COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 8, 16-22 February 2014

All users

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: 30 January 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 seasons and publishes the results on its website in the Weekly Influenza Surveillance Overview.

➔Update of the week

In week 7/2014, sixteen of the 29 reporting countries reported widespread geographic patterns of influenza activity.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 24 October 2013

Measles, a highly transmissible vaccine-preventable disease, is still endemic in many EU countries in which vaccination uptake remains below 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

Anthroposophic schools were involved in two recent measles outbreaks in two countries in 2014: in Austria and Finland. New outbreaks have been reported in Wales since October 2013 in the same area as the one affected in last year's outbreak. The UK has seen ten measles cases in returning travellers from the Philippines where there is an ongoing outbreak. The measles outbreak in the Netherlands is still ongoing but is showing signs of slowing down. In the EU neighbouring countries, Russia reports several big ongoing outbreaks.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012 Latest update: 28 November 2013

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.

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Non EU Threats

New! Influenza A(H10N8) - China - Monitoring human cases

Opening date: 16 February 2014

On 17 December 2013, Chinese authorities reported the first fatal human case of avian influenza A(H10N8) affecting a 73-year-old woman from Jiangxi province. The immunocompromised patient had underlying illnesses and died on 6 December 2013. Since then, two additional human cases of influenza A(H10N8) have been reported in Jiangxi province in China. These are sporadic cases that occurred in the context of enhanced testing of avian influenza in China. There is no evidence of secondary transmission.

Winter Olympic and Paralympic Games 2014

Opening date: 27 January 2014 Latest update: 21 February 2014

The Winter Olympics and Paralympic Games are being held from 7 to 21 February and from 7 to 16 March 2014 (Paralympics) in Sochi, Russia. The Russian public health authorities (Rospotrebnadzor) have strengthened surveillance for these mass gathering events. As in previous similar events, ECDC has enhanced its epidemic intelligence activities in relation to the event.

➔Update of the week

During the past week, no communicable disease events were detected as potential threats to the 2014 Winter Olympic Games.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 20 February 2014

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, the outbreak has affected 14 Chinese provinces and two municipalities. Since March 2013, 355 cases have been reported, including 67 deaths. 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. Since October 2013, 219 cases have been reported, the majority in previously affected provinces or in patients who visited such provinces prior to illness. However, two cases have been reported in newly affected provinces in China (Guizhou and Guangxi) during the second wave of the outbreak.

➔Update of the week

Between 13 and 21 February, 16 new cases of influenza A(H7N9) infection have been reported in China: Zhejiang (three), Guangdong (eight), Hunan (two), Anhui (two) and Jiangsu (one).

Chikungunya outbreak - The Caribbean, 2013

Opening date: 9 December 2013 Latest update: 14 February 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 21 February 2014, the number of confirmed and probable cases is more than 2 000 in the region. There has been one fatality reported.

➔Update of the week

During the past week, 293 new cases of chikungunya have been reported in the Caribbean. New confirmed cases were reported from Saint Martin (FR) (58), Martinique (99), Saint Barthélemy (10), Guadeloupe (82). In addition new cases were reported from Dominica (41). French Guyana reported two autochthonous cases. These last two cases are the first autochthonous chikungunya cases in mainland South America. St. Kitts and Nevis reported the first confirmed case (reported by media Link).

Zika virus infection outbreak - The Pacific - 2013-2014

Opening date: 9 January 2014 Latest update: 6 February 2014

Two French overseas territories are affected by outbreaks of Zika virus (ZIKAV) infection: French Polynesia and New Caledonia. This is the second documented outbreak of ZIKAV infection reported in the Pacific. It is estimated that more than 29 000 cases have sought medical care with Zika-like symptoms in French Polynesia since the beginning of the outbreak in October 2013. There is a simultaneous dengue outbreak in the region. 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

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In French Polynesia 180 new suspected cases were recorded during last week bringing the number of suspected cases to 8 442. One additional case of Guillain-Barré syndrome and one additional case of meningo-encephalitis have been reported since the last update. There have been 72 cases of neurological and auto-immune complications of which 39 cases were Guillain-Barré syndrome. The outbreak is declining in the majority of the islands.

In New Caledonia three additional autochthonous cases of ZIKAV infection were reported during last week. As of 12 February 2014, there are 66 cases, of which 31 are imported cases.

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

Opening date: 24 September 2012 Latest update: 20 February 2014

Since April 2012, 186 laboratory-confirmed cases, including 87 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, three cases with comorbidities have been reported by health authorities of Saudi Arabia, two of them have died.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 20 February 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 three countries: Afghanistan, Pakistan and Nigeria. In addition, there have been cases reported from five other countries in 2013: Cameroon, Ethiopia, Kenya, Somalia and Syria.

➔Update of the week

Since last week, seven new wild poliovirus 1 (WPV1) cases have been reported to WHO with disease onset in 2014. Three additional cases of WPV1 were notified with onset in 2013.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 20 February 2014

Dengue fever is one of the most prevalent vector-borne diseases in the world, affecting an estimated 50-100 million people each year, mainly in the tropical regions of the world. The identification of sporadic autochthonous cases in non-endemic areas in recent years has already highlighted the risk of locally acquired cases occurring in EU countries where the competent vectors are present. The 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.

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II. Detailed reports

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

Opening date: 4 October 2013 Latest update: 30 January 2014

Epidemiological summary

For week 7/2014:

- Of the 29 countries providing clinical data, Greece and Finland reported high-intensity influenza activity, eleven reported medium intensity and 16 countries reported low-intensity influenza activity.
- Of the 1 332 sentinel specimens tested across 25 countries, 488 (37%) were positive for influenza virus. Since week 40/2013, seven countries have reported 2 531 hospitalised, laboratory-confirmed influenza cases, 2 508 (99%) of which were caused by influenza virus type A infection.

