



#### **COMMUNICABLE DISEASE THREATS** REPORT

# CDTR Week 20, 11-17 May 2014

All users

This weekly bulletin provides updates on threats monitored by ECDC.

# I. Executive summary **EU Threats**

## Cluster of Schistosoma haematobium - Corsica, France - 2014

Opening date: 8 May 2014 Latest update: 15 May 2014

A cluster of three cases of Schistosoma haematobium infection in a French family was identified in April 2014 (father and two children), with possible exposure in a recreational area in southern Corsica. Eight additional cases were detected in three more families (two French and one German) who have spent their vacation in the same area. Epidemiological and environmental investigations are ongoing.

→Update of the week

No new cases were reported since last week.

# Influenza - Multistate (Europe) - Monitoring 2013-2014 season Opening date: 4 October 2013 Latest update: 15 May 2014

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

→Update of the week

With influenza activity continuing to decline in all reporting countries after five months of active transmission, the 2013-14 influenza season is coming to an end.

# **Non EU Threats**

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

Opening date: 24 September 2012 Latest update: 16 May 2014

Since April 2012, 621 laboratory-confirmed cases, including 188 deaths, of acute respiratory disease caused by Middle East respiratory syndrome coronavirus (MERS-CoV) have been reported by national health authorities. 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. Human-to-human transmission to close contacts and in hospital settings has occurred, but there is no evidence of sustained transmission among humans. MERS-CoV is genetically distinct from the coronavirus that caused the SARS outbreak.

#### →Update of the week

Since the previous CDTR, 84 new cases have been reported. Sixty-five cases were reported by Saudi Arabia. Fourteen cases were reported by the United Arab Emirates. Lebanon has reported its first case of MERS-CoV with no travel history nor contact to a confirmed case. The Netherlands has reported two cases with recent travel history to Saudi Arabia. The USA has reported a second case of MERS-CoV with travel history to Saudi Arabia. Jordan has reported one case with no travel history.

#### **Outbreak of Ebola Virus Disease - West Africa - 2014**

Opening date: 22 March 2014 Latest update: 15 May 2014

There is an ongoing outbreak of Ebola virus disease (EVD) in West Africa affecting Guinea and Liberia, with onset in early February 2014.

→Update of the week

During the past week, five new confirmed cases have been reported in Guinea.

# Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 15 May 2014

On 6 December 2013, France reported two laboratory-confirmed autochthonous cases of chikungunya in the French part of the Caribbean island of Saint Martin. Since then, local transmission has been confirmed in the Dutch part of Saint Martin, on Martinique, Saint Barthélemy, Guadeloupe, British Virgin Islands, Dominica, Anguilla, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, the Dominican Republic, Haiti, Antigua and Barbuda and French Guiana. Aruba only reported imported cases. This is the first documented outbreak of chikungunya with autochthonous transmission in the Americas. As of 25 April 2014, there have been more than 40 000 probable and confirmed cases in the region. Seven fatalities have been reported so far.

#### →Update of the week

During the past week, new cases have been reported in most of the affected areas. In the French Antilles, the number of new cases is generally decreasing or constant. In French Guiana, the number of autochthonous cases is increasing and the virus circulation is intensifying and new emerging clusters have been identified. Increased transmission is reported by the Dominican Republic. Media quoting the Department of Health reports a substantial increase of cases in Haiti (LINK). Antigua and Barbuda, British Virgin islands and Saint Lucia have reported additional cases (CARPHA).

To date, islands with confirmed cases are Saint Martin/Sint Maarten, Martinique, Saint Barthélemy, Guadeloupe, British Virgin Islands, Anguilla, Dominica, Aruba, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Dominican Republic, Haiti, Antigua and Barbuda, and French Guiana in mainland South America (WHO). In most of the territories of the French Antilles, given the caseload, the health authorities decided not to seek laboratory confirmation for all suspected cases.

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

Opening date: 20 April 2006 Latest update: 15 May 2014

Dengue fever is one of the most prevalent vector-borne diseases in the world, 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.

#### →Update of the week

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

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

Opening date: 8 September 2005 Latest update: 15 May 2014

Polio, a crippling and potentially fatal vaccine-preventable disease that mainly affects children, is close to being eradicated as a result of global public health efforts. Polio remains endemic in Afghanistan, Pakistan and Nigeria.

→Update of the week

During the past week, three new infections with wild poliovirus 1 (WPV1) were reported: one in Nigeria and two in Pakistan.

