

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

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

During week 44, all 25 reporting countries experienced low intensity of clinical influenza activity and reported stable or decreasing trends.

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

Opening date: 3 June 2013

Latest update: 7 November 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 7 November 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, no new cases were detected in the EU and neighbouring countries.

Non EU Threats

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

Opening date: 28 October 2013

Latest update: 31 October 2013

The Norwegian Institute of Public Health, in October 2013, reported an outbreak of wound botulism among people who inject drugs (PWID). As of 8 November, there are four confirmed and two suspected cases reported among PWID residing in the Oslo area or in neighbouring municipalities. This is the largest outbreak of wound botulism ever identified in Norway.

→Update of the week

No new cases were reported during the week leading up to 8 November 2013.

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

Opening date: 24 September 2012

Latest update: 7 November 2013

Since April 2012, 151 laboratory-confirmed cases, including 64 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 31 October and 7 November 2013, one additional fatal case has been reported from Saudi Arabia from the Eastern Region in a 56-year-old female.

On 6 November 2013, [Spain](#) reported a probable case of MERS-CoV infection in a traveller returning from the Hajj.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 24 October 2013

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. The outbreak affected 12 Chinese provinces and Taiwan causing 139 cases of human infection, including 45 deaths. Since the end of May 2013, only sporadic cases have been reported. The virus reservoir and the mode of transmission to humans have not been determined. Zoonotic transmission from poultry to humans is thought to be the most likely scenario. There has been no epidemiological link between most of the cases, and sustained person-to-person transmission has not been observed.

→Update of the week

Since the last update on 1 November 2013, [WHO](#) has confirmed two additional cases in China.

Pertussis -Multistate (EU) - Monitoring European outbreaks

Opening date: 11 July 2013

Latest update: 3 October 2013

During the last three years there has been an increase in the number of reported pertussis cases, with large outbreaks being repeatedly reported in different regions of the world, even in those with sustained high vaccination coverage, including the EU. Due to the re-emergence of pertussis in several EU countries in recent years ECDC has started to monitor the pertussis situation in the EU Member States.

→Update of the week

No indications of major ongoing outbreaks during October 2013 were detected through the media or available surveillance sources.

Outbreak of poliomyelitis - Syria -2013

Opening date: 22 October 2013

Latest update: 8 November 2013

A cluster of 22 children affected by acute flaccid paralysis (AFP) was detected in early October 2013 in Deir Al Zour province in Syria. Wild poliovirus type 1 (WPV1) has been isolated from ten of the affected cases under investigation. Wild poliovirus was last reported in Syria in 1999. This cluster increases the risk for the importation of wild poliovirus to the EU/EEA and further re-establishment and transmission in the Member States. WHO's International Travel and Health recommends that all travellers to and from polio-infected areas be fully vaccinated against polio.

→Update of the week

There has been no update this week.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 7 November 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 attaining this goal.

→Update of the week

Since the last update on 25 October 2013, 27 new wild polio virus type 1 (WPV1) cases were reported to the World Health Organization.

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 no new cases have been reported.

II. Detailed reports

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

Opening date: 4 October 2013

Latest update: 24 October 2013

Epidemiological summary

During week 44/2013 influenza activity was low in Europe:

- All 25 reporting countries experienced low intensity of clinical influenza activity and reported stable or decreasing trends
- Sporadic spread was reported by five countries
- Of 236 sentinel specimens tested by 19 countries, one (0.4%) was positive for influenza virus
- Nine hospitalised laboratory-confirmed influenza cases have been reported since week 40 by Ireland and the UK

Web sources: [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.

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

Opening date: 3 June 2013

Latest update: 7 November 2013

Epidemiological summary

Since 5 June, ECDC has published on its website weekly updates on the spatial distribution of West Nile fever cases in the European Union and neighbouring countries. Cases reported in the EU were autochthonous human WN fever cases (neuro-invasive and non-neuro-invasive), meeting laboratory criteria as per the EU case definition (Directive 2008/426/EC) and all reported cases outside the EU.

The first four cases of West Nile fever were reported on 31 May 2013 by the office of epidemiology of the Astrakhanskaya oblast in Russia. These cases occurred in early May, almost one month earlier than in 2010-2012.

As of 6 November 2013, 226 human cases of West Nile fever (including 150 neuro-invasive infections) have been reported in the EU; 16 cases in Croatia, 86 in Greece, 31 in Hungary, 69 in Italy and 24 in Romania. In neighbouring countries, 557 cases have been declared in Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Russia, Ukraine, Israel and Tunisia.

In the EU, Greece has still been the most affected country, with 86 cases. Nine areas reporting cases have been displayed on the map. Italy has reported more cases than in previous years and 15 provinces were affected, including some of the most populated provinces in the north of the country and a newly infected province in the south. Hungary, Romania and Croatia have reported 31, 24 and 16 cases, respectively. In these countries, the respective capitals were affected.