Influenza season is currently in different phases in different countries. Some countries are experiencing decreasing influenza activity while others have not yet reached the epidemic peak. Influenza A(H1)pdm09 and A(H3) viruses are co-circulating in outpatient settings. However, A(H1)pdm09 is predominant in hospitalised cases.

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.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 24 October 2013

Epidemiological summary

EU Member States

Austria

Between 1 December 2013 and 13 February 2014, 44 cases of measles were reported in Austria compared to 79 cases in the whole of 2013. Thirty-eight cases were due to the same outbreak affecting Lower Austria (28) and Vienna (10). Eleven cases of this outbreak were confirmed to be due to genotype D8. In two cases from different regions (Tirol and Salzburg) genotype B3 was identified. Sixty-eight percent of the confirmed and probable cases are unvaccinated, and in 11% the vaccination status is unknown. Thirty-nine percent of the cases are reported to have been hospitalised. Three of the patients are healthcare workers and 12 cases are students in an anthroposophic school. There have been previous outbreaks in anthroposophic schools in Austria. The largest one occurred in Salzburg in 2008 with 394 cases. Outbreak investigations continue and recommendations are given regarding post-exposure prophylaxis as well as vaccination for people with no record of two doses of measles vaccinations. The Ministry of Health launched a measles initiative during the first week of January to increase awareness on measles vaccination.

Finland

Fifty schoolchildren in an anthroposophic school in Finland have been placed in quarantine at the end of January 2014 due to a measles case in a student returning from abroad. Only half of the school's students have received MMR vaccine against measles. There are also susceptible children in a nearby kindergarten who are unvaccinated because of their young age. Those students

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who have received two MMR vaccinations have returned to school, but the fifty students in quarantine are doing their school assignments from home. Students have been urged to stay at home and may not visit public places and friends until the end of the incubation period.

Sweden

The Swedish Public Health Agency (Folkhälsomyndigheten) reported on 7 February 2014 that investigations are ongoing regarding three measles cases in Stockholm, born in the 1940s and 1960s, who had fallen ill recently. None of them had been abroad before they became ill and tracing is in progress to clarify the source of infection. Two unrelated cases have been reported from Örebro and Skåne involving a returning traveller and a person who had contact with people who have recently been abroad.

The Netherlands – update

The epidemic is still ongoing but is slowing down. Since 1 May 2013 and as of 12 February 2014, RIVM reported 2 628 cases. A 17-year-old girl died due to complications of measles. Most measles patients are unvaccinated (94%) and are aged 4-12 years (57%). Since the beginning of the outbreak, there have been 17 health workers diagnosed with measles. Of these, 11 were unvaccinated, two individuals vaccinated with two doses, three individuals vaccinated with one dose, and one person who was vaccinated with three doses. There was a spread of measles from the Netherlands to Alberta, Canada in October 2013 through a visitor, causing a local outbreak there with 42 cases.

The UK – measles cases ex Philippines

Public Health England reported ten cases of measles in the UK since December 2013 in persons returning from the Philippines where there is an ongoing outbreak. Ages of the cases ranged from less than one year to 45 years. Three cases were under 13 months of age and therefore not yet eligible for immunisation. The majority of the cases (eight) had travelled to the Philippines to visit family and friends and at least four cases were infectious on their flight back to the UK raising the possibility of onward transmission and further cases occurring. In some instances patients seeking care were not isolated immediately, exposing healthcare workers and other vulnerable patients. Current advice by Public Health England's Immunisation Department is that individuals with clinical features compatible with measles illness who have recently travelled to the Philippines should be treated as likely measles cases, and public health actions – such as identifying vulnerable contacts – commenced ahead of laboratory confirmation of the diagnosis. Several other countries report measles cases imported from the Philippines: Japan, the US (Hawaii), Taiwan, Canada, New Zealand and Australia.

Wales - update

Since October 2013, several community and school-associated outbreaks have been reported in Wales by Public Health Wales with the majority of cases from around Swansea, the same area that was mostly affected by the previous outbreak. Cases are mainly in the age group between 10 and 18; however, adults have also been affected. Although more than 70 000 catch up doses of MMR were given across Wales during the last outbreak, around 30 000 children and young people in the 10-to-18 age group remain unprotected. Health authorities are again offering extended immunisation sessions in the affected schools and areas and are urging people born after 1970 to check their previous measles immunisations and bring their vaccination status up to date when necessary.
The largest ever outbreak reported in Wales started in November 2012 and was declared to be over in July 2013. It resulted in 1 219 notifications of measles. Eighty-eight people needed hospitalisation and there was one death.

Germany – SSPE fatality

The German media reported the death of a 19-year-old adolescent due to subacute sclerosing panencephalitis (SSPE). He contracted measles as a toddler and started to show symptoms of brain affection at the age of ten. He was later diagnosed with SSPE and had been in a vegetative state for the last seven years. More information is available here: http://aktion-max.de/

Rest of the world

Russia

Several large ongoing outbreaks are reported. In Kursk, as of 10 February, the number of cases of measles has reached 207 in an outbreak involving a Baptist community who refuse vaccination. In the Astrakhan region, the number of reported measles cases as of 10 February 2014 is 110 affecting several villages. Another large outbreak is ongoing in the Tula region with 62 cases of suspected and confirmed measles cases, both among Baptists and in Roma people. The Karachay-Cherkess Republic reported 41 laboratory-confirmed measles cases since the beginning of 2014, mainly among adults. Seven of the patients are healthcare workers.

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Vietnam
From 1 January to 13 February, the country recorded 621 cases including seven deaths, according to the National Institute of Hygiene and Epidemiology and the Pasteur Institute in Ho Chi Minh City. More than 160 children have been hospitalised so far due to measles. Twenty of the patients had serious complications including pneumonia and respiratory failure.

