



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 10, 2-8 March 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: 27 February 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 9/2014, of the 30 countries providing clinical data, two countries reported high-intensity influenza activity, ten reported medium intensity and 18 countries reported low-intensity influenza activity.

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 EU Member States.

→Update of the week

No indications of major ongoing outbreaks during February 2014 were detected through the media or available surveillance sources.

Measles outbreak on a cruise ship- Mediterranean Sea - 2014

Opening date: 1 March 2014

Latest update: 6 March 2014

On 27 February 2014, Italy reported that around forty crew members showed symptoms of exanthematous disease suspected to be measles aboard a cruise ship coming from Palma de Mallorca. On 26 February 2014, one crew member, a 27-year-old female, was confirmed for measles by PCR. This triggered an investigation and implementation of prevention and control measures as the cruise ship has several thousand passengers and crew on a weekly basis.

Non EU Threats

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 6 March 2014

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since March 2013, 380 cases have been reported, including 116 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, 245 cases have been reported, the majority in previously affected provinces or in patients who visited such provinces prior to illness.

→Update of the week

Between 28 February and 06 March 2014, 10 new cases of influenza A(H7N9) infection have been reported in China: three cases in Zheijang, three cases in Guangdong, two cases in Hunan, and one case in Jiangsu and Guangxi respectively.

Chikungunya outbreak - The Caribbean, 2013-2014

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 06 March 2014, there have been close to 8 000 suspected cases in the region. There have been three fatalities reported.

→ Update of the week

During the past week the number of new cases reported increased in some of the affected areas. No new affected areas or islands were reported. The islands affected 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.

Zika virus infection outbreak - The Pacific - 2013-2014

Opening date: 9 January 2014

Latest update: 6 March 2014

There is an ongoing outbreak of Zika virus (ZIKAV) infection in the Pacific affecting two French overseas territories (French Polynesia and New Caledonia) and Easter Island. 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

There is no new update since last week from **French Polynesia**. As of 21 February there were more than 8 500 suspected cases. There have been 74 cases of neurological and auto-immune complications of which 41 cases were Guillain-Barré syndrome. The outbreak is declining in the majority of the islands.

In **New Caledonia**, an additional 31 autochthonous cases of Zika virus (ZIKAV) infection were reported during the past week. As of 5 March 2014, 171 confirmed cases have been reported, of which 139 were autochthonous. There are no reports of neurological complications.

One case of ZIKAV was reported from **Easter Island**, a Chilean territory located in the Pacific Ocean, with a date of onset on 11 February 2014. Forty suspected cases meeting the case definition used for the surveillance of Zika virus infection in Chile have been identified through a retrospective investigation on Easter Island. This is the first report of locally acquired ZIKAV infection in the Americas.

On 25 February 2014, the <u>Norwegian Institute of Public Health (NIPH)</u> reported one confirmed case of Zika virus (ZIKAV) infection in a returning traveller from Tahiti.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 6 March 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.

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

Opening date: 24 September 2012

Latest update: 6 March 2014

Since April 2012, 189 laboratory-confirmed cases, including 82 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.

\rightarrow Update of the week

Since the previous CDTR, two new cases have been reported by local health authorities in Saudi Arabia. Both cases were reported to be male and suffering from chronic diseases. One of the cases has died.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks Latest update: 6 March 2014

Opening date: 8 September 2005

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. In addition, there were cases reported from five other countries in 2013: Cameroon, Ethiopia, Kenya, Somalia and Syria.

\rightarrow Update of the week

During the past week, six new cases of wild poliovirus type 1 (WPV1) were reported to WHO. Two of these cases had onset of symptoms in 2013.

II. Detailed reports

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

Opening date: 4 October 2013

Latest update: 27 February 2014

Epidemiological summary

For week 9/2014:

- Of the 30 countries providing clinical data, Greece and Finland reported high-intensity influenza activity, 10 reported medium intensity and 18 countries reported low-intensity influenza activity.
- Of the 1 152 sentinel specimens tested across 25 countries, 394 (34%) were positive for influenza virus, representing a decrease in the proportion of positive specimens for the fifth consecutive week.
- Seven countries reported 227 hospitalised laboratory-confirmed influenza cases of which 100, mainly infected by A (H1N1)pdm09 virus, were admitted to intensive care units (ICU).

Based on the various indicators for the influenza season, the status of the season varies considerably between EU/EEA Member States. Some countries are experiencing decreasing influenza activity while six countries still reported increasing and high influenza-like illness/acute respiratory illness (ILI/ARI) rates. Influenza A(H1)pdm09 and A(H3) viruses are co-circulating in outpatient settings; however, A(H1)pdm09 is predominant in hospitalised cases. Influenza B viruses have been rarely detected.