Polio was declared a public health emergency of international concern (PHEIC) on 5 May 2014 by the World Health Organization (WHO) Director-General. As a result of the PHEIC, WHO issued <u>temporary recommendations</u> for controlling the spread of polioviruses.

# **II. Detailed reports**

## Cluster of Schistosoma haematobium - Corsica, France - 2014

Opening date: 8 May 2014 Latest update: 15 May 2014

### **Epidemiological summary**

On 23 April 2014, the Institut de Veille Sanitaire (France) was notified of a cluster of three cases of *Schistosoma haematobium* infection among a family, two children and their father. The infections were presumably acquired in southern Corsica, France, in August 2013. The infection of the father might have been evolving for a few years as he had presented with unexplained macroscopic haematuria since 2012, and possibly 2011. He had contact with fresh water in the same area of southern Corsica in 2011.

Additional cases were detected among two other French families that had accompanied the family of the first cases on vacation in a campground near Porto Vecchio, southern Corsica, in August 2013. All cases shared the same exposure to a natural swimming area (fresh water). Among the 12 members of the three families, six cases were confirmed through detection of *S. haematobium* eggs in urine and two probable cases were identified.

Furthermore, five additional cases of urinary schistosomiasis were reported from Germany in a family of six members. The travel history of the German and French families showed that they all had stayed in the same campground and reported recreational water activities in the Cavo River in August 2013.

None of the above cases reported an exposition to fresh water (swimming) in an endemic area of Schistosoma haematobium.

Web sources: WHO factsheet | French regional authorities statement | Medscape France|

#### ECDC assessment

These are the first locally-acquired infections of *Schistosoma haematobium* in the EU. The disease is known to be very focal in its establishment and as such, the risk of acquiring the infection exists only for residents and people visiting the affected place and having occupational or recreational activities in the river.

#### **Actions**

ECDC is preparing a rapid risk assessment.

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

Opening date: 4 October 2013 Latest update: 15 May 2014

# Epidemiological summary

For week 19/2014:

- Low intensity influenza activity was reported by 26 reporting countries.
- Of 86 sentinel specimens tested across 13 countries, seven (8%) were positive for influenza virus.
- Ten hospitalised laboratory-confirmed influenza cases were reported, seven of which were admitted to intensive care units.

With influenza activity continuing to decline in all reporting countries after five months of active transmission, the 2013–14 influenza season is coming to an end.

Web sources: WISO | ECDC Influenza |

#### **ECDC** assessment

The influenza season started in EU/EEA countries in week 2/2014.

### **Actions**

ECDC will continue to produce weekly influenza surveillance overviews during the northern hemisphere influenza season.

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

Opening date: 24 September 2012 Latest update: 16 May 2014

### Epidemiological summary

Summary: Since April 2012 and as of 16 May 2014, 621 laboratory-confirmed cases of MERS-CoV have been reported by local health authorities worldwide, including 188 deaths.

Confirmed cases and deaths by region:

Middle East:

Saudi Arabia: 511 cases/160 deaths United Arab Emirates: 67 cases/9 deaths

Qatar: 7 cases/4 deaths Jordan: 9 cases/4 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

Europe:

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

Africa:

Tunisia: 3 cases/1 death

Asia:

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

Americas:

United States of America: 2 cases/0 deaths

Nineteen cases have been reported from outside the Middle East: the UK (4), France (2), Tunisia (3), Germany (2), USA (2), Italy (1), Malaysia (1), Philippines (1), Greece (1) and Netherlands (2). In France, Tunisia and the UK, there has been local transmission among patients who had 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.

On 11 May 2014 a second imported case of MERS-CoV was confirmed by the United States Centers for Disease Control.

On 13 May 2014, National Institute for Public Health and the Environment (RIVM) in the Netherlands reported the first imported case of MERS-CoV in the country. On 15 May 2014 second imported case, who travelled with the first case, was reported.

ECDC notes the decision of Margaret Chan, the Director General of WHO, on 14 May 2014 not to call the MERS-CoV outbreak a Public Health Emergency of International Concern (PHEIC) as the conditions have not yet been met. This decision was based on the advice of the WHO Emergency Committee under the international health regulations on MERS-CoV. However the committee indicated that, based on current information, "the seriousness of the situation had increased in terms of public health impact, but that there is no evidence of sustained human-to-human transmission."

**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 | Eurosurveillance article 26 September |

**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 likely an important host species for the virus, and many of the primary cases in clusters have reported direct or indirect camel exposures. 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. An international case-control study has been designed and proposed by WHO. Results of this or similar epidemiological studies in order to determine the initial exposures and risk behaviours among the primary cases are urgently needed.