In neighbouring countries, most of the cases have been reported from Serbia where 302 cases have been detected in 18 districts, including the capital, Beograd. A large number of cases have also been reported from Russia (177 cases in 11 oblasts and the Adygeya Republic) and from Israel (63 cases). In addition, sporadic cases have been reported from Bosnia and Herzegovina (3 cases), the former Yugoslav Republic of Macedonia (1 case), Montenegro (4 cases), Tunisia (6 cases) and Ukraine (1 case).

Web sources: [ECDC West Nile fever risk maps](#) | [ECDC West Nile fever risk assessment tool](#) |

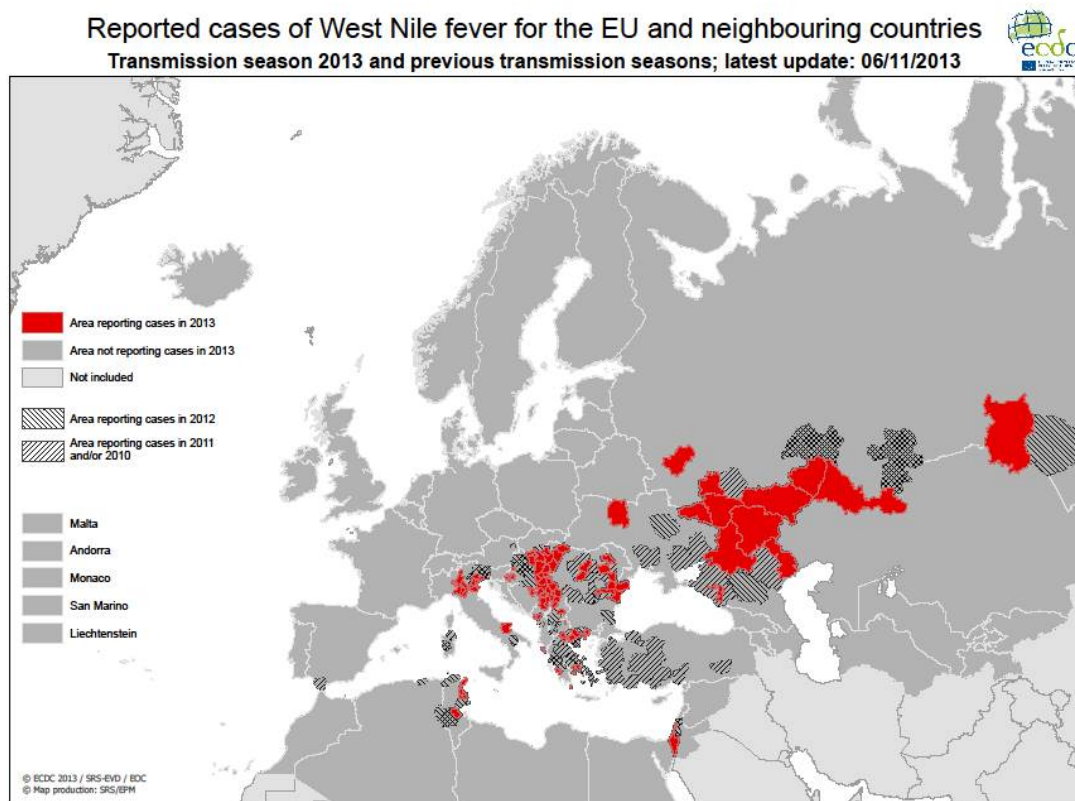
ECDC assessment

Since 25 October, no recent cases have been reported. With the decrease of mosquito populations, the season of West Nile virus transmission for humans has now come to an end in the EU and neighbouring countries.

Actions

ECDC will publish the last weekly update of the [West Nile fever risk maps](#) today and close its seasonal monitoring of West Nile virus transmission for 2013.

ECDC



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 four confirmed and two 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

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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 as PWID and all reside in the Oslo area or in neighbouring municipalities. Most cases have reported intramuscular injection of heroin.

Web sources: [FHI website](#) | [Eurosurveillance](#)

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.

ECDC will close this threat and monitor any upcoming events through routine epidemic intelligence activities.

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

Opening date: 24 September 2012

Latest update: 7 November 2013

Epidemiological summary

As of 7 November 2013, WHO reports 151 laboratory-confirmed cases of MERS-CoV worldwide, including 64 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 125 symptomatic and asymptomatic cases including 53 deaths; Jordan two cases, both of whom died; United Arab Emirates five cases, including one fatality; Qatar five cases, including two deaths; and Oman one case.

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

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 have been reported by Saudi Arabia and two by the UAE. Seven of these cases were healthcare workers.

A new imported case was reported on 6 November by Spain: a 61-year-old female with no known chronic conditions. She stayed in Saudi Arabia from 2 October to 1 November 2013, initially in Medina, then in Mecca for the Hajj. No contacts with animals or confirmed cases were reported. Initial lab tests for MERS-CoV on three different samples were positive on 5 November, and further tests are ongoing to confirm the findings. This is the first case reported in Spain and the first case in the EU since May 2013.

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](#) | [Oman MoH](#) | [Spain 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.

