

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Measles outbreak on a cruise ship- Mediterranean Sea - 2014

Opening date: 1 March 2014

Latest update: 20 March 2014

A measles outbreak was declared on 27 February 2014 on a cruise ship sailing in the north-western Mediterranean with port calls in Marseille (France), Barcelona, Palma de Mallorca (Spain), Civitavecchia, La Spezia and Savona (Italy).

→Update of the week

As of 27 March 2014, 37 cases of measles associated with this outbreak have been reported by Italy (36) and Austria (1).

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 28 March 2014

Measles, a highly transmissible vaccine-preventable disease, is still endemic in many EU countries in which vaccination uptake remains below the level required to interrupt the transmission cycle. ECDC monitors measles transmission and outbreaks in the EU and neighbouring countries in Europe on a monthly basis through enhanced surveillance and epidemic intelligence activities. Elimination of measles requires consistent vaccination uptake above 95% with two doses of measles vaccine in all population groups, strong surveillance and effective outbreak control measures.

→Update of the week

The outbreak in the Netherlands, which affected regions with low vaccine uptake due to religious beliefs, was declared over at the end of February 2014. Several local media now report a new outbreak in The Hague region. Other EU Member States with current outbreaks include Spain, Denmark, the Czech Republic and Austria.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 28 March 2014

Rubella, caused by the rubella virus and commonly known as German measles, is usually a mild and self-limiting disease and is an infection which often passes unnoticed. The main reason for immunising against rubella is the high risk of congenital malformations associated with rubella infection during pregnancy. All EU Member States recommend vaccination against rubella with at least two doses of vaccine for both boys and girls. The vaccine is given at the same intervals as the measles vaccine as part of the MMR vaccine.

→Update of the week

No new outbreaks detected during the past month.

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

Opening date: 4 October 2013

Latest update: 27 March 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

In week 12/2014, of the 29 countries providing clinical data, Estonia, Greece and Romania reported medium intensity and all other countries reported low intensity.

The influenza activity is declining with only a few countries reporting medium intensity level, wide geographical spread or increasing trend. Influenza is still circulating with a higher proportion of influenza subtype A(H3) than A(H1)pdm09. The rate for influenza-positive tested specimens is declining.

Non EU Threats

Ebola outbreak - Guinea - 2014

Opening date: 22 March 2014

Latest update: 28 March 2014

An outbreak of Ebola haemorrhagic fever is currently ongoing in Guinea since early February 2014. The outbreak that started in the eastern part of the country has now reached the capital Conakry. This is the first time an Ebola outbreak is reported in Guinea. Multidisciplinary teams have been deployed to the field to actively search and manage cases, trace and follow-up contacts, and to sensitise communities on the outbreak prevention and control. Investigations on reported cases in Liberia and Sierra Leone along the border with Guinea are ongoing. So far, no confirmed cases have been reported from outside Guinea.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 27 March 2014

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, 401 cases have been reported from China, including 121 deaths. No autochthonous cases have been reported from outside of China. Most cases have been unlinked and sporadic zoonotic transmission from poultry to humans is the most likely explanation for the outbreak. Sustained person-to-person transmission has not been documented. Transmission has peaked in two distinct waves; during the winter months in 2013 and during the winter of 2013-2014. The reason for this pattern is not obvious. Since October 2013, 266 cases have been reported and the majority of these cases were reported from previously affected provinces or in patients who visited these provinces prior to onset of illness.

→Update of the week

Between 21 and 27 March 2014, seven new cases of influenza A(H7N9) infection have been reported in China: Guangdong province (5), Anhui province (1) and Hunan province (1).

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

Opening date: 24 September 2012

Latest update: 26 March 2014

Since April 2012, 206 laboratory-confirmed cases, including 86 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 had direct links to a primary case infected in the Middle East, or have returned from the Middle East. 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, five new cases have been reported in the Middle East. Three cases were reported from Riyadh in Saudi Arabia and two cases from Abu Dhabi in the United Arab Emirates.

Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013

Latest update: 28 March 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 and French Guyana. Aruba only reported imported cases. This is the first documented outbreak of chikungunya with autochthonous transmission in the Americas. As of 28 March 2014, there have been more than 18 000 probable and confirmed cases in the region. There have been five fatalities reported.

→Update of the week

During the past week, the number of new cases reported increased in most of the affected areas but at a lower rate than in the previous weeks in the French Antilles. In Martinique and Guadeloupe, new municipalities were affected. A media report in [ProMED Spanish](#) quoting the Minister of Health reports a large suspected outbreak of Chikungunya in the Dominican Republic. Specimens have been sent to CDC Atlanta for confirmation. The islands with confirmed cases are Saint Martin/Sint Maarten, Martinique, Saint Barthélemy, Guadeloupe, Virgin Islands (UK), Anguilla, Dominica, Aruba, Saint Kitts and Nevis and French Guiana in mainland South America. In most of the territories of the French Antilles, given the load of cases, the health authorities decided not to seek laboratory confirmation for all suspected cases.

Zika virus infection outbreak - The Pacific - 2013-2014

Opening date: 9 January 2014

Latest update: 27 March 2014

There is an ongoing outbreak of Zika virus (ZIKAV) infection in the Pacific affecting several countries, including Easter Island, a territory administered by Chile. There is a simultaneous dengue outbreak in the region (DENV 1 and 3). The French Polynesian health authorities report a concurrent significant increase in neurological syndromes and autoimmune illnesses. The cause and possible links with Zika or dengue virus infections are being investigated.