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**

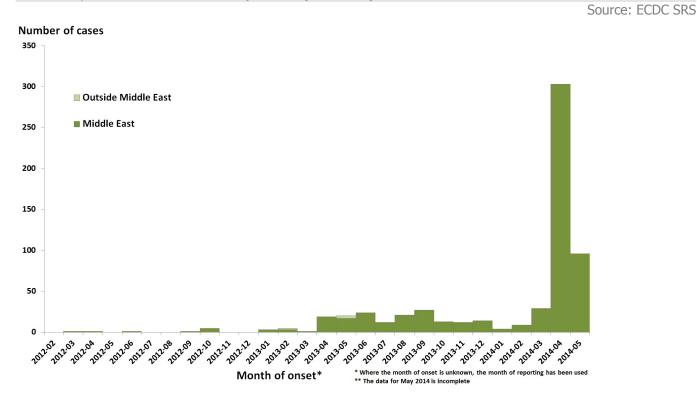
ECDC published an epidemiological update.

The last update of the rapid risk assessment was published on 25 April 2014.

The first 133 cases are described in Eurosurveillance, published on 26 September 2013.

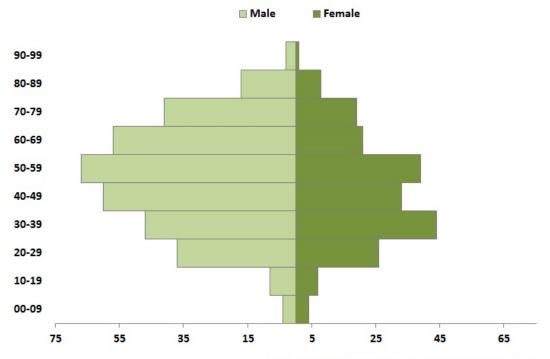
ECDC is closely monitoring the situation in collaboration with WHO and EU Member States.

# Distribution of confirmed cases of MERS-CoV by month of onset and place of probable infection, March 2012 - 16 May 2014 (n=621\*)



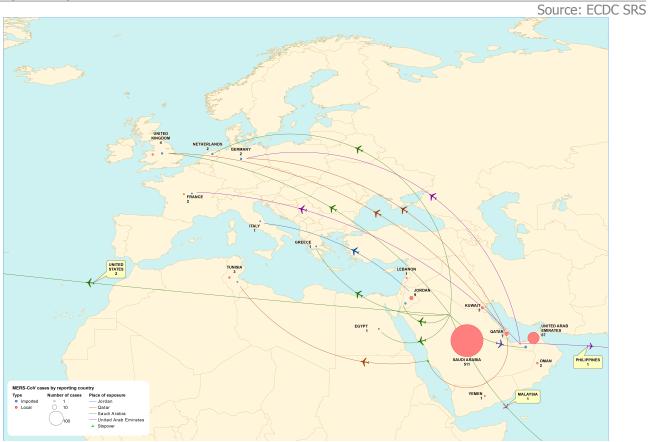
# Distribution of confirmed cases of MERS-CoV by gender and age group, March 2012 - 16 May 2014 (n=543\*)





\*78 cases for which age or sex data is missing have been excluded

# Distribution of confirmed MERS-CoV cases by place of reporting, March 2012 - 16 May 2014 (n=621)



#### **Outbreak of Ebola Virus Disease - West Africa - 2014**

Opening date: 22 March 2014 Latest update: 15 May 2014

## **Epidemiological summary**

**Guinea**. As of 12 May 2014, the Ministry of Health of Guinea has reported 248 clinical cases of EVD, including 171 deaths. The cumulative total of clinical EVD cases and deaths since the beginning of the outbreak by location is: Conakry (50 cases, including 24 deaths); Guéckédou (163/119); Macenta (22/17); Kissidougou (8/6), Dabola (4/4) and Djingaraye (1/1). The number of confirmed cases is 138, including 92 deaths.

There have been no new cases of EVD in Kissidougou since 1 April, Macenta since 9 April and Conakry since 26 April. In Djingaraye and Dabola, no new cases have been reported since the end of March 2014. If no additional cases are identified in Conakry, the observation period for those individuals identified through contact tracing will end on 17 May.

**Liberia**. As of 12 May 2014, no new confirmed cases of EVD have been reported. The number of cases is 12 (six confirmed, two probable and four suspected) and 11 deaths. Liberia is preparing to host a cross-border meeting with Côte d'Ivoire and Sierra

Leone and surveillance activities have been enhanced in districts bordering Guinea.