The case of MERS-CoV infection reported in Spain should remind EU citizens of the risk of contracting MERS-CoV through exposure while travelling to the Middle East. 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.

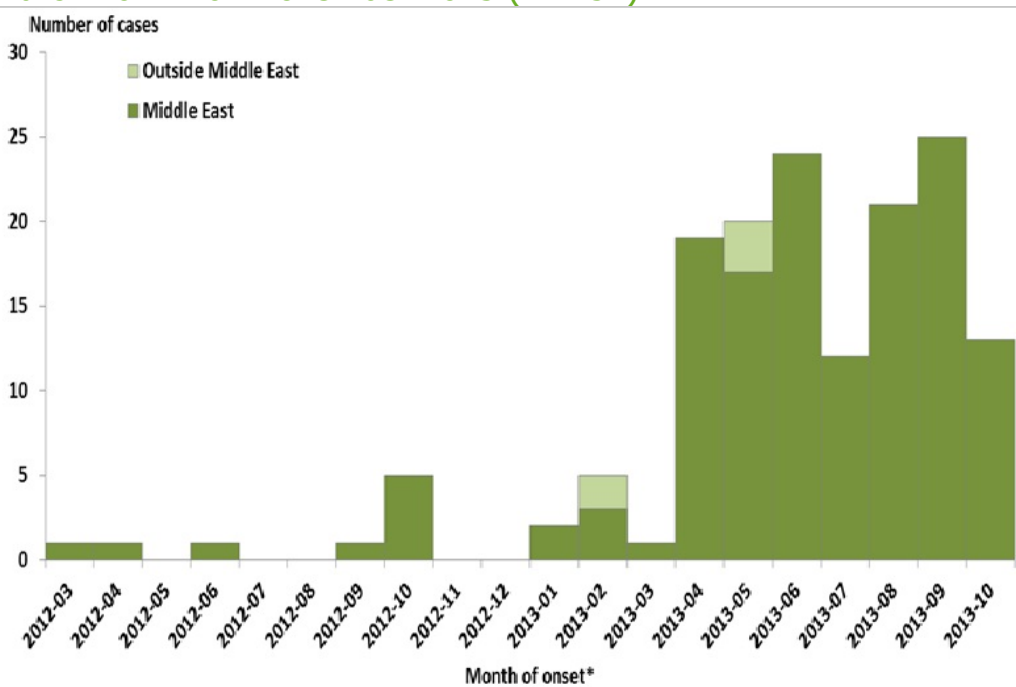
Actions

The latest update of a [rapid risk assessment](#) was published on 7 November 2013.

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.

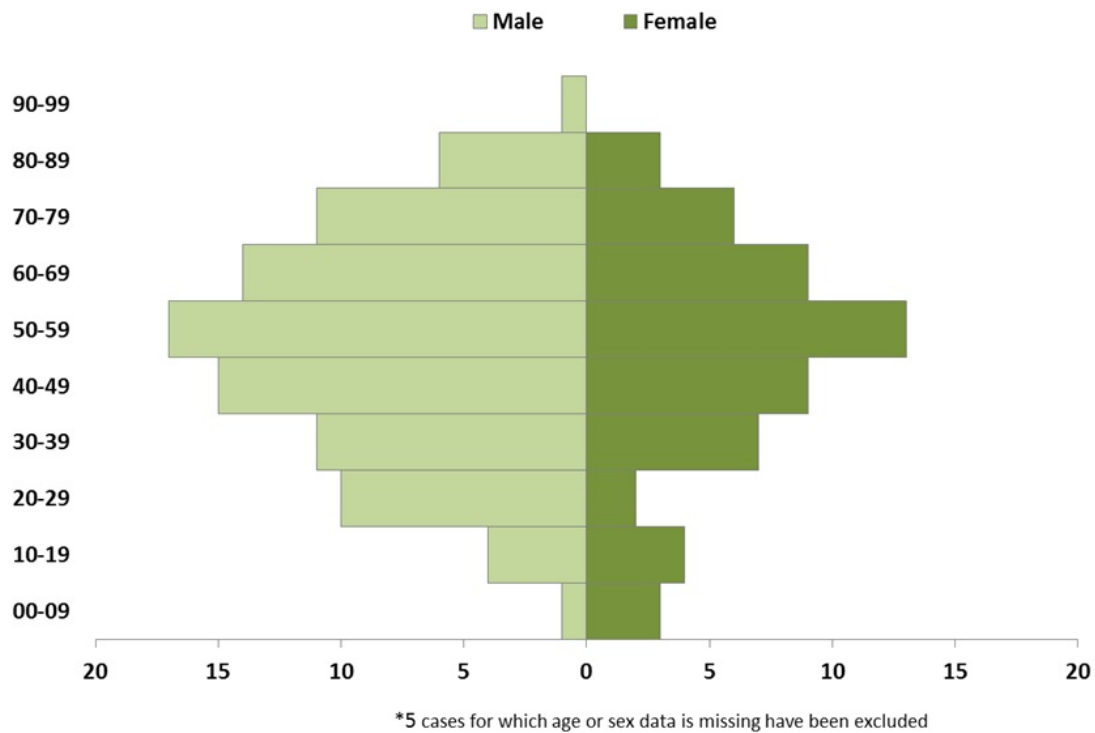
Distribution of confirmed cases of MERS-CoV by month* and place of probable infection, March 2012 - 07 November 2013 (N=151)