→Update of the week

In **French Polynesia**, since October 2013 and as of 21 March 2014, there are 8 708 suspected ZIKAV cases, 21 of which were reported during the past week, according to the [Bureau de Veille Sanitaire](#). Overall, the epidemic is declining in all islands. No additional cases of Guillain-Barré syndrome or other neurological complications have been reported since week 8.

In **New Caledonia**, as of 26 March 2014, 390 cases of ZIKAV infection have been recorded since November 2013, of which 358 are autochthonous cases. Of these cases, 114 were reported during the past week, according to [DASS](#).

On the **Cook Islands**, as of 25 March 2014, there are 49 confirmed and 630 suspected cases with Zika-like symptoms, according to [media](#) quoting local health authorities. This is an increase of 442 suspected cases since the last update on 13 March. The first case was a returning traveller from Tahiti.

On **Easter Island**, a territory administered by Chile, there is no new update this week.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 28 March 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, ten new cases of wild poliovirus type 1 (WPV1) were reported to WHO, one affecting Iraq, a country that has not recorded any cases since 2000.

The WHO South East Asia Region was certified polio-free at a ceremony in India this week. This means that transmission of wild poliovirus has been interrupted in this region comprising of 11 countries. This achievement marks a significant leap forward in global eradication, with 80% of the world's population now living in certified polio-free regions.

II. Detailed reports

Measles outbreak on a cruise ship- Mediterranean Sea - 2014

Opening date: 1 March 2014

Latest update: 20 March 2014

Epidemiological summary

A measles outbreak was declared on 27 February 2014 on the Costa Pacifica ship cruising in the western Mediterranean Sea. The index case in the outbreak is a crew member who sought medical care off the ship for fever and rash on 22 February and was laboratory confirmed to have measles on 27 February.

As of 27 March 2014, 37 cases of measles have been reported: 36 from Italy and one from Austria. Twenty one cases are among crew members, seven among passengers and nine are passengers contacts. There is one additional suspected case in a UK resident who was infected while visiting the Emergency Department in Sardinia concomitantly with a previously reported case.

Measles viruses of genotype B3 have been isolated from this outbreak. The fragment sequences are identical to a strain associated with an outbreak in the Philippines and appear to be different from the strain currently associated with an outbreak in Barcelona.

More than 800 crew members have been vaccinated in response to the outbreak. The epidemiological investigations are on-going.

ECDC assessment

Measles is a highly infectious disease and frequently results in outbreaks. Introduction of measles virus into confined groups, such as passengers and crew on a ship, can result in large and rapidly evolving outbreaks if vaccine uptake in the group is below the epidemic threshold. Measles has a long incubation period of up to 21 days, and cases are contagious on average four days prior to and after the rash. Additional cases among contacts of disembarked passengers cannot be ruled out.

Actions

ECDC published a [Rapid Risk Assessment](#) on 05 March 2014. Two ECDC experts were deployed to Rome where they have supported the Italian outbreak response team from 10 to 14 March 2014. The outbreak was described in detail in a Rapid Communication published in [Eurosurveillance](#) on 13 March. An [epidemiological update](#) was posted on 25 March 2014.

ECDC together with Italian authorities is preparing a report.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 28 March 2014

Epidemiological summary

EU Member States

Spain

A measles outbreak that began in late January in [Catalonia](#) affected 26 people by the end of February 2014. Twelve cases were hospitalised. The cases were detected in the city of Barcelona and in several municipalities in the province of Girona. Most of those affected are adults between 18 and 47 years who were unvaccinated or had not completed the recommended vaccination regimen. Two patients were hospitalised with pneumonia. The outbreak originated with an imported case in a 37-year-old visitor.

Denmark

Since mid-February, there has been an outbreak of measles in Østsjælland in the [Copenhagen area](#) with seven laboratory confirmed cases. Two more cases are awaiting laboratory results, also from the same area. The primary case was a child of one year. There is no identified source of infection for this child. Five of the cases are children under three years, all unvaccinated. During the same period two cases were reported in Nordsjælland in returning adult visitors from the Philippines. Genotyping has so far been carried out on samples from five of the Danish patients and all were genotype B3.

The Netherlands

The outbreak in the Netherlands, which affected regions with low vaccine uptake due to religious beliefs, was declared over at the end of February 2014. [Media](#) report a new outbreak in The Hague region since the end of February 2014 with fifteen cases. The outbreak involves two adults and 13 children, some of whom are less than 14 months old and have not gotten their first MMR vaccination.

The Czech Republic

The Czech Republic has reported an outbreak of measles in a hospital from the Ustecky region (Masarykova Hospital, Usti nad Labem) that started in February. Eighty cases have been recorded (41 laboratory confirmed, 39 suspected). The index case, a 46-year-old male, had travelled to India. He was subsequently hospitalised. The majority of cases in the outbreak were healthcare workers (59%). Measures were taken and about 200 persons were vaccinated. The last case was identified on 10 March 2014.

Austria – update

According to an update by the [Austrian health authorities](#) the last case in the outbreak near Vienna had symptom onset on 4 March. Therefore, the outbreak will be soon declared over. As of 19 March 2014, there have been 44 cases reported. Half of the laboratory-confirmed cases were due to genotype D8. Three-quarters of the cases were either not vaccinated against measles or their measles vaccination status was unknown. Forty-three percent of patients were hospitalised. Four cases occurred in healthcare workers. Transmission in the hospital setting occurred twice during the outbreak. Almost one-third of the cases occurred in students in a Montessori school. Two measles patients were 10 month old children.

In Tyrol, cases due to serotype B3 were reported recently where the primary case had potential exposure in the Philippines.