The numbers of cases remain subject to change due to reclassification and consolidation of cases and laboratory data, enhanced surveillance activities and contact tracing activities. Introduction of *ebolavirus* serology to test PCR negative clinical cases is also likely to change the final number of laboratory confirmed cases.

WHO and international organisations are supporting the Ministries of Health of Guinea and Liberia in their EVD prevention, contract tracing, health care and control-related activities.

No cases have been detected in returning travellers in Europe.

**Web sources**: 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 | NEJM 16 April article

#### **ECDC** assessment

This is the first time an EVD outbreak has been reported in Guinea. The origin of this outbreak is currently unknown. The outbreak seems to be slowing down. The risk of infection for travellers is considered very low since most human infections result from direct contact with the bodily fluids or secretions of infected patients, particularly in hospitals (nosocomial transmission) and as a result of unsafe procedures, use of contaminated medical devices (including needles and syringes) and unprotected exposure to contaminated bodily fluids.

#### **Actions**

ECDC has published an updated <u>rapid risk assessment</u> and provided guidance to Member States for the safe handling of bush meat, as well as for travellers to and from the affected countries. ECDC has published information for <u>EU travellers</u> and an <u>epidemiological update</u> on its website.

ECDC is closely monitoring this event.

# Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 15 May 2014

# **Epidemiological summary**

Cases reported as of 11 May 2014:

- Virgin Islands (UK), 20 confirmed cases
- Saint Martin (FR), 3 240 suspected and 793 confirmed or probable cases, 3 deaths
- Sint Maarten (NL), 301 confirmed autochthonous cases
- Martinique, 24 180 suspected and 1 515 confirmed or probable cases, 3 deaths
- · Saint Barthélemy, 500 suspected and 135 confirmed or probable cases
- · Guadeloupe, 13 000 suspected and 1 328 confirmed or probable cases, one death
- Dominica, 1 252 suspected cases and 105 confirmed cases
- · French Guiana, 122 confirmed cases of which 83 autochthonous
- Anguilla, 33 confirmed cases
- Aruba, 1 imported case originating from Sint Maarten
- · Saint Lucia, 5 confirmed cases
- St. Kitts and Nevis, one confirmed case
- Dominican Republic, 8017 suspected and 17 confirmed cases
- Saint Vincent and the Grenadines, 24 suspected cases and 3 confirmed cases
- Haiti, 14 confirmed cases

Antigua and Barbuda, 4 cases

Web sources: ECDC Chikungunya | CDC Factsheet | Medisys page |

#### **ECDC** assessment

Epidemiological data indicate that the outbreak, which started in Saint Martin (FR), is expanding. An increasing number of cases have been observed from most of the affected areas. The vector is endemic in the region, where it also transmits dengue virus. 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. The autochthonous cases in French Guiana are the first autochthonous chikungunya cases in mainland South America.

#### **Actions**

ECDC published a rapid risk assessment on 12 December 2013 and epidemiological updates on 10 January and 7 February 2014.

# Chikungunya outbreak as of 14 May 2014



# Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 15 May 2014

### **Epidemiological summary**

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

**Asia:** In Cambodia, the number of reported dengue cases and deaths has dropped sharply this year compared with the same time period in 2013 (1 240 cases and one death in 2014 compared with 1 628 cases and 11 deaths in 2013 during the first quarter of the year), according to the Ministry of Health. Singapore has reported more than 5 000 dengue cases nationally from January to April this year which is 15 per cent less cases compared with the same time period last year, according to media quoting the Ministry of Health. In the Philippines, the Department of Health has reported a significant decline in the number of new dengue infections from January to April 2014 compared with the same time period last year. The majority of cases recorded have been reported in central Luzon and Region IV-A in northern Philippines.

**Caribbean:** Puerto Rico has reported 1 091 suspected cases so far in 2014, and the number of suspected cases notified in week 11 remained below the historical average and epidemic threshold of reporting, according to the <u>US CDC</u>. DENV-1 and DENV-4 have been the predominant circulating serotypes during the past eight weeks. <u>Media</u> reports that the Dominican Republic has recorded 15 dengue related deaths so far this year.