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

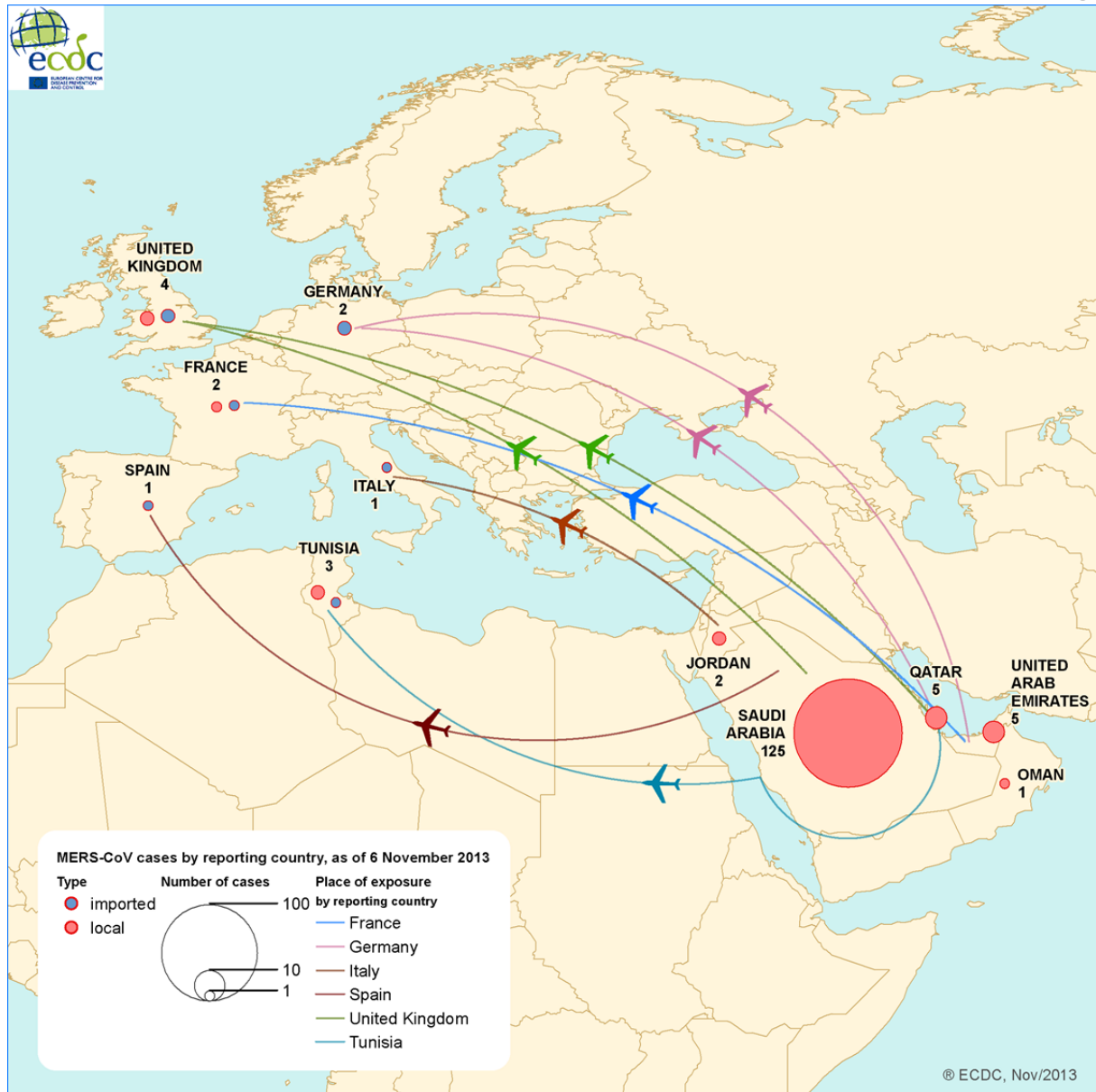
Distribution of confirmed cases of MERS-CoV by age and gender, March 2012 - 07 November 2013 (n=146*)

ECDC SRS



Distribution of MERS-CoV cases by place of reporting as of 07 November 2013

ECDC SRS



Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 24 October 2013

Epidemiological summary

In March 2013, Chinese authorities announced the identification of a novel reassortant A(H7N9) influenza virus in patients in eastern China. Since then, 139 cases of human infection with influenza A(H7N9) have been reported from: Zhejiang (49 cases), Shanghai (34), Jiangsu (27), Henan (4), Anhui (4), Beijing (2), Shandong (2), Fujian (5), Hunan (3), Jiangxi (5), Hebei (1), Guangdong (2) and Taiwan (1). In addition, the virus has been detected in one asymptomatic case in Beijing. Most cases have developed severe respiratory disease. Forty-five patients have died (case-fatality ratio=26%). The median age is 58 years, ranging between four and 91 years; 40 of 139 patients are female, with gender being unknown in five cases.