Rest of the world

Canada

A large outbreak is ongoing in [British Columbia](#), Canada's "Bible belt" in a community where vaccination coverage is low. There are 228 cases reported in the Fraser Valley region. The outbreak is now spreading further in with cases reported outside Vancouver, Ottawa and on Prince Edward Island.

U.S.

There is an outbreak in [Orange County](#), California with 20 cases. As of 21 March, there had been 36 measles cases reported state-wide, although that does not include the most recent numbers from Orange County. Last year at this time in California, there had been four reported cases of measles.

Web sources: [ECDC measles and rubella monitoring](#) | [ECDC/Euronews documentary](#) | [WHO Epidemiological Briefs](#) | [MedISys Measles page](#) | [EU-VAC-net ECDC](#) | [ECDC measles factsheet](#)

ECDC assessment

So far in 2014, six EU Member States have already reported outbreaks even though the measles transmission season has not yet started. The target year for measles elimination in Europe is 2015. The current situation suggests that endemic measles transmission continues in many EU Member States and the prospect of achieving the 2015 objective is diminishing.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 28 March 2014

Epidemiological summary

The 27 EU/EEA countries reported 38 847 rubella cases during the most recent 12-month period between January 2013 and December 2013. Twenty countries reported consistently for the 12-month period. Poland accounted for 99% of all reported rubella cases in the 12-month period; 88% of these cases were either unvaccinated or had an unknown vaccination status. Less than 1% of the cases had a positive result in a rubella laboratory test. In 14 countries the rubella notification rate was rate less than one case per million population during the last 12 months.

Web sources: [ECDC measles and rubella monitoring](#) | [ECDC rubella factsheet](#) | [WHO epidemiological brief summary tables](#) | [WHO epidemiological briefs](#) | [Progress report on measles and rubella elimination](#) | [Towards rubella elimination in Poland](#)

ECDC assessment

As rubella is typically a mild and self-limiting disease with few complications, the rationale for eliminating rubella would be weak if it were not for the virus' teratogenic effect. When a woman is infected with the rubella virus within the first 20 weeks of pregnancy, the foetus has a 90% risk of being born with congenital rubella syndrome (CRS), which entails a range of serious

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incurable illnesses. The increase in the number of rubella cases reported in Romania and Poland during the last two years and the number of babies born with CRS are cause for concern. Rubella occurs predominantly in age and sex cohorts historically not included in vaccination recommendations. To achieve rubella elimination, supplemental immunisation activities in these cohorts are needed.

Actions

ECDC closely monitors rubella transmission in Europe by analysing the cases reported to the European Surveillance System and through its epidemic intelligence activities on a monthly basis. Twenty-four EU and two EEA countries contribute to the enhanced rubella surveillance. The purpose of the enhanced rubella monitoring is to provide regular and timely updates on the rubella situation in Europe in support of effective disease control, increased public awareness and the achievement of the 2015 rubella and congenital rubella elimination target.

An ECDC report is available online: [Survey on rubella, rubella in pregnancy and congenital rubella surveillance systems in EU/EEA countries](#)

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

Opening date: 4 October 2013

Latest update: 27 March 2014

Epidemiological summary

For week 12/2014:

- Of the 29 countries providing clinical data, Estonia, Greece and Romania reported medium intensity and all other countries reported low intensity.
- Of the 662 sentinel specimens tested across 23 countries, 207 (31%) were positive for influenza virus. Of these, 198 (96%) were type A, 118 subtyped as A(H3) and 47 A(H1)pdm09, and nine (4%) were type B.
- Six countries reported 117 hospitalised laboratory-confirmed influenza cases, including 67 cases admitted to intensive care units.

Web sources: [WISO](#) | [ECDC Seasonal influenza](#) | [US-CDC health advisory](#) | [CDC Seasonal influenza](#) | [FluWatch, Canada](#) | [FluView, USA](#)

ECDC assessment

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

Actions

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

Ebola outbreak - Guinea - 2014

Opening date: 22 March 2014

Latest update: 28 March 2014

Epidemiological summary

As of 27 March 2014, 103 suspected and laboratory confirmed cases including 66 deaths (CFR: 64%) have been reported from Guékédou, Macenta and Kissidougou districts in south east Guinea. Four healthcare workers are among the victims.

On 27 March 2014, the Ministry of Health notified WHO of four laboratory confirmed cases in the capital, Conakry. It also said a fifth suspected case-patient from the city has died without lab confirmation. According to a [media report](#) quoting the Minister of Health, the primary case is an old man who showed symptoms of haemorrhagic fever after visiting Dinguiraye in central Guinea and who subsequently died. Four of the man's brothers, who attended his funeral in the central town of Dabola, started to show the same symptoms. They tested positive for Ebola on their return to Conakry and have been placed in an isolation ward in Donka hospital. The old man's family has also been quarantined.

In neighbouring countries, Sierra Leone has reported six suspected cases including five deaths and Liberia eight suspected cases including six deaths. All these cases have a history of travel to affected districts in Guinea.

Fifteen of the reported cases in Guinea have so far been confirmed. Results from sequencing, done by CIRI Lyon, showed strongest homology of 98% with Zaire Ebola virus last reported in 2009 in Kasai-Occidental Province of DR Congo. This Ebola virus species has been associated with high mortality rates during previous outbreaks.

Response activities are ongoing. The Ministry of Health and Médecins Sans Frontières have established isolation facilities in Guéckédou district and plans are underway to establish an additional isolation ward in Macenta district. WHO and the Global Outbreak Alert and Response Network (GOARN) have deployed experts to support operational response. The necessary supplies and logistics required for supportive management of patients and all aspects of outbreak control are also being mobilised.