Web sources: ECDC measles and rubella monitoring | ECDC/Euronews documentary | WHO Epidemiological Briefs | MedISys Measles page | EUVAC-net ECDC | ECDC measles factsheet

ECDC assessment

So far in 2014, Austria and Wales have already reported outbreaks even though the measles transmission season has not started yet. The large outbreak in the Netherlands is still ongoing. 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 November 2013

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 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

New! Influenza A(H10N8) - China - Monitoring human cases

Opening date: 16 February 2014

Epidemiological summary

As of 13 February 2014, three human cases of infuenza A(H10N8) virus have been reported in Jiangxi province in China.
On 17 December 2013, Chinese authorities reported the first fatal human case of avian influenza A(H10N8) affecting a 73-year-old woman from Jiangxi province. The immunocompromised patient with underlying illnesses was admitted to a local hospital on 30 November for treatment. Her clinical diagnosis was severe pneumonia and she died on 6 December. According to local authorities,

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the patient had visited a local live poultry market.

On 29 January 2014, the second human case of influenza A(H10N8) was reported. The case was a 55-year-old female who visited a local live poultry market on 4 January 2014 and had no exposure to similar cases before the onset of symptoms.

The third human case of influenza A(H10N8) in Jiangxi province was reported on 13 February 2013. The case was a 75-year-old man who developed fever and fatigue on 4 February and was admitted to hospital on the same day. His lung infection worsened on 5 February and he died on 8 February. There is currently no information available about whether this patient was exposed to live poultry or had underlying medical conditions.

ECDC assessment

The three human cases of infuenza A(H10N8) virus infection reported in Jiangxi province in China are sporadic cases that occurred in the context of enhanced testing of avian influenza in China. There is no evidence of secondary transmission.

Actions

ECDC epidemic intelligence team is closely monitoring this event.

Winter Olympic and Paralympic Games 2014

Opening date: 27 January 2014 Latest update: 21 February 2014

Epidemiological summary

ECDC assessment

The overall level of threat of communicable disease transmission and outbreaks during the 2014 Winter Olympic Games in Sochi is considered low with the exception of influenza, influenza-like illness (ILI) and acute diarrhoea and vomiting for which the risk is considered moderate.

Actions

ECDC has enhanced epidemic intelligence activities in collaboration with WHO EURO during this event.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 20 February 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 21 February 2014, there have been 354 laboratory-confirmed cases in China: Zhejiang (135), Guangdong (69), Shanghai (42), Jiangsu (40), Fujian (20), Hunan (13), Jiangxi (5), Henan (4), Anhui (8), Beijing (4), Shandong (2), Hebei (1), Guangxi (3), Guizhou (1), Hong Kong (5), Taiwan (2) and one case reported in Malaysia imported from China. In addition, the virus has been detected in one asymptomatic case in Beijing.

Most cases have developed severe respiratory disease. Sixty-seven patients have died (case-fatality ratio=19%).

Since 15 October 2013, 219 cases were reported from Zhejiang (89), Guangdong (68), Fujian (15), Jiangsu (13), Shanghai (8), Hunan (10), Anhui (4) Beijing (2), Guangxi (3), Guizhou (1), Taiwan (1) and Hong Kong (5).

Web sources: Chinese CDC | WHO | WHO FAQ page | ECDC | Malaysian Ministry of Health |

ECDC assessment

The continued and increasing transmission of a novel reassortant avian influenza virus, capable of causing severe disease in humans in one of the most densely populated areas in the world, is a cause for concern due to the pandemic potential. However, the most likely scenario for China is that this remains a local (but widespread) zoonotic outbreak, in which the virus is transmitted

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

The recent fatal case of influenza A(H5N1) imported to Canada and the recent imported case of influenza A(H7N9) in Malaysia provides support to the notion that imported cases of influenza A(H7N9) might also be seen in Europe. However, the risk of the disease spreading to Europe via humans in the near future is still considered 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.

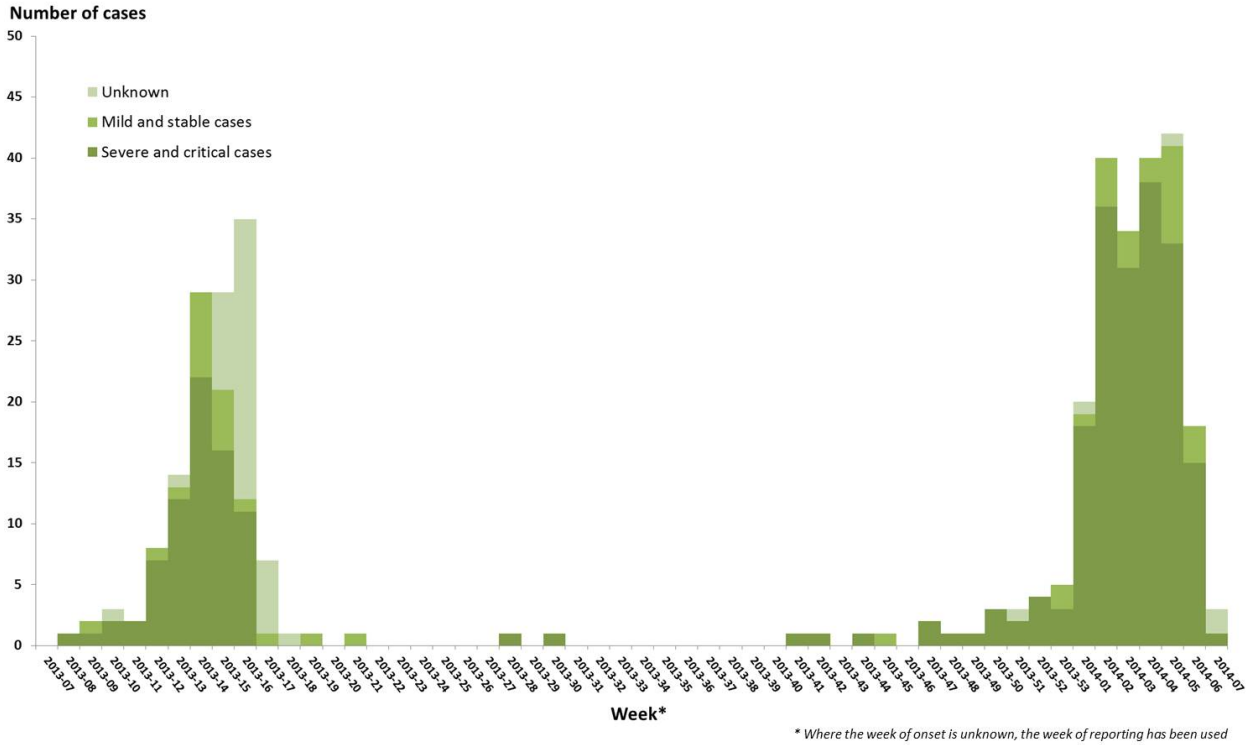
ECDC published an epidemiological update on 7 February 2014.