Four cases have been reported in China since 23 October 2013, two of them were notified during the last week. Both cases had contact with live poultry. The first case is a three-year-old male from Guangdong Province. He became ill on 29 October 2013. The second patient is a 64-year-old female from Zhejiang Province with date of onset on 30 October 2013.

Web sources: [Chinese CDC](#) | [WHO](#) | [WHO FAQ page](#) | [OIE](#) | [Chinese MOA](#) |

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ECDC assessment

Influenza A(H7N9) is a zoonotic disease that has spread in poultry in parts of eastern China, causing severe disease in humans. There is no evidence of sustained person-to-person transmission. Close to 3 000 contacts have been followed up, and only a few are reported to have developed symptoms, as part of three small family clusters. Many unanswered questions remain regarding this outbreak, e.g. the reservoir, the route of transmission, the spectrum of disease and the reason for an unusual age–gender imbalance.

Authorities have employed strict control measures including closing live poultry markets and culling poultry in affected areas. Following these measures, the number of reported cases has dropped. It is not possible to determine at this point whether these four new cases, reported during the last two weeks, mark the resurgence of the outbreak. ECDC's earlier risk assessment remains valid.

EU citizens travelling and living in China are strongly advised to avoid live bird markets. The risk of the disease spreading to Europe via humans is considered low. However, it is not unlikely that people presenting with severe respiratory infection in the EU and a history of potential exposure in the outbreak area will require investigation in Europe.

Actions

The Chinese health authorities continue to respond to this public health event with enhanced surveillance, epidemiological and laboratory investigation including scientific research.

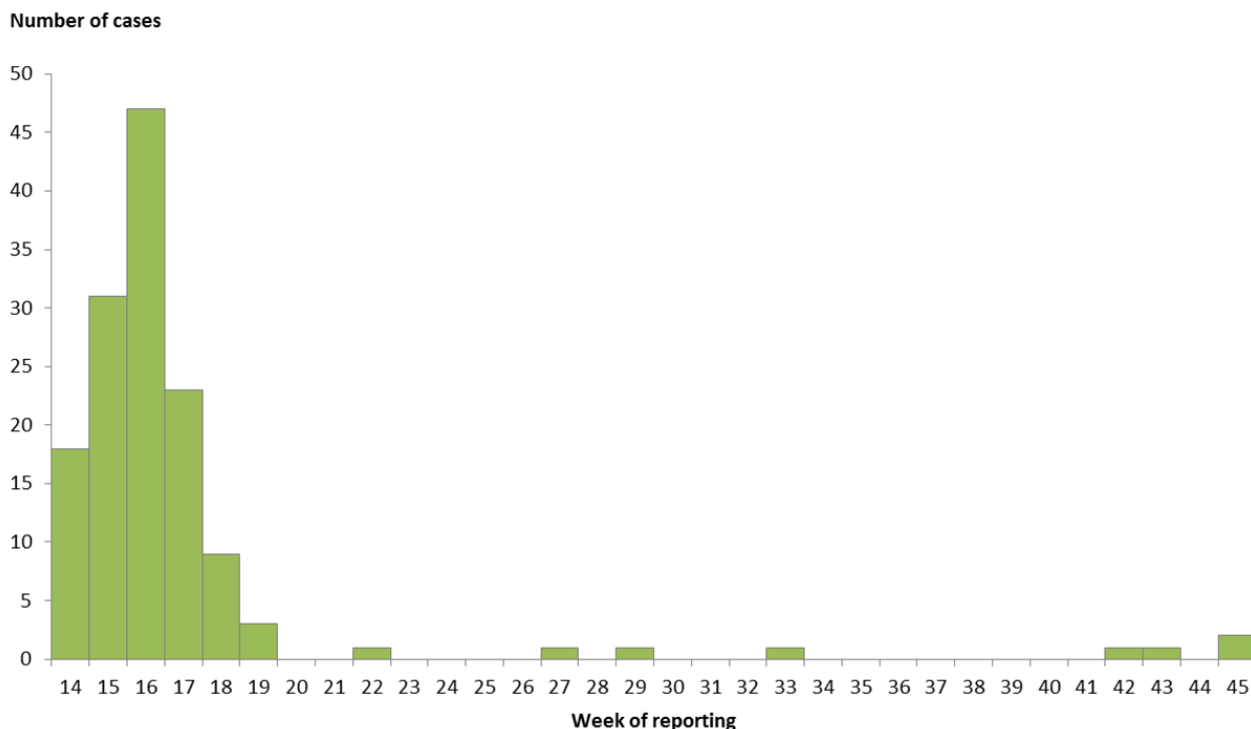
ECDC is closely monitoring developments.