Web sources: [WHO/AFRO outbreak news](#) | [Interim Infection Control Recommendations for Care of Patients with Suspected or Confirmed Filovirus \(Ebola, Marburg\) Haemorrhagic Fever WHO](#) | [ECDC Ebola health topic page](#) | [ECDC Ebola and Marburg fact sheet](#) | [Risk assessment guidelines for diseases transmitted on aircraft](#)

ECDC assessment

This is the first time an Ebola outbreak has been reported in Guinea. The origin of this outbreak is currently unknown. However, exposure to bush meat has been suspected for primary cases, as well as transmission through close contact with blood, secretions, organs or other biological fluids of infected animals. Most of secondary cases who developed the disease participated in funeral ceremonies and most had been in direct contact with infected or deceased patients or had handled their bodies.

This seems to be a rapidly developing outbreak which now involves the capital Conakry. The number of cases is expected to increase in the coming weeks in Guinea and potentially in bordering countries in the region. However, control measures, such as isolation of cases and active monitoring of contacts, currently implemented with the support of international partners should be able to control this outbreak and prevent further spread of the disease.

The risk of infection for travellers is considered very low since most human infections result from direct contact with the body 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 body fluids.

WHO advises against the application of travel or trade restrictions on Guinea and neighbouring countries based on the current information available on this Ebola outbreak.

Actions

ECDC has prepared a [rapid risk assessment](#) and is closely monitoring this event.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 27 March 2014

Epidemiological summary

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, human cases have continued to be reported, and as of 27 March 2014, there have been 401 laboratory-confirmed cases: Zhejiang (138), Guangdong (96), Shanghai (42), Jiangsu (43), Fujian (21), Hunan (19), Anhui (11), Jiangxi (5), Henan (4), Beijing (4), Guangxi (4), Shandong (2), Hebei (1), Guizhou (1), Jilin (1), Hong Kong (6), Taiwan (2) and one case reported in Malaysia imported from China.

Most cases have developed severe respiratory disease. One hundred and twenty-one patients have died (case-fatality ratio=30.2%).

Since October 2013, 266 cases were reported from Zhejiang (92), Guangdong (95), Fujian (16), Jiangsu (16), Hunan (16), Shanghai (8), Anhui (7) Beijing (2), Guangxi (4), Guizhou (1), Jilin (1), Taiwan (1) and Hong Kong (6). One exported case from China was diagnosed in Malaysia.

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

ECDC assessment

The continued transmission in one of the most densely populated areas in the world of a novel reassortant avian influenza virus capable of causing severe disease in humans, is a cause for concern due to the pandemic potential of the virus. Currently, the most likely scenario is that this remains a local although geographically widespread zoonotic outbreak, in which the

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virus is transmitted sporadically to humans in close contact with the animal reservoir, similar to the influenza A(H5N1) situation.

The fatal case of influenza A(H5N1) imported from China to Canada and the recent imported case of influenza A(H7N9) in Malaysia support the scenario that imported cases of influenza A(H7N9) may be detected in Europe. However, the risk of the disease spreading among humans following an importation to Europe is considered to be very low. People in the EU presenting with severe respiratory infection and a history of potential exposure in the outbreak area will require careful investigation in Europe.

The risk of increased transmission of H7N9 viruses between humans is not negligible. European countries should continue to prepare for the eventuality of future pandemics, including one caused by A(H7N9). Preparedness activities should include the precautionary development of early human vaccine candidates and increased monitoring of animal influenzas at the animal-human interface.

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.