Web sources: <u>WISO</u> | <u>ECDC Seasonal influenza</u> | <u>US-CDC health advisory</u> | <u>CDC Seasonal influenza</u> | <u>FluWatch</u>, <u>Canada</u> | <u>FluView</u>, <u>USA</u>

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.

Pertussis -Multistate (EU) - Monitoring European outbreaks

Opening date: 11 July 2013

Latest update: 3 October 2013

Epidemiological summary

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.

Measles outbreak on a cruise ship- Mediterranean Sea - 2014

Opening date: 1 March 2014

Latest update: 6 March 2014

Epidemiological summary

On the evening of 27 February 2014, Italy reported that on board the Costa Pacifica – a cruise ship which had arrived from Palma de Mallorca, Spain, earlier that day and docked in the port of Civitavecchia, Italy – around forty crew members showed symptoms of exanthematous disease suspected to be measles. This was based on laboratory confirmation (PCR on urine samples) and the fact that the ship's medical staff reported on 26 February 2014 that one crew member, a 27-year-old female, had a respiratory illness and a skin rash when she disembarked at Genoa on 22 February.

The medical staff at the Rome–Fiumicino Office of USMAF (Uffici di Sanità Marittima, Aerea e di Frontiera: Maritime, Air and Frontier Health Office under the Italian Ministry of Health), which is also responsible for Civitavecchia, and experts on infectious diseases from the National Institute of Infectious Diseases (INMI) in Rome performed a thorough examination of the medical situation on board upon the ship's arrival.

On 28 February, Italy reported that nine persons were hospitalised at the National Institute of Infectious Diseases (INMI) in Rome, with symptoms suggestive of measles. Initial laboratory tests confirmed the diagnosis of measles in seven people (IgM antibodies). Two cases of probable measles infection in crew members were identified when the ship arrived in Savona on 1 March 2014. They and four close contacts were transferred to a resort in Orbetello, Italy, for isolation. Furthermore a case of chickenpox was later confirmed in a 4 year-old girl, who disembarked the ship with her parents in Savona on 1 March 2014.

The ship arrived in Marseille on 2 March 2014 where no clinical cases of measles or fever were reported among the passengers and crew on board.

On 3 March, the Costa Pacifica docked in the port of Barcelona, Spain. After an inspection by the Port Health Officers, who had assessed the sanitary situation on board the vessel, the Ship Sanitation Certificate was 'negative', i.e. no cases were detected on board the vessel.

On 5 March 2014, the ship called at Palma de Mallorca, Spain; the ship's authorities detected no new cases.

According to the information provided by the medical team on board and the medical log, no new suspected measles cases have been detected since 1 March 2014. The itinerary of the cruise ship involves the ports of Marseille, France; Barcelona, Spain; Palma de Mallorca, Spain; Civitavecchia, Italy; La Spenzia, Italy; and Savona, Italy.

ECDC assessment

Measles is a highly infectious disease and frequently results in widespread outbreaks, mainly among unvaccinated individuals. The incubation period is about 10 days, with approximately 7–18 days from exposure to onset of fever. The rash usually appears 14 days after exposure. Measles cases are considered infectious four days before and four days after the onset of the rash. Measles can be complicated by pneumonia, otitis media, laryngotracheo-bronchitis; and diarrhoea occurs commonly in young children.

The Costa Pacifica regularly sails on seven-day cruises in the western Mediterranean. The apparent high attack rate among the crew suggests a low vaccine coverage in this group. Measles is highly contagious. Given the relatively long incubation period and the contagiousness prior to disease symptoms, it is likely that new cases will appear among the crew, and further transmission may take place.

As one case of chicken-pox in a child was confirmed last week, additional cases can be expected in a weeks' time, given the incubation period.

Actions

ECDC has published a Rapid Risk Assessment on 05 March 2014.

ECDC is supporting the Italian national health authorities with contact tracing of the passengers and epidemiological follow-up by deploying two ECDC staff members to the site.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 6 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 06 March 2014, there have been 380 laboratory-confirmed cases: Zhejiang (138), Guangdong (83), Shanghai (42), Jiangsu (41), Fujian (20), Hunan (17), Anhui (9), Jiangsi (5), Henan (4), Beijing (4), Guangxi (4), Shandong (2), Hebei (1), Guizhou (1), Jilin (1), Hong Kong (5), Taiwan (2) and one case reported in Malaysia imported from China.

Most cases have developed severe respiratory disease. One hundred and sixteen patients have died (case-fatality ratio=31%).