ECDC published an updated [Rapid Risk Assessment](#) on 8 May 2013.

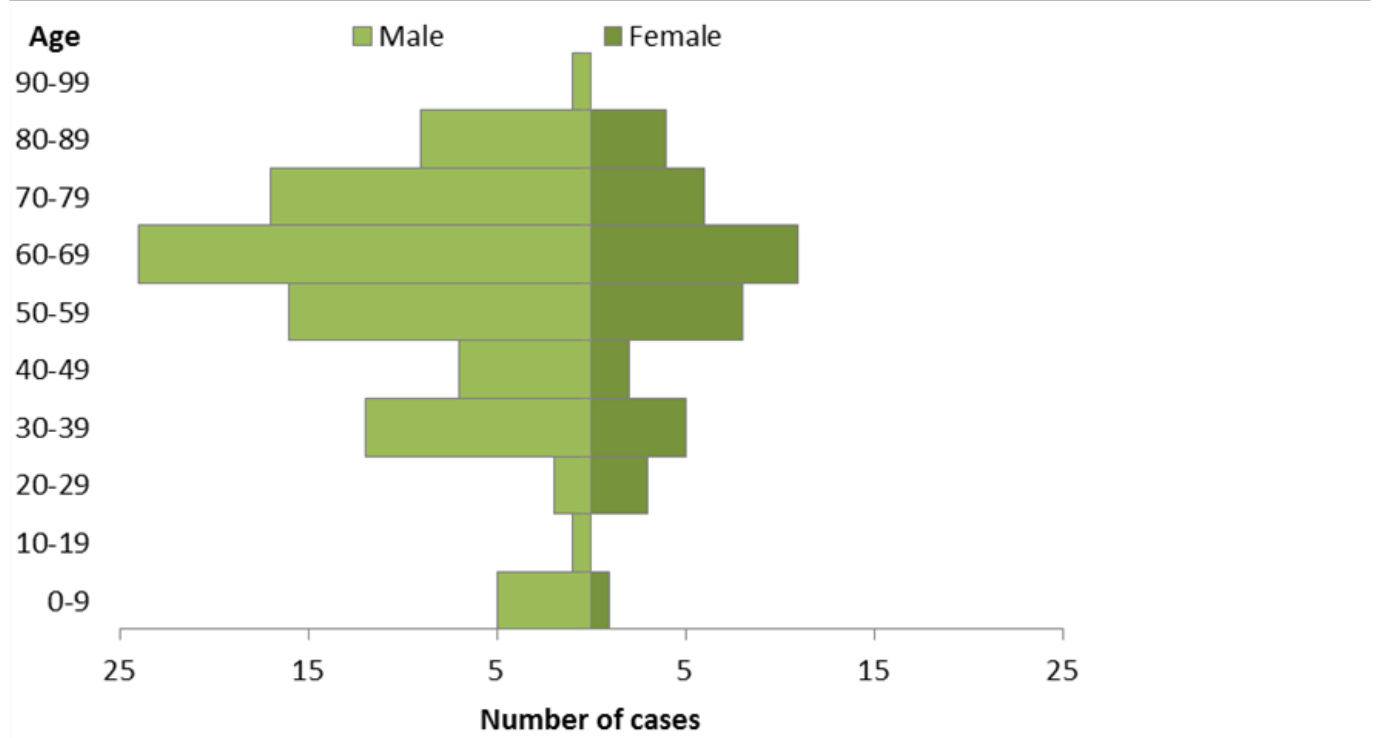
ECDC guidance for [Supporting diagnostic preparedness for detection of avian influenza A\(H7N9\) viruses in Europe](#) for laboratories was published on 24 April 2013.

Number of A(H7N9) cases by the date of reporting as of 06 November 2013 (n=139)