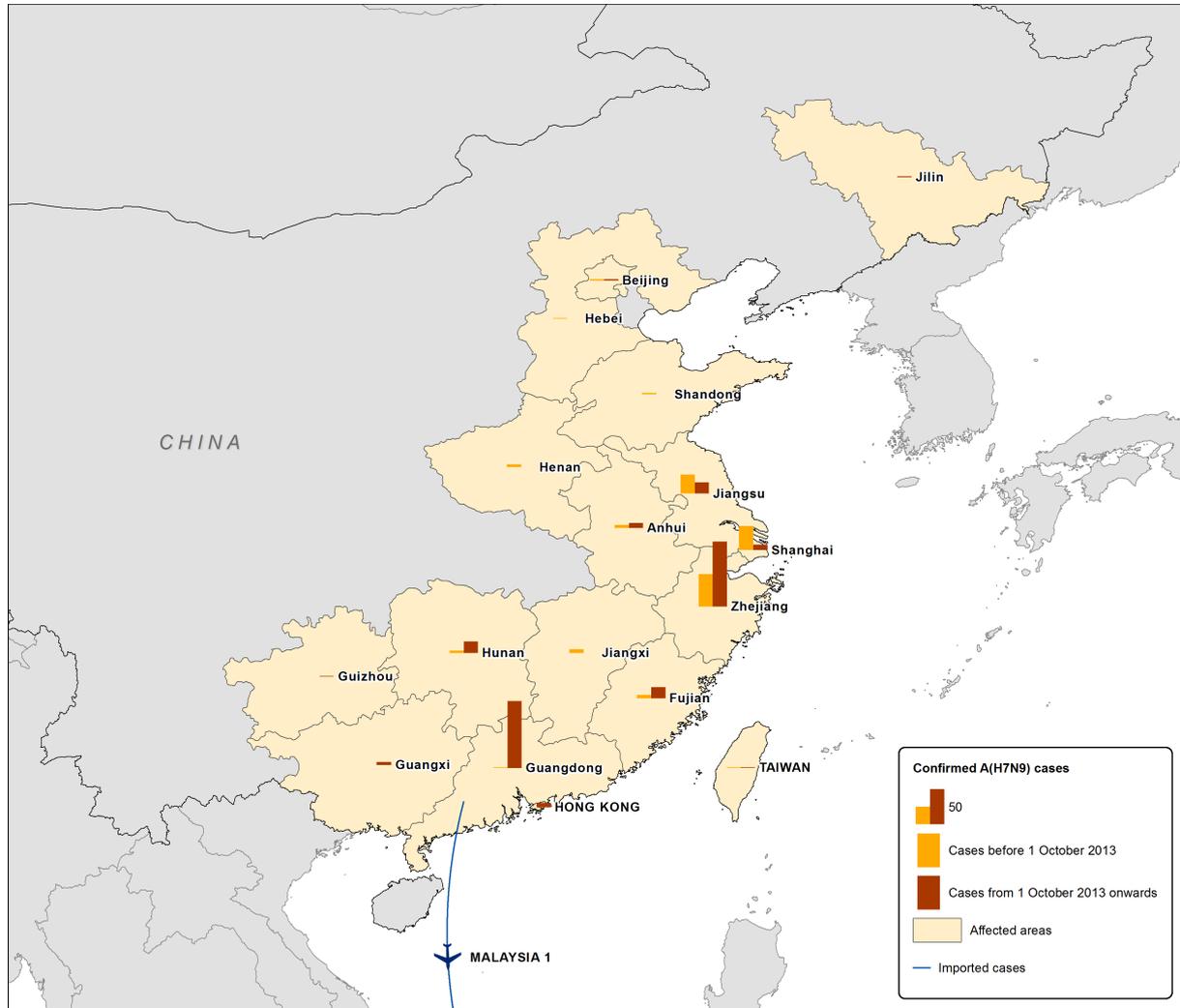
ECDC published an updated [Rapid Risk Assessment](#) on 26 February 2014.

ECDC published an [epidemiological update](#) on 7 February 2014.

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

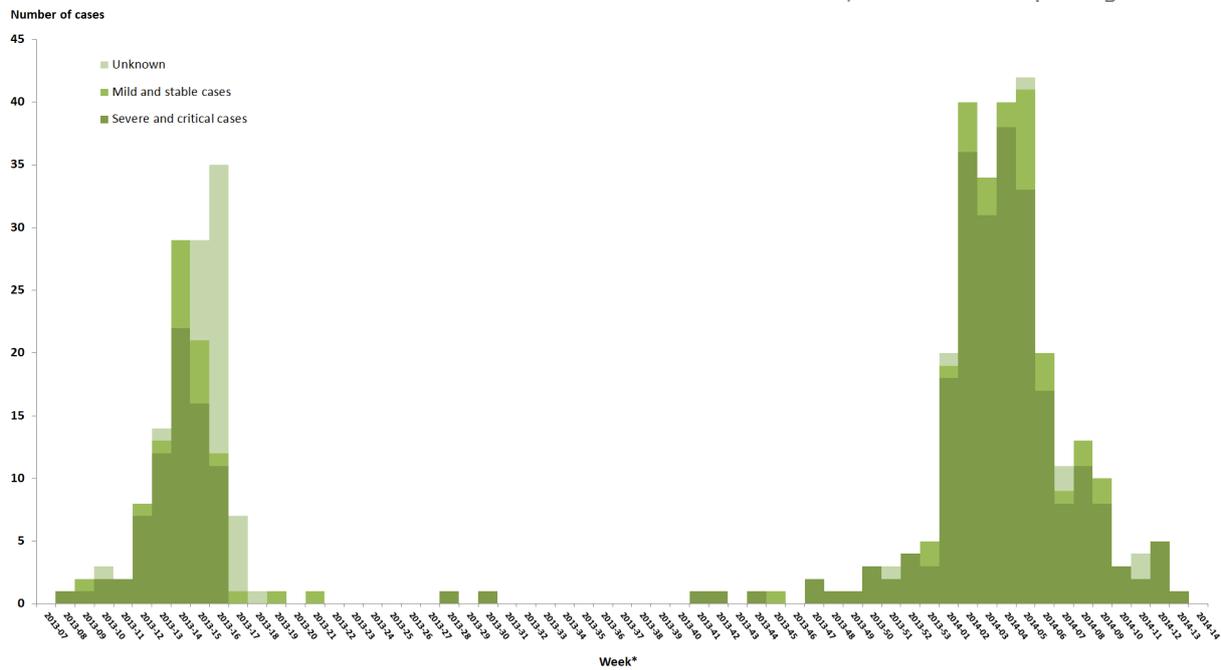
Distribution of confirmed A(H7N9) cases by place of reporting, week 14/2013 to 13/2014 (n=401)