ECDC published an updated Rapid Risk Assessment on 28 January 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 week of onset and severity, week 14/2013 to week 07/2014, China (n=355)

Source: ECDC SRS



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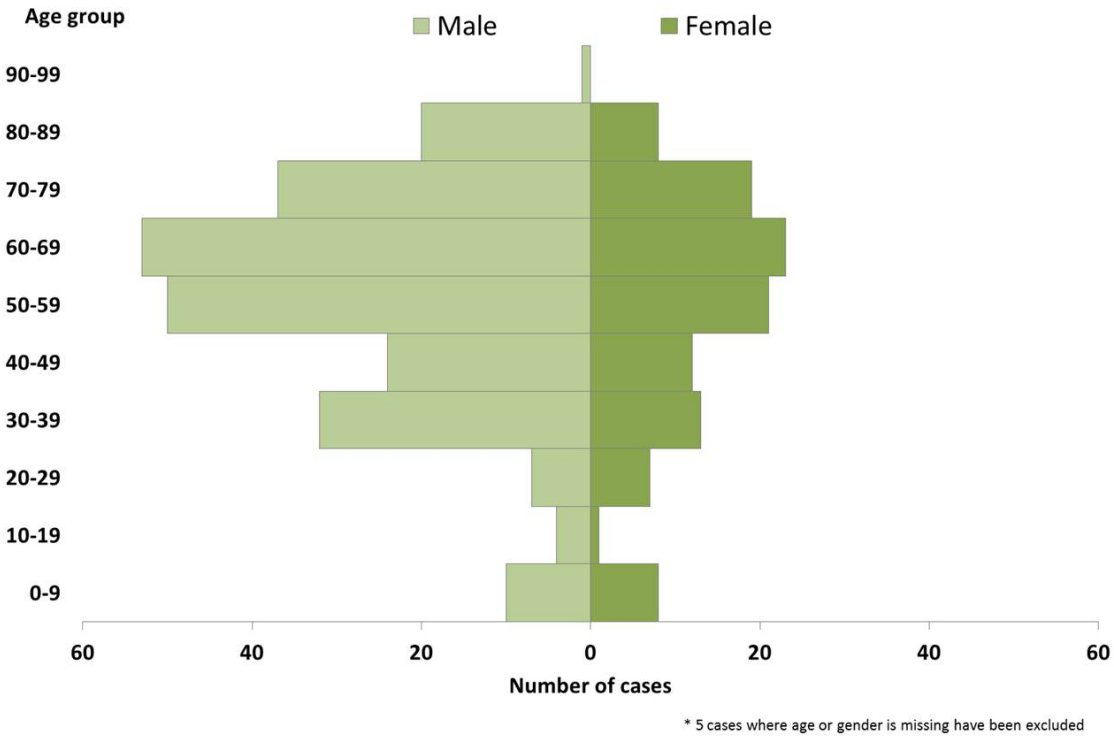
Distribution of confirmed A(H7N9) cases by age and gender, 31/03/2013 - 20/02/2014, China (n=355)

Source: ECDC SRS



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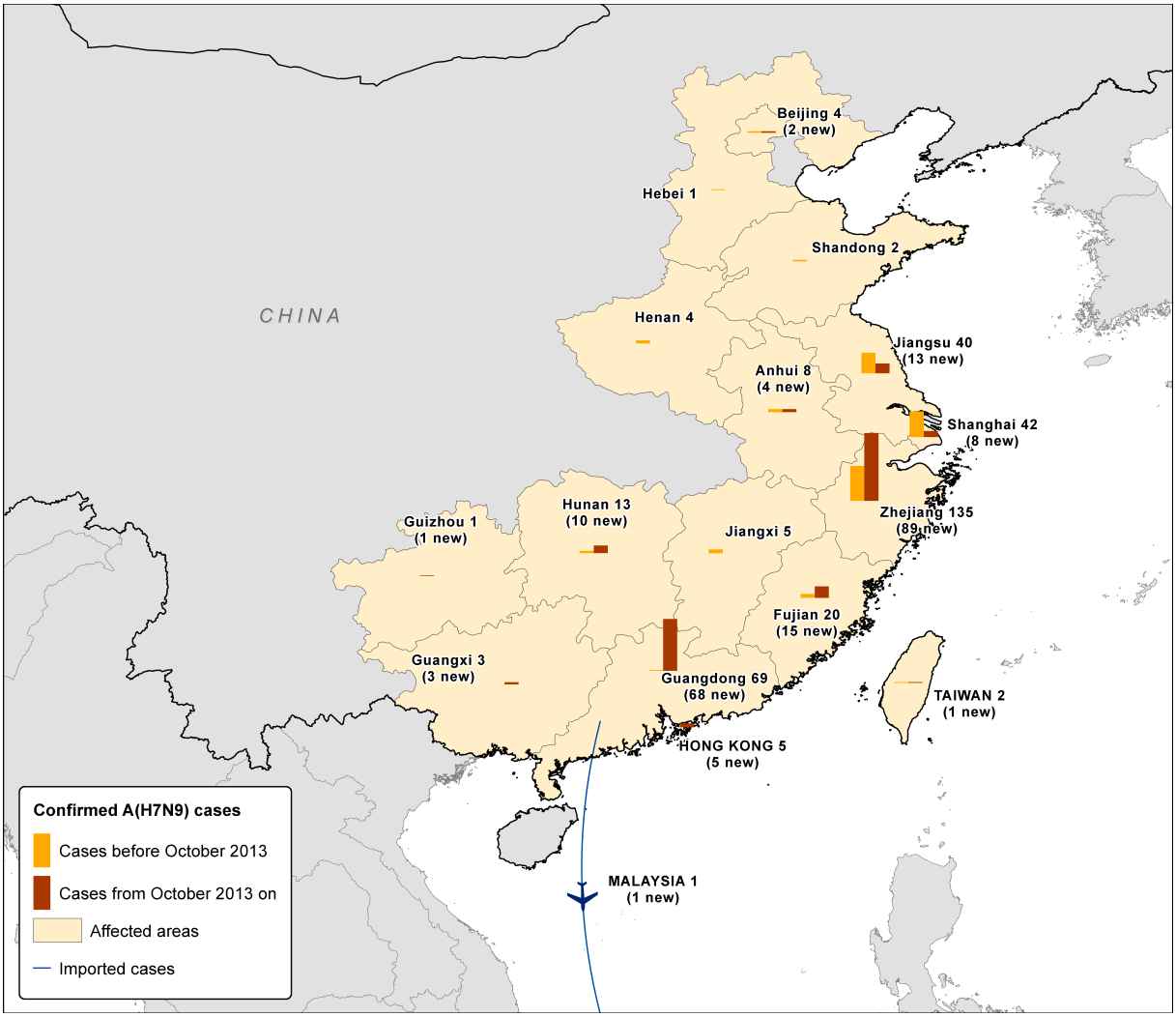
Distribution of confirmed A(H7N9) cases by place of reporting, week 14/2013 to 08/2014 (n=355)

