risk for the importation of wild polio virus to the EU/EEA and further re-establishment and transmission in the Member States. It is expected that the number of asylum seekers, refugees and illegal migrants entering the EU will continue to be high and possibly increase as the conflict evolves.

In the ECDC rapid risk assessment it is recommended that:

- Countries hosting Syrian citizens in designated areas (camps) should assess the level of transmission of wild poliovirus among them. Such assessments can be carried out through enhanced clinical surveillance, environmental surveillance, and systematic collection of stool samples from symptomatic and asymptomatic persons;
- EU Member States receiving refugees and asylum seekers from Syria should assess their vaccination status on arrival and provide polio vaccination and other vaccinations as needed;
- Regional and international efforts to assess the risk and provide vaccination and other public health services in Syria and to Syrian refugees hosted by neighbouring countries should be supported;
- Member States should consider implementing the recommendations made in the ECDC risk assessment of wild-type poliovirus transmission in Israel;
- Countries should review their national preparedness plans, and ensure that items such as a framework and responsibilities for outbreak response, enhanced activities and reporting timelines, and vaccine of choice for outbreak response are in place.

## Actions

ECDC published an [epidemiological update](#) on 30 October.

ECDC published a [rapid risk assessment](#) on 24 October.

## Wound botulism in people who inject drugs (PWID) - Norway- 2013

Opening date: 28 October 2013

Latest update: 31 October 2013

### Epidemiological summary

On 28 October, the Norwegian Institute of Public Health reported two confirmed and four suspected cases of wound botulism. Test results are pending for the suspected cases. The cases have been reported in four men and two women between the ages of 35 and 50. The date of symptom onset for the confirmed and suspected cases ranges from 10 October to 25 October 2013. Five out of the six cases have been hospitalised. All cases have been reported in PWID and reside in the Oslo area or in neighbouring municipalities. Most cases have reported intramuscular injection of heroin.

**Web sources:** [FHI website](#)

### ECDC assessment

This is the largest outbreak of wound botulism ever identified in Norway. These cases raise the possibility that a batch of contaminated heroin is in circulation. Wound botulism in PWID has been reported from several European countries during the last few years. Considering the complex international distribution chain of heroin, the exposure of PWID in other EU Member States cannot be excluded. Member states should consider increasing awareness in healthcare settings to support prompt diagnosis and treatment as well as reporting to appropriate public health authorities. In addition, heroin users, their social networks, drug treatment and harm reduction services should be alerted regarding signs and symptoms of wound botulism infection and of the importance of seeking medical treatment immediately. The availability of anti-toxin vials for possible future cases should also be ensured.

## Actions

ECDC published a [rapid risk assessment](#) in collaboration with the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) on 31 October.

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

Opening date: 20 April 2006

Latest update: 31 October 2013

### Epidemiological summary

**Asia:** Thailand is reportedly experiencing one of its worst dengue outbreaks in the last 20 years with more than 136 000 cases and 126 deaths recorded nationally so far in 2013. In India, strong dengue activity is reported across most states, especially in New Delhi, where dengue cases have risen to more than 4 200 cases. During the past week, the provinces of Punjab, Sindh and Pakhtunkhwa in Pakistan all reported an increasing number of new dengue infections.

A new study has identified a new serotype of dengue virus in Asia. [Malaysian and US researchers](#) recently identified a new dengue virus in severely ill cases during an outbreak in 2007 in Sarawak state, Borneo. Experimental infections showed that in monkeys the virus induces antibodies significantly different from those elicited by the other four strains. The implications for public health have yet to be assessed. It is not known if there is a sustainable transmission of this virus in the Sarawak region. Scientific publications about this discovery are expected within 6-8 weeks.

**Caribbean:** The Dominican Republic has recorded more than 12 600 cases and at least 90 deaths so far this year. This is three times more cases than for the same time period last year. Puerto Rico reported 527 suspected cases in week 36 and this level of reporting remains above the epidemic threshold. In total, 13 693 suspected cases have been reported in 2013. DENV-1 remains the predominant serotype (71%) circulating followed by DENV-4 (28%).

**Americas:** High dengue activity is reported across most of Central America. As of 21 October, Mexico has recorded 40 831 cases and 47 deaths nationally. A nationwide red alert has been issued for dengue in Nicaragua after they recorded nearly 5 000 cases

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and nine deaths nationally up to 22 October. DENV-2 is the predominant serotype circulating. El Salvador continues to experience strong dengue activity and the country has now declared a second national health alert for dengue in 2013.

In South America, Paraguay has reported 140 787 confirmed dengue cases so far in 2013 compared to 30 823 cases during the same time period in 2012. In addition, the number of dengue related deaths in Paraguay has almost tripled compared to the same period last year. In Venezuela, 41 938 dengue cases have been recorded in 2013 which is almost three times higher than in 2012 (33,040 cases), according to the latest update published by the Ministry of Health. In Brazil, since the beginning of the year more than 1.4 million cases of dengue have been reported across the country up to 21 September, according to the latest update from the Pan American Health Organization (PAHO). This is almost three times higher than for the same period last year where around 537 000 cases were notified. The southeast region of the country is the most affected and accounts for more than 60% of all cases.

**Pacific:** French Polynesia continues to report dengue activity and Moorea has recorded 115 dengue cases during the past eight months.

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

### 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.

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