ECDC SRS



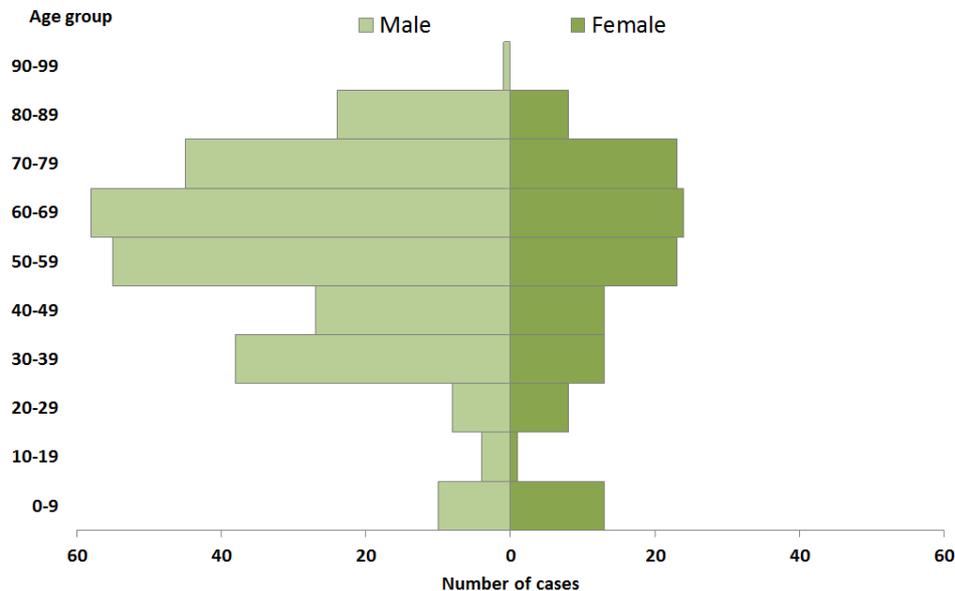
Distribution of confirmed A(H7N9) cases by week of onset and severity, week 14/2013 to week 13/2014, China (n=401)

* Where the week of onset is unknown, the week of reporting has been used



Distribution of confirmed A(H7N9) cases by age and gender, 31 March 2013 - 27 March 2014, China (n=396*)

ECDC SRS



*5 cases where age or gender is missing have been excluded

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

Opening date: 24 September 2012

Latest update: 26 March 2014

Epidemiological summary

As of 27 March 2014, 206 laboratory-confirmed cases of MERS-CoV have been reported by local health authorities worldwide, including 86 deaths. The following countries have reported MERS-CoV cases:

Saudi Arabia: 162 cases / 64 deaths
 United Arab Emirates: 17 cases / 6 deaths
 Qatar: 7 cases / 4 deaths
 Jordan: 3 cases / 3 deaths
 Oman: 2 cases / 2 deaths
 Kuwait: 3 cases / 1 death
 UK: 4 cases / 3 deaths
 Germany: 2 cases / 1 death

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France: 2 cases / 1 death
Italy: 1 case / 0 death
Tunisia: 3 cases / 1 death

Twelve cases have been reported from outside the Middle East: the UK (4), France (2), Tunisia (3), Germany (2) and Italy (1). 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. However, with the exception of a possible nosocomial outbreak in Al-Ahsa, Saudi Arabia, secondary transmission has been limited. Twenty-four asymptomatic cases have been reported by Saudi Arabia and three by the United Arab Emirates.

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 an ongoing source of infection in the region. There is therefore a continued risk of cases presenting in Europe following exposure in the Middle East, and surveillance for MERS-CoV 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

ECDC's latest [epidemiological update](#) was published on 25 November 2013.

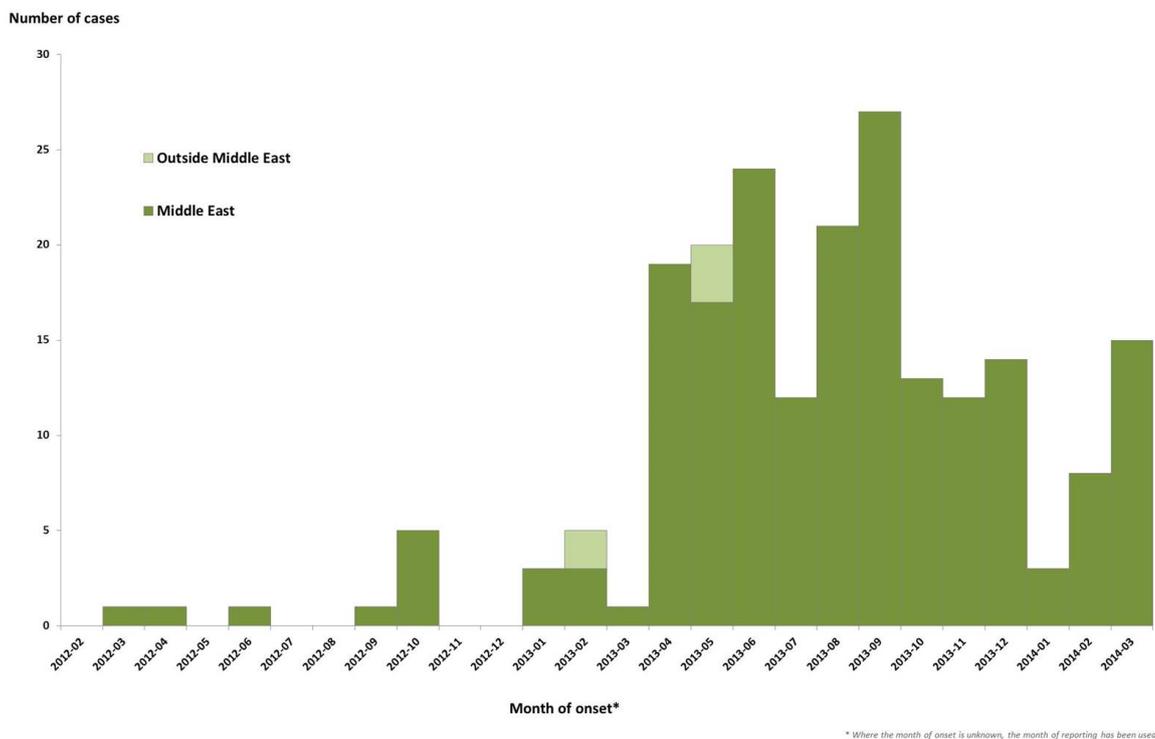
The latest update of a [rapid risk assessment](#) was published on 7 November 2013.