Source: ECDC SRS



Chikungunya outbreak - The Caribbean, 2013

Opening date: 9 December 2013 Latest update: 14 February 2014

Epidemiological summary

Cases reported as of 21 February 2014:

- Virgin Islands (UK), 6 confirmed cases;
- Saint Martin (FR), 711 confirmed or probable cases;
- Sint Maarten (NL), 65 confirmed autochthonous cases;
- Martinique, 943 confirmed or probable cases;
- Saint Barthélemy, 114 confirmed or probable cases;
- Guadeloupe, 335 confirmed or probable cases;

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- Dominica, 1 confirmed case (imported) and 44 autochthonous cases;
- French Guyana, 7 confirmed cases, 5 imported and 2 autochthonous;
- Anguilla, five 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 (reported by media Link)

Web sources:

ECDC assessment

Epidemiological data indicate that the outbreak, that started in Saint Martin (FR), is expanding. An increasing number of cases has been observed from most of the affected areas. The vector is endemic in the regions, 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 two autochthonous cases in French Guyana 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

Zika virus infection outbreak - The Pacific - 2013-2014

Opening date: 9 January 2014 Latest update: 6 February 2014

Epidemiological summary

It is estimated that more than 29 000 cases have sought medical care with Zika-like symptoms in French Polynesia since the beginning of the outbreak in October 2013. Health authorities in the territory report a concurrent significant increase in neurological syndromes and autoimmune illnesses. There is a simultaneous dengue outbreak in the region. The cause of the

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complications and their possible links with ZIKAV or dengue virus infections are being investigated. No neurological complications have been reported to date in New Caledonia.

Public health control measures, including increased surveillance and the promotion of measures to avoid mosquito bites, have been implemented in both affected territories.

Web sources: ECDC fact sheet | Bureau de Veille Sanitaire| NaTHNac | DASS New Caledonia

ECDC assessment

This is the first documented outbreak of ZIKAV infection in French Polynesia and New Caledonia. ZIKAV infection is considered an emerging infectious disease with the potential to spread to new areas where the *Aedes* mosquito vector is present. There is a risk for the disease spreading further in the Pacific, and for sporadic imported cases in Europe from endemic areas. Vigilance must be enhanced towards imported cases of ZIKAV infection in the 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 travel medicine 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.

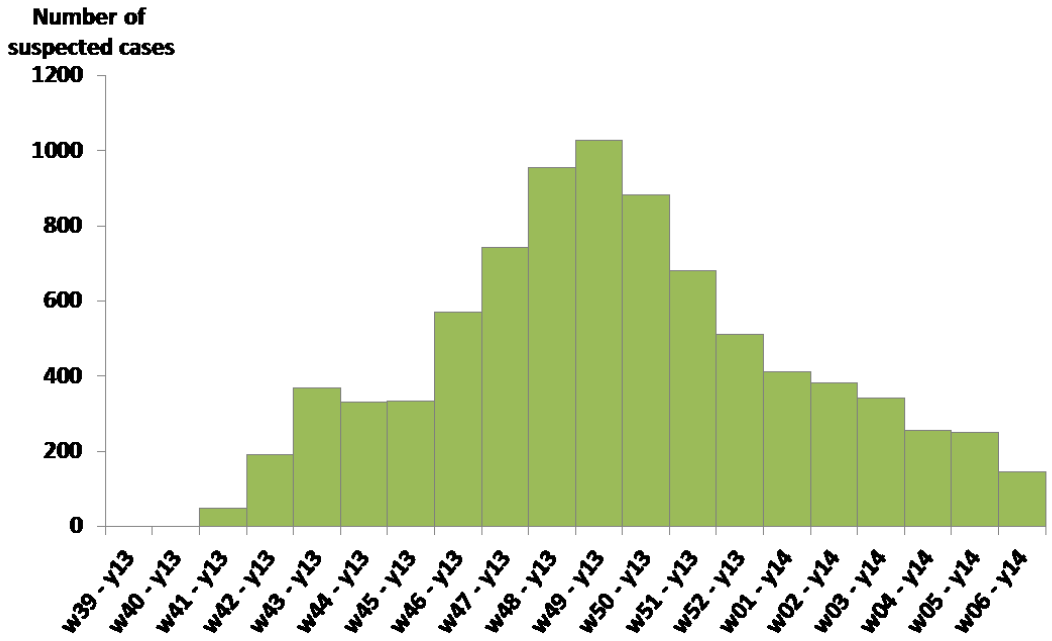
ZIKAV infection is a mild illness and has not been known to have neurological complications. The reported complications in French Polynesia are not confirmed to be caused by ZIKAV infections. However, there is a temporal association with the simultaneous outbreaks of ZIKAV and dengue. It is important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

Actions

ECDC has prepared a risk assessment on this event.