**Oceania:** A major epidemic of dengue fever is still ongoing in Fiji with more than 25 000 cases and 15 deaths reported since October 2013, according to media reports. In French Polynesia, as of 13 May 2014, 2 127 confirmed cases have been reported with 73 cases recorded so far in May. Overall, hospitalisation rates fell sharply in April, according to the latest update from the Bureau for Health Surveillance in French Polynesia. Active circulation of DENV-1 and DENV-3 in New Caledonia continues with 21 cases recorded so far in May, according to Direction des Affaires Sanitaires et Sociales (DASS). There is an ongoing outbreak of DENV-3 in the Solomon Islands. Dengue epidemics in Tuvalu and Vanuatu are underway. The recent trend in Tuvalu has been increasing but decreasing in Vanuatu.

**Americas:** In Central America, the recent trend in Panama has been increasing and as of 6 May, more than 3 000 dengue cases, including eight deaths, have been reported nationally. There remains a yellow dengue alert across 58 municipalities in El Salvador and the most affected departments are San Salvador, Cuscatlan, Sonsonate, San Vicente and Cabanas. In South America, Brazil is experiencing high dengue activity in Sao Paulo, especially in Jau municipality, where around 3 000 cases and five deaths have been reported so far this year, according to media. This is reported to be the worst dengue outbreak in the municipality's history. The states of Aractuba and Campinas in Sao Paulo are also experiencing dengue epidemics. According to media, the Brazilian Commission in charge of genetically modified organisms authorised the release of transgenic mosquitoes into the environment in early April to affect the reproductive capacity of *Aedes aegypti*. A large scale release of RIDL mosquitoes in Brazil is planned in June.

**Africa:** Media, quoting the Ministry of Health, reports that around 400 cases of dengue fever have been detected in Dar es Salaam, Tanzania, since the start of the year. In Mayotte, the weekly number of new dengue infections is increasing after remaining relatively stable for the past few weeks. From 21 April to 4 May 2014, 39 new cases were reported, including 25 locally-acquired cases, 3 imported cases and 11 cases are currently under investigation. So far in 2014, 117 cases of dengue fever have been detected in Mayotte, of which 74 are locally-acquired cases, according to media quoting local health authorities.

Web sources: ECDC Dengue | Healthmap Dengue | MedISys | ProMED Americas and Asia |

#### **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  $\underline{report}$  on the climatic suitability for dengue transmission in continental Europe and  $\underline{guidance}$  for  $\underline{invasive}$  mosquitoes' surveillance.

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

# Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 15 May 2014

### Epidemiological summary

During the past week three new infections with Wild poliovirus 1 (WPV1) were reported: one in Nigeria (first case in this state since July 2013) and two in Pakistan.

Worldwide, 77 cases have been reported to WHO in 2014, compared with 33 for the same time period in 2013. The most affected country is Pakistan (61 cases this year).

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. This was an imported outbreak, and it was demonstrated that the WPV originated from India. An outbreak in the Netherlands, in a religious community opposed to vaccination, caused two deaths and 71 cases of paralysis in 1992.

The last indigenous WPV case in the WHO European Region was in Turkey in 1998. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases. There is an ongoing polio outbreak in Syria with onset in 2013, and until 15 May 2014, 35 confirmed cases of Acute Flaccid Paralysis (AFP) caused by WPV-1 have been reported from across the country. WPV-1 originating from Pakistan has been circulating in Israel since early 2013 without causing any cases of AFP. The circulation was detected through routine environmental surveillance of sewage for polioviruses. Israel has responded with vaccination campaigns, first with IVP later followed by OPV, and has reintroduced a single dose of OPV in addition to IPV into the routine vaccination schedule for children.

There are indications that the transmission of WPV is increasing in Pakistan, and the number of new AFP cases during the first four months of 2014 increased ten-fold compared to the same period in 2013.

On 5 May 2014, the Director-General of WHO, Dr Margaret Chan, acted on the recommendation of the International Health Regulations Emergency Committee and declared that the spread of wild-type poliovirus in 2014 constitutes a Public Health Emergency of International Concern (PHEIC) in accordance with the International Health Regulations (IHR). WHO has issued Temporary Recommendations for controlling the international spread of polioviruses out of the remaining ten polio-infected countries in the world. Three of the countries, Cameroon, Pakistan and Syria, are required to ensure that all people leaving these countries after staying for more than four weeks must have received a dose of polio vaccine within 12 months to four weeks prior to departure.

References: 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 | WHO position paper on polio vaccines, January 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 re-introduction of wild poliovirus into the EU.

Due to the current polio situation, the threat is being followed weekly.

ECDC is preparing a public health development document, due to the declaration of polio as a PHEIC.

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