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

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

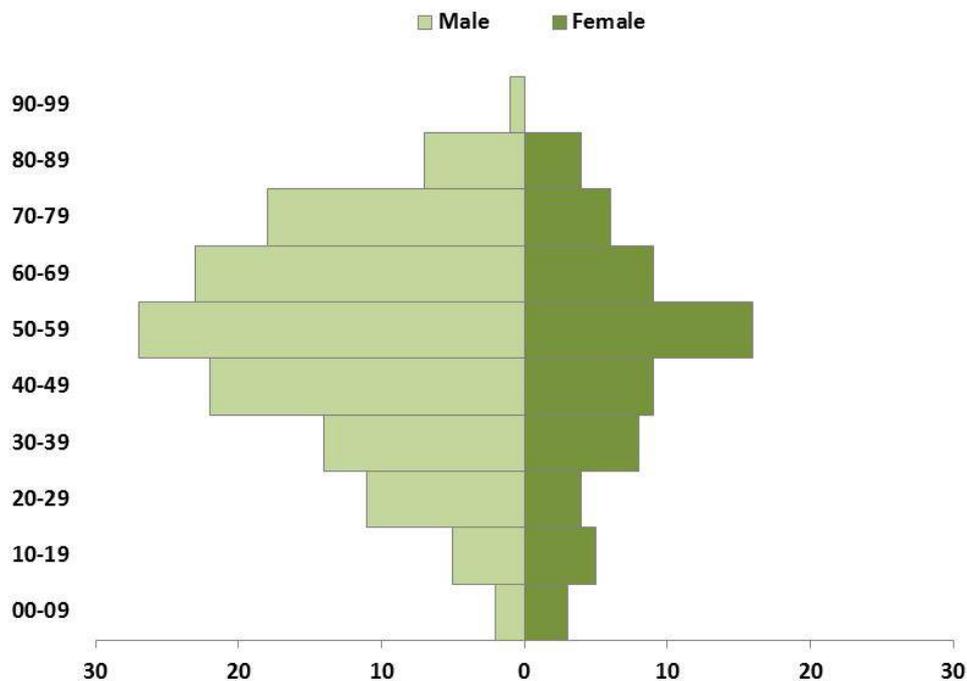
Distribution of confirmed cases of MERS-CoV by month of onset and place of probable infection, March 2012 - 27 March 2014 (n=206*)

ECDC SRS



Distribution of confirmed cases of MERS-CoV by gender and age group, March 2012 - 27 March 2014 (n=194*)