Distribution of suspected Zika infection cases notified by sentinel network by week of reporting, as of week 06/2014

Bureau de Veille Sanitaire, Polynesie Francaise



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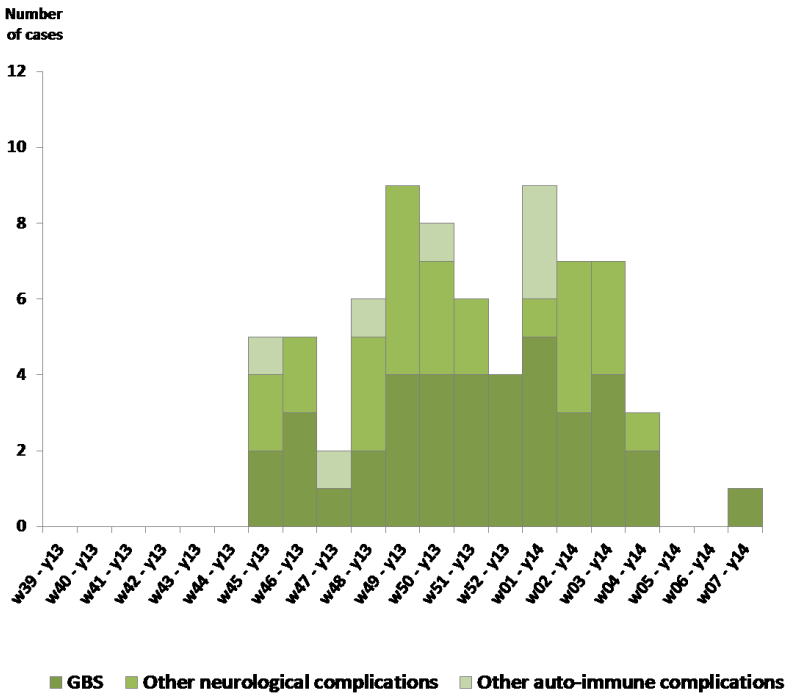
Distribution of suspected Zika infection cases presenting with neurological and auto-immunes complications notified by sentinel network by week of reporting and, as of week 07/2014

Bureau de Veille sanitaire, Polynesie francaise



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

Opening date: 24 September 2012 Latest update: 20 February 2014

Epidemiological summary

As of 21 February 2014, 186 laboratory-confirmed cases of MERS-CoV have been reported by local health authorities worldwide, including 81 deaths. The following countries have reported MERS-CoV cases:

Saudi Arabia: 147 cases / 61 deaths
United Arab Emirates: 13 cases / 5 deaths
Qatar: 7 cases / 4 deaths
Jordan: 3 cases / 3 deaths
Oman: 2 case / 2 deaths
Kuwait: 2 cases / 0 death
UK: 4 cases / 3 deaths
Germany: 2 cases / 1 death
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: in 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-two asymptomatic cases have been reported by Saudi Arabia and three by the United Arab Emirates.

The fourth meeting of the IHR Emergency Committee concerning MERS-CoV was held on 4 December 2013. The Committee concluded that there was no reason to change its previous advice to the Director-General. Their unanimous decision was that the conditions for a Public Health Emergency of International Concern (PHEIC) had not been met.

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Based on events since its last meeting, the Committee emphasised the need for:

- investigative studies, including international case-control, serological, environmental, and animal-human interface studies, to better understand risk factors and the epidemiology;
- further review and strengthening of tools, such as standardised case definitions and surveillance, and further emphasis on infection control and prevention.

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 |

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.