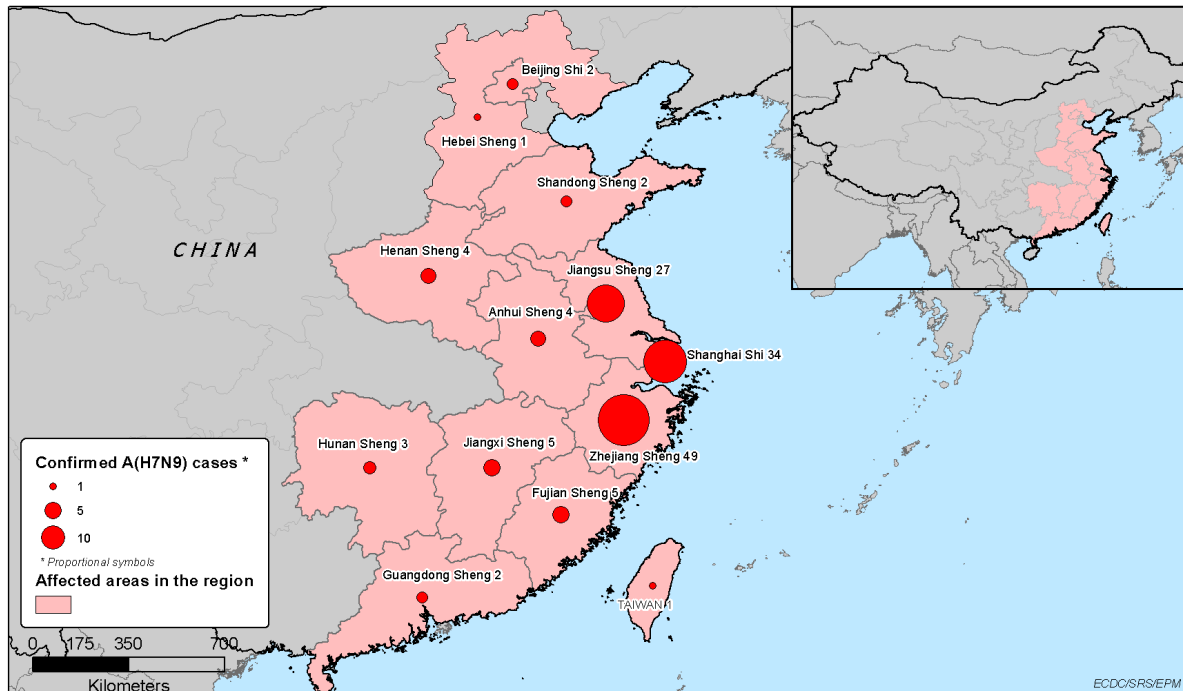
ECDC SRS



Number of A(H7N9) cases by gender and age distribution as of 06 November 2013 (n=135)



Reported cumulative number of confirmed cases of novel influenza A(H7N9) by province in China, as of 06 November 2013, 15.00 CEST



Pertussis -Multistate (EU) - Monitoring European outbreaks

Opening date: 11 July 2013

Latest update: 3 October 2013

Epidemiological summary

The Czech Republic

The number of cases of whooping cough in the Czech Republic has increased during 2013 according to a recent [media article](#). According to the National Health Institute (EAA) this is the second highest incidence of the disease in the last ten years.

The United Kingdom

[PHE](#) published an update on the pertussis situation in England during November 2012-July 2013, according to which laboratory-confirmed cases of pertussis have been declining since November 2012 apart from a slight increase in July 2013 in line with seasonal trends. Whilst the overall number of cases has fallen, large numbers of cases continue to be confirmed in individuals aged 15 years or older. The greatest impact in the reduction of the number of cases was seen in infants below three months consistent with the effects due to the maternal immunisation programme that started 1 October 2012. Between January and July 2013 there were 86 confirmed cases in infants under one year of age compared to 288 in the first seven months of 2012.

Pertussis immunisation has been offered to all pregnant women to protect infants from birth and this programme will continue in 2013/2014 until further notice. Information on the uptake of pertussis immunisation in pregnant women has been published for women giving birth up to the end March 2013.

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Web sources:

[ECDC Annual Epidemiological Report2012](#) | [ECDCPertussis](#) | [MedISys](#) | [WHO](#) | [Ireland](#) | [HPS Scot](#) | [PHE](#) | [THL](#) | [BMG](#) | [SMI](#) | [Hungary](#)

ECDC assessment

Over the last 20 years, the epidemiology of pertussis has changed remarkably with a shift from mainly paediatric cases (normally children <10 years of age) towards adolescents, adults and infants too young to have been fully vaccinated. Infants are at highest risk of complications and death from pertussis, and immediate interventions should focus on protecting this group. Pertussis is generally under-reported in adults but this population group is the source of infection to young children.