Since October 2013, 245 cases were reported from Zhejiang (92), Guangdong (82), Fujian (15), Jiangsu (14), Hunan (14), Shanghai (8), Anhui (5) Beijing (2), Guangxi (4), Guizhou (1), Jilin (1), Taiwan (1) and Hong Kong (5). One exported case from China was diagnosed in Malaysia.

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 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

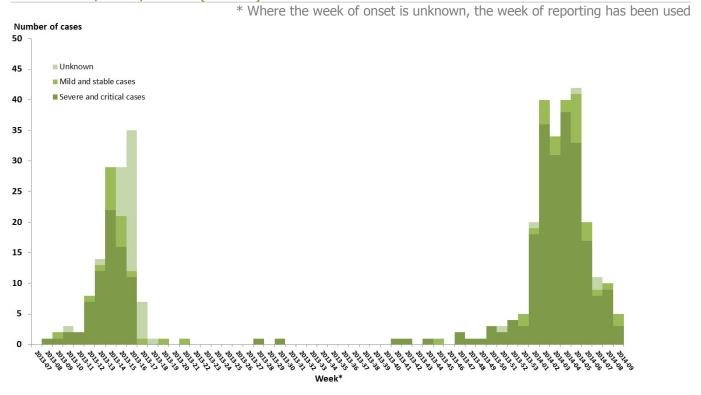
The Chinese health authorities continue to respond to this public health event with enhanced surveillance, epidemiological and laboratory investigation, including scientific research. ECDC is closely monitoring developments.

ECDC published an updated Rapid Risk Assessment on 26 February 2014.

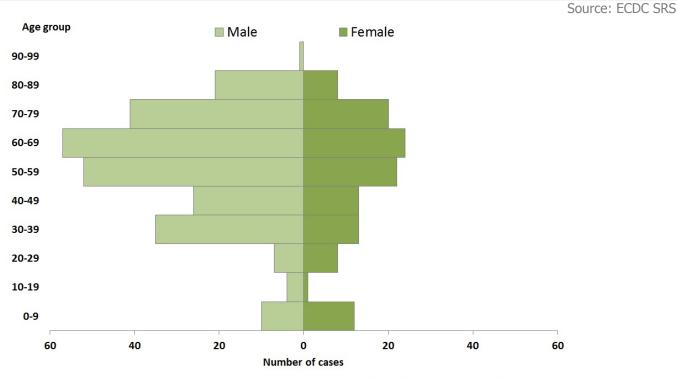
ECDC published an epidemiological update on 7 February 2014.

ECDC published a guidance document for <u>Supporting diagnostic preparedness for detection of avian influenza A(H7N9) viruses in</u> <u>Europe</u> for laboratories on 24 April 2013.

Distribution of confirmed A(H7N9) cases by week of onset and severity, week 14/2013 to week 09/2014, China (n=380)

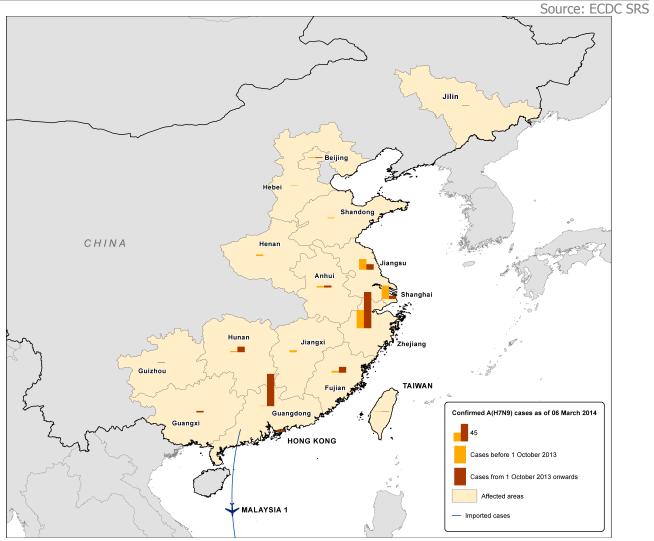


Distribution of confirmed A(H7N9) cases by age and gender, 31/03/2013 - 06/03/2014, China (n=375)



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

Distribution of confirmed A(H7N9) cases by place of reporting, week 14/2013 to 09/2014 (n=380)



Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013

Latest update: 14 February 2014

Epidemiological summary

Cases reported as of 06 March 2014:

- Virgin Islands (UK), 6 confirmed cases;
- Saint Martin (FR), 2 030 suspected and 765 confirmed or probable cases;
- Sint Maarten (NL), 115 confirmed autochthonous cases;
- Martinique, 3940 suspected and 1058 confirmed or probable cases;
- Saint Barthélemy, 380 suspected and 127 confirmed or probable cases;

- Guadeloupe, 1 460 suspected and 476 confirmed or probable cases;
- Dominica, 56 confirmed cases (imported) and 91 autochthonous cases;
- French Guiana, 17 confirmed cases, 10 of which are autochthonous 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 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 autochthonous cases in French Guyana are the first autochthonous chikungunya cases in mainland South America.