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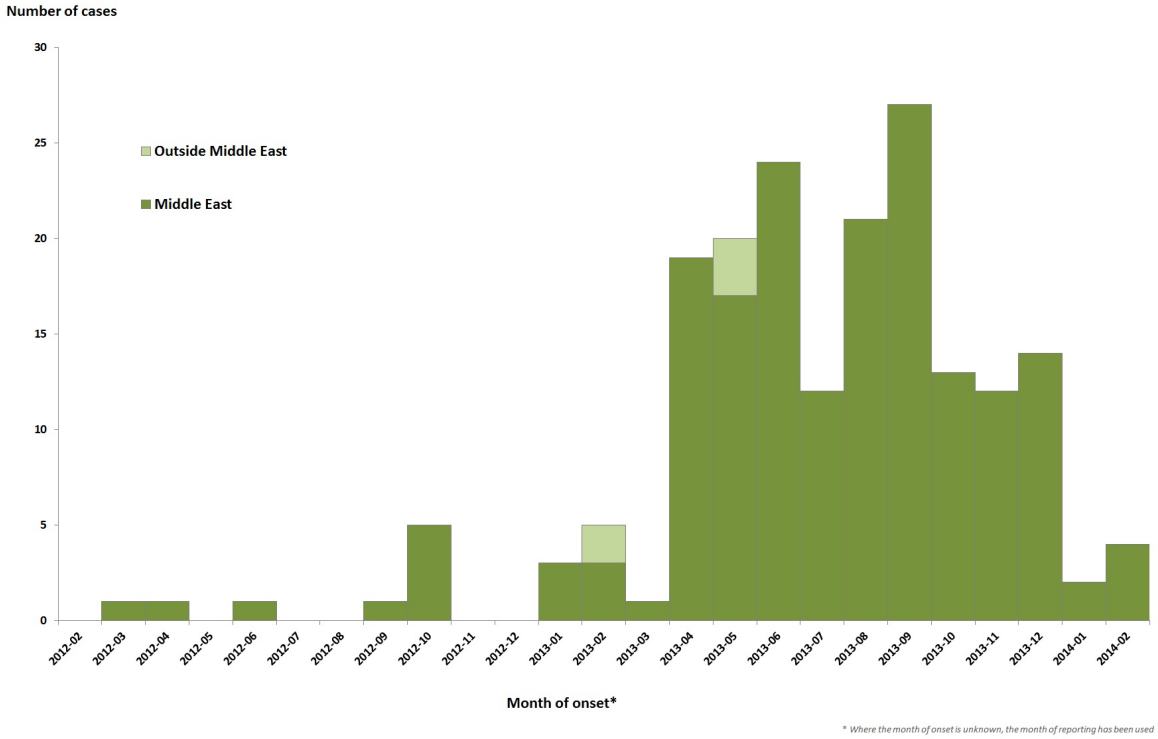
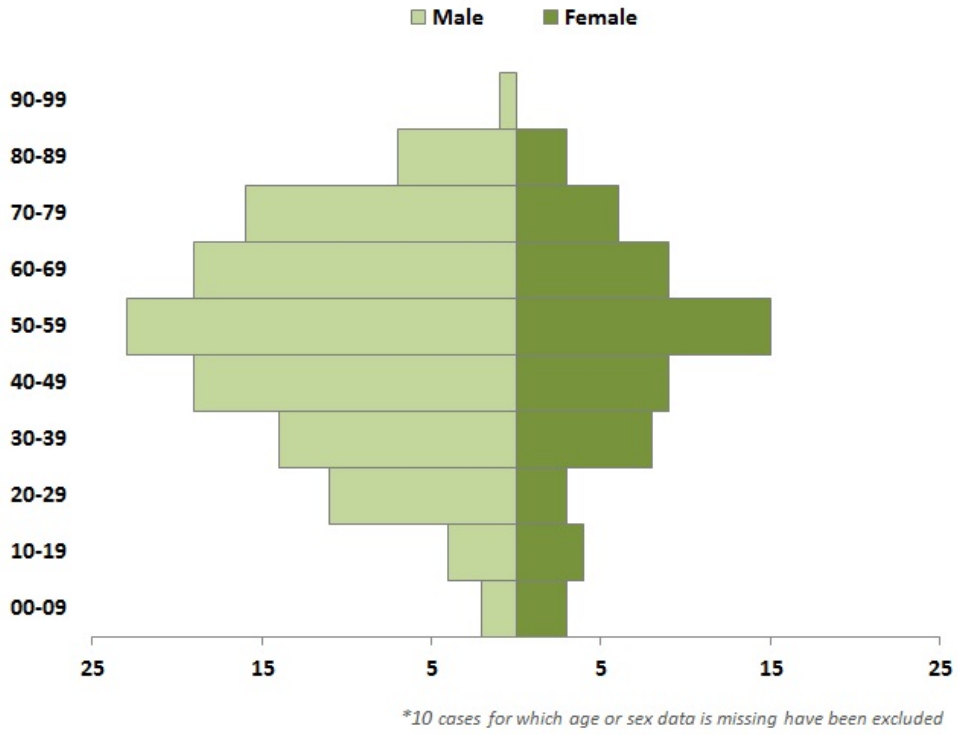
Distribution of confirmed cases of MERS-CoV by month of onset and place of probable infection, March 2012 - 21 February 2014 (n=186*)

Source:ECDC SRS



Distribution of confirmed cases of MERS-CoV by gender and age group, March 2012 - 21 February 2014 (n=176*)

Source: ECDC SRS



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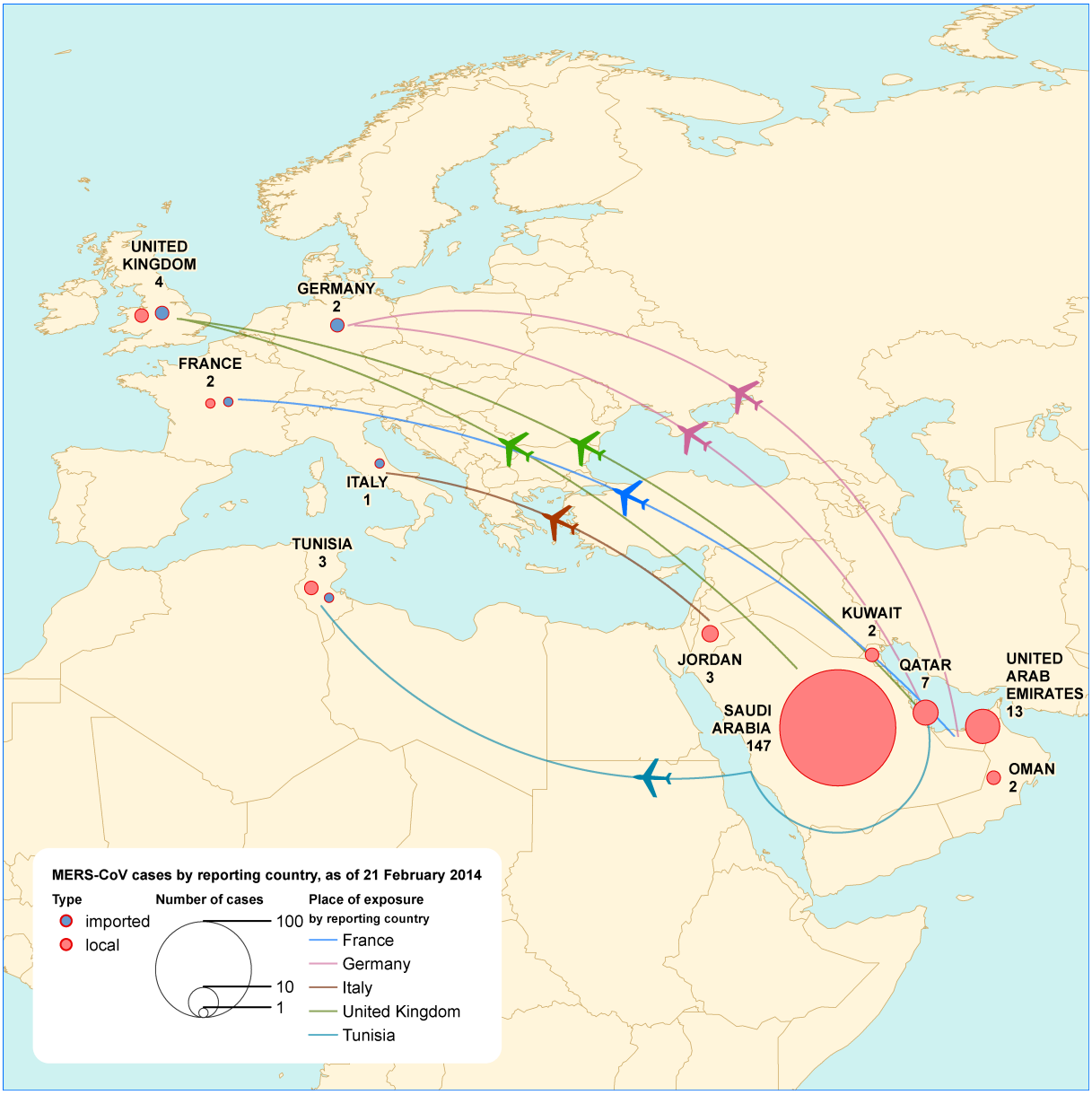
Distribution of confirmed MERS-CoV cases by place of reporting, March 2012 - 21 February 2014