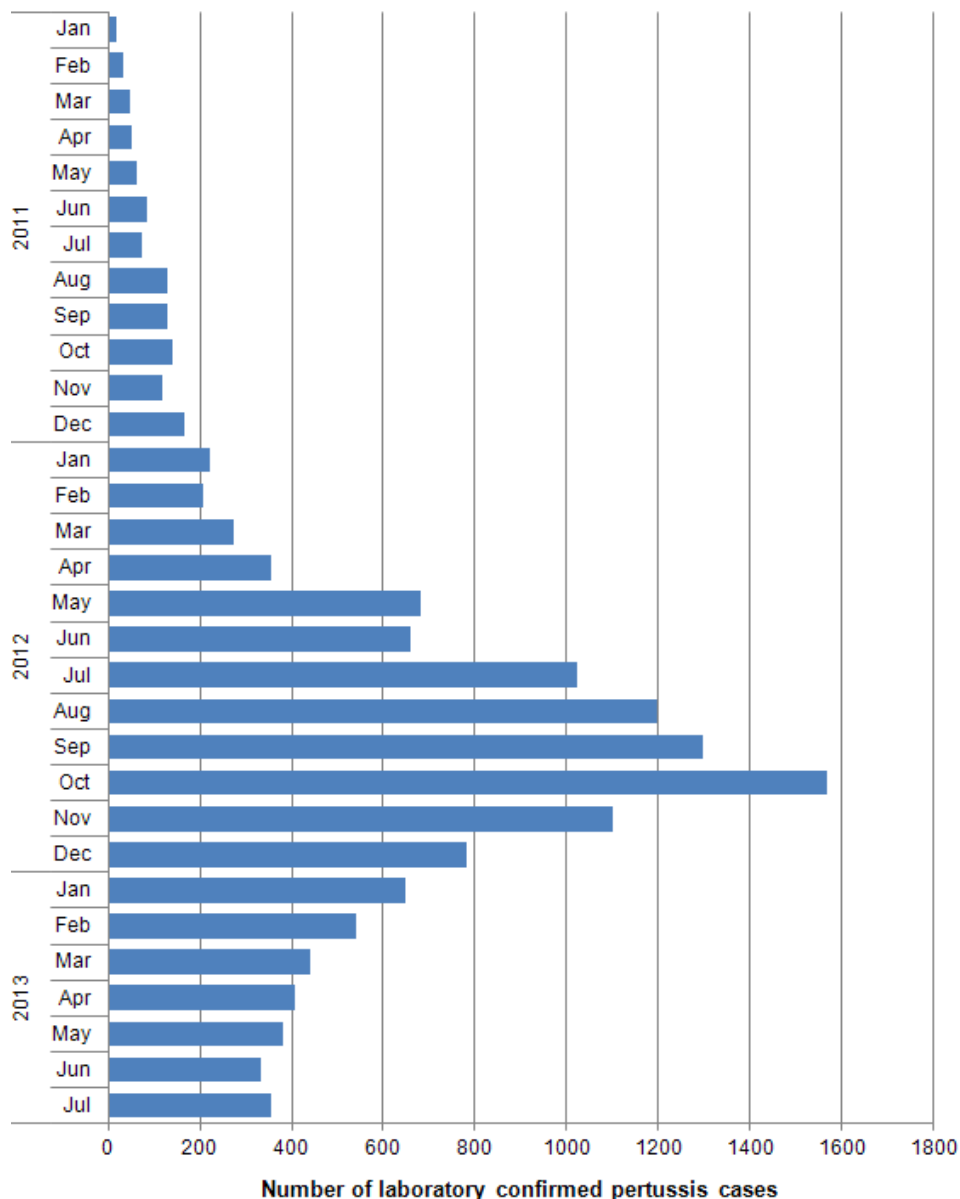
Pertussis P3 serotypes emerged globally after 1988, and now predominate in many EU/EEA countries. They produce more pertussis toxin which appear to suppress immunity and reduce the duration of immunity among vaccinated or naturally infected individuals. There is evidence that duration of immunity induced by the current DTaP vaccine may be shorter than that induced by the previous DTwP vaccine. Case-based pertussis data are reported to the European Surveillance System annually.

Actions

ECDC monitors pertussis transmission in Europe on a monthly basis through its epidemic intelligence activities.

Provisional number of confirmed cases of pertussis in England, by month, January 2011 to July 2013

PHE



Outbreak of poliomyelitis - Syria -2013

Opening date: 22 October 2013

Latest update: 8 November 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. Ten of the children in the cluster were confirmed to be infected with WPV1. Final genetic sequencing results are pending to determine the origin of the isolated viruses.

Syria and the neighbouring countries began planning and implementing a large-scale outbreak response. 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 Syria and neighbouring countries in early November 2013. In the meantime a surveillance alert has been issued for the region to actively search for additional potential cases.

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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 in crowded conditions and there are large movements of people. These are all conditions that favour the spread of infectious and vaccine-preventable diseases.

Ten of the cases of acute flaccid paralysis in Deir Al Zour province in Syria were confirmed to be caused by wild-type poliovirus. There is a probability of widespread transmission of poliovirus in Syria and possibly in the areas bordering Syria. This cluster of cases increases the risk that wild poliovirus might be imported to the EU/EEA and become further re-established with 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.

ECDC will continue to follow this event through the global polio outbreak monitoring activities.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 7 November 2013

Epidemiological summary

Worldwide, as of 6 November 2013, 328 cases of poliomyelitis have been notified to WHO compared with 181 for the same period in 2012. Eight countries have recorded cases in 2013: Somalia (180), Nigeria (51), Pakistan (56), Kenya (14), Afghanistan (9), Ethiopia (7), Syria (10) and Cameroon (1).

The earlier reported three suspected cases of acute flaccid paralysis in South Sudan were not caused by wild poliovirus.

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Although no case of paralytic polio has been reported, environmental surveillance suggests that WPV1 transmission, first detected in February 2013, continues in southern and parts of central Israel. WPV1-positive samples were detected also in the occupied Palestinian territory (3 sites).

Following reports of a cluster of 22 acute flaccid paralysis (AFP) cases on 17 October 2013 in Syria, wild poliovirus type 1 (WPV1) has been isolated from ten of the cases under investigation. Final genetic sequencing results are pending. Wild poliovirus was last reported in Syria in 1999. 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 confirmed 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.

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 cases) 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).

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.

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