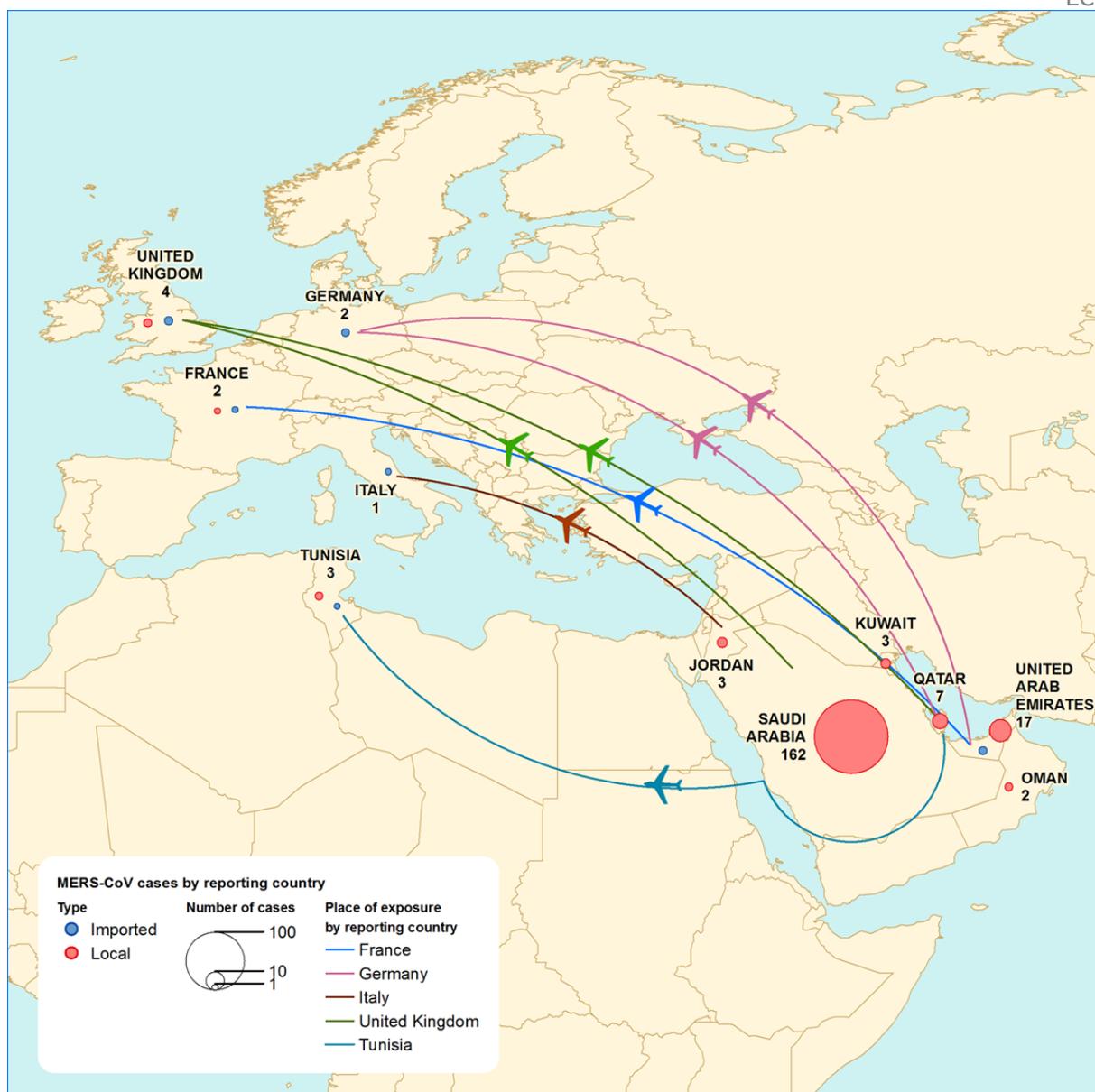
ECDC SRS



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

Distribution of confirmed MERS-CoV cases by place of reporting, March 2012 - 27 March 2014 (n=206)

ECDC SRS



Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013

Latest update: 28 March 2014

Epidemiological summary

Cases reported as of 28 March 2014:

- Virgin Islands (UK), 7 confirmed cases;
- Saint Martin (FR), 2 750 suspected and 784 confirmed or probable cases, 3 deaths;
- Sint Maarten (NL), 224 confirmed autochthonous cases;
- Martinique, 9 340 suspected and 1 207 confirmed or probable cases, 2 deaths;
- Saint Barthélemy, 435 suspected and 134 confirmed or probable cases;

- Guadeloupe, 2 270 suspected and 734 confirmed or probable cases;
- Dominica, 487 suspected cases and 72 confirmed cases;
- French Guiana, 22 confirmed autochthonous cases and 11 imported cases;
- Anguilla, 14 confirmed cases on the island with one case probably originating from Saint Martin;
- Aruba, one imported case originating from Sint Maarten;
- St. Kitts and Nevis, one confirmed case.

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 an [epidemiological update](#) on 10 January and on [7 February](#) 2014.

The Caribbean islands

Wikipedia



Zika virus infection outbreak - The Pacific - 2013-2014

Opening date: 9 January 2014

Latest update: 27 March 2014

Epidemiological summary

The Zika outbreak started in October 2013 in French Polynesia and it is estimated that more than 30 000 cases have sought medical care with Zika-like symptoms there. The outbreak has since spread to other areas including a territory belonging to Chile. Public health control measures, such as increased surveillance and the promotion of measures to avoid mosquito bites, have been implemented in the affected territories.

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Health authorities in French Polynesia have reported a concurrent significant increase in neurological syndromes and autoimmune illnesses. There is a simultaneous dengue outbreak in the region. The cause of the complications and their possible links with ZIKAV or dengue virus infections are being investigated. No neurological complications have been reported to date in the other affected areas.

Web sources: [ECDC fact sheet](#) | [Bureau de Veille Sanitaire](#) | [NaTHNaC](#) | [DASS New Caledonia](#)

ECDC assessment

ZIKAV infection continues to spread to new areas in the Pacific. There is a risk for the disease spreading further both in the Pacific and to the countries of the Americas where the *Aedes* mosquito is present, and for sporadic imported cases in Europe from endemic areas. Vigilance must be enhanced towards imported cases of ZIKAV infection in EU Member States and EU overseas countries and territories and outermost regions, in particular where effective vectors are present. Early detection of cases is essential to reduce the risk of autochthonous transmission. Clinicians and medical travel clinics should be aware of the situation in the Pacific islands and include ZIKAV infection in their differential diagnosis.

There is no available vaccine against ZIKAV infection. Travellers can protect themselves by preventing mosquito bites.

ZIKAV infection is a mild illness and has not been known to have neurological complications. The reported complications in French Polynesia are not confirmed to be caused by ZIKAV infections. However, there is a temporal association with the simultaneous outbreaks of ZIKAV and dengue. It is important to determine the cause of this increase and a possible association with the ongoing transmission of DENV-1, DENV-3 and ZIKAV.

Actions

ECDC published a [risk assessment](#) on 14 February 2014.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 28 March 2014

Epidemiological summary

Ten new cases of WPV1 were notified to WHO this week (week 13): seven from Pakistan, one from Afghanistan, one from Iraq and one from Ethiopia.

The case of polio reported this week from Iraq highlights the current regional spread of the virus. The case, a six-month old boy from Baghdad who had not been immunised, developed paralysis on 10 February 2014. This is the first polio case in the country since 2000. Genetic sequencing indicates the virus is most closely related to virus detected in Syria.

Worldwide, 47 cases have been reported to WHO in 2014, compared with 16 for the same time period in 2013.

WPV1 positive samples have been detected by environmental surveillance in Israel since 3 February 2013 and continue to be detected in 2014 (17 positive samples have been collected this year, the most recent of which was collected on 16 February 2014).

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 vaccinations, 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.

The recent detection of WPV in environmental samples in Israel, and the confirmed and ongoing outbreaks in Syria and Somalia, highlight the risk of re-importation into Europe. Recommendations are provided in the recent ECDC risk assessments:

[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 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 situation of polio, the threat is being followed weekly.

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