Actions

ECDC published a <u>rapid risk assessment</u> on 12 December 2013 and an <u>epidemiological update</u> on 10 January and on <u>7</u> <u>February</u> 2014.

The Caribbean islands



Opening date: 9 January 2014

Latest update: 6 March 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 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 the affected territories.

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

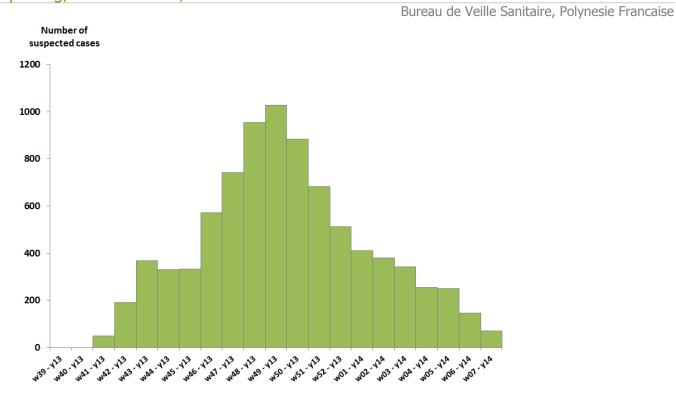
ECDC assessment

This is the first documented outbreak of ZIKAV infection in French Polynesia and New Caledonia and the first autochthonous case of ZIKAV infection in the Americas. ZIKAV infection is considered an emerging infectious disease with the potential to spread to new areas where the *Aedes* mosquito is present. There is a risk for the disease spreading further in the Pacific and to the countries of the Americas where the vector is present, 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 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.

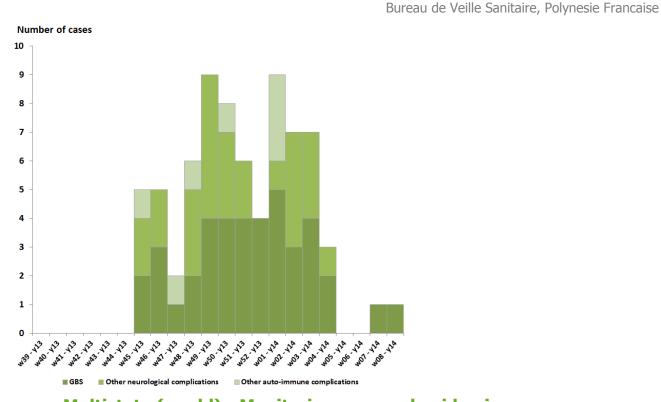
Actions

ECDC prepared a <u>risk assessment</u> on this event.



Distribution of suspected Zika infection cases notified by sentinel network by week of reporting, as of week 07/2014

Distribution of suspected Zika infection cases presenting with neurological and autoimmunes complications notified by sentinel network by week of reporting and, as of week 08/2014



Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 6 March 2014

Epidemiological summary

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

Asia: As of 26 February, Australia, Malaysia and Singapore have been experiencing a higher number of reported cases in 2014 compared to 2013 for the same time period. The recent trend increased in Lao PDR. However, reported cases remain lower in 2014 than 2013 for the same time period. In early 2014, dengue activity remains low in Lao PDR and substantially lower than during the same time period in 2013. The recent trend continued to decrease in Cambodia, Philippines and Vietnam.

Malaysia is experiencing dengue activity. In February 2014, dengue activity was almost four times higher compared to the same time period in 2013. Singapore is experiencing an increased level of dengue activity so far this year with 2 910 dengue cases reported between 1 January and 1 March compared to 2 220 during the same period in 2013.

Caribbean: Dengue activity seems to be declining in Guadeloupe with a fall in the number of probable and confirmed cases reported during the past few weeks. Despite this recent decline, the epidemic is still on-going and still affecting the mainland and nearby islands, according to <u>InVS</u>.

Oceania: A high level of dengue activity is being observed in Fiji, Vanuatu and Cook Islands. In Fiji, as of 16 February 2014, more than 6 659 suspected cases and 2 589 confirmed cases have been reported, including two deaths. The Central Division has recorded the highest number of suspected cases with 2 112 cases reported to date. Dengue virus serotype 3 (DENV-3) has been isolated. The number of cases is expected to continue to increase in the coming months. The m<u>edia</u> reports that the Ministry of Health in Samoa has issued a dengue health alert after detecting an imported case of dengue fever from Fiji.