Source: ECDC SRS



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 20 February 2014

Epidemiological summary

The seven new WPV1 cases this week were reported from Pakistan (6) and Afghanistan (1).

Somalia reported two new WPV1 cases this week with onset of paralysis for both cases in June 2013. These cases were reported late due to a laboratory processing backlog.

In Syria, one new WPV1 case was reported in the past week bringing the number of laboratory-confirmed WPV1 to 24. The most recent case had onset of paralysis on 17 December. Additionally, there are 13 cases confirmed from contested areas but not yet reflected in official figures. In the Middle East, a comprehensive outbreak response continues to be implemented across the region. The most recent supplementary immunisation activities (SIAs) in Syria were held in early January and early February. Initial reporting indicates that over three million children were reached during the January SIA, and coverage attaining more than 85% in all but three governorates. Coverage data from the February activity is currently being compiled and analysed.

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In 2014, 18 cases have been recorded so far, from Pakistan (15) and Afghanistan (3). Pakistan remains the only country with areas of uncontrolled transmission of polio, particularly in parts of Federally Administered Tribal Areas (FATA) and Khyber Pakhtunkhwa.

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.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 20 February 2014

Epidemiological summary

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

Asia: Up to 12 February, Malaysia and Singapore have been experiencing increased dengue activity and have reported a higher number of cases in 2014 compared to the same time period in 2013. The recent trend continued to decrease in Cambodia, Laos, the Philippines and Vietnam. Laos experienced a large number of cases in 2013, which peaked in August. However, since the beginning of 2014, dengue activity remains low and substantially lower than during the same time period in 2013. There has been an outbreak of dengue fever in Timor-Leste's capital, Dili. The number of cases increased in early January. A Government assessment identified the highest number of cases in Comoro, followed by Bairro Pite, Becora and Area Formosa sub-districts. To date, 197 cases have been reported, with two fatalities.

Caribbean: The dengue epidemic in Guadeloupe is slowing down, according to InVS.

Oceania: In French Polynesia, the number of new dengue infections continues to decrease. As of 14 February 2014, 1 691 have been reported with 55 cases reported so far in February, according to InVS. The recent trend in New Caledonia has been decreasing and the number of reported dengue cases remains lower in 2014 compared to the same time period in 2013. Fiji continues to experience strong dengue activity with 2 589 confirmed cases reported since the epidemic began in November 2013, according to media quoting local health authorities. The majority of cases have been reported in the Central Division, particularly in Suva. The Australian and British High Commissioners have issued travel advisories to their citizens travelling to Fiji, according to media. The recent trend has increased in Australia. The outbreak in Cairns has now reached more than 70 cases but the outbreak in Port Douglas has stabilised.

Americas: In Central America, Panama has recorded 2 443 confirmed cases of dengue fever, including six deaths, so far in 2014, according to the Ministry of Health. In South America, Peru is experiencing increased dengue activity across most states in early February, particularly in Loreto, San Martin, Ucayali and Madre de Dios.

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Africa: The Ministry of Health in Tanzania has issued a dengue alert after recording 21 cases in Dar es Salaam. Dengue fever was first detected in Dar es Salaam in June 2010 when 40 people were infected. Nineteen cases of dengue fever have been reported in Mayotte since early 2014, including five cases in the past two weeks. Of the five cases reported, three were imported from Comoros, one was locally acquired and one has an unknown origin. To date, only two locally acquired cases have been recorded and there is currently still no active virus circulation on the island, according to media quoting local health authorities. A media source reports a suspected case of dengue fever in Madagascar.

Websources: ECDC Dengue | Healthmap Dengue | MedISys | ProMed Asia-Pacific update| ProMed Americas update|WPRO update|

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 are being detected in European countries, highlighting the risk of locally acquired cases occurring in countries where the competent vectors are present.

Actions

ECDC has published a technical report on the climatic suitability for dengue transmission in continental Europe and guidance for invasive mosquitoes' surveillance.

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

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