In Vanuatu, as of 18 February 2014, 765 cases have been reported including 85 confirmed cases of dengue. The Ministry of Health is continuing to activate enhanced surveillance in Port Vila and the main centres throughout the country. With the support of WHO and other external partners, case management capacity and prevention intervention have been strengthened in Port Vila

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and Luganville. On the Cook Islands, as of 25 February 2014, 47 cases of dengue-like illness have been reported, of which 36 were positive following a rapid diagnosis test. All cases are from Rarotonga and no hospitalisations have been reported to date.

Australia continues to report dengue outbreaks in the Queensland area.

In New Caledonia, more than 70 dengue cases have been reported since September 2013 up to 20 February, with an increasing proportion of endemically transmitted disease reported. DENV-3 has been isolated in addition to DENV-1 (isolated in one imported case). Arboviral surveillance and public health response measures have been reviewed and strengthened.

In French Polynesia, the dengue situation seems to be improving with a decline in cases reported each week after reporting an increasing level of dengue activity since mid-July 2013. As of 21 February 2014, the number of cases is 1 724. DENV-3, to which a large proportion of the population of the Pacific Islands are likely to be susceptible has recently been isolated in the region and is co-circulating with DENV-1. However, a large proportion of the Pacific Island communities are likely to be immune to DENV-1 as it has been circulating in the region for many years.

Americas: In Central America, the Costa Rican Ministry of Health reports that between 1 January and 15 February, 1 262 dengue cases have been recorded, a decrease of nearly 65% compared with the same time period in 2013. In Honduras, 1 174 dengue cases were notified in week 8 (16-22 February), a 15% increase compared to the previous week. San Pedro Sula and Tegucigalpa are the cities with the largest number of reported cases. In South America, Brazil has reported increased dengue activity during the past week, particularly in the states of Mato Grosso, Rio de Janeiro and Sao Paulo.

Africa: Between 10 and 23 February 2014, six new locally-acquired cases occurred in Mayotte, signalling an increase in dengue activity after a decline at the end of January. Since 1 January, 26 cases of dengue fever have been detected in Mayotte, of which eight were locally-acquired cases, 17 have been imported and one case has an unknown origin. According to <u>InVS</u>, the occurrence of six locally-acquired cases in the past two weeks with no epidemiological link, suggests that there is now active circulation of the virus on the island.

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 <u>report</u> on the climatic suitability for dengue transmission in continental Europe and <u>guidance for</u> <u>invasive mosquitoes' surveillance</u>.

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

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

Opening date: 24 September 2012

Latest update: 6 March 2014

Epidemiological summary

As of 06 March 2014, 189 laboratory-confirmed cases of MERS-CoV have been reported by local health authorities worldwide, including 82 deaths. The following countries have reported MERS-CoV cases:

Saudi Arabia: 150 cases / 62 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: 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.

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: <u>ECDC's latest rapid risk assessment</u> <u>ECDC novel coronavirus webpage</u> | <u>WHO</u> | <u>WHO MERS updates</u> | <u>WHO travel</u> <u>health update</u> | <u>WHO Euro MERS updates</u> | <u>CDC MERS</u> | <u>Saudi Arabia MoH</u> | <u>Eurosurveillance article 26 September</u> | <u>Oman MoH</u> |

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

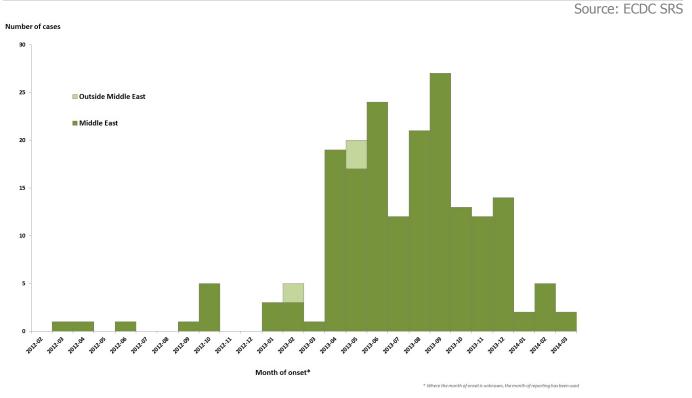
ECDC's latest epidemiological update was published on 25 November 2013.

The latest update of a rapid risk assessment was published on 7 November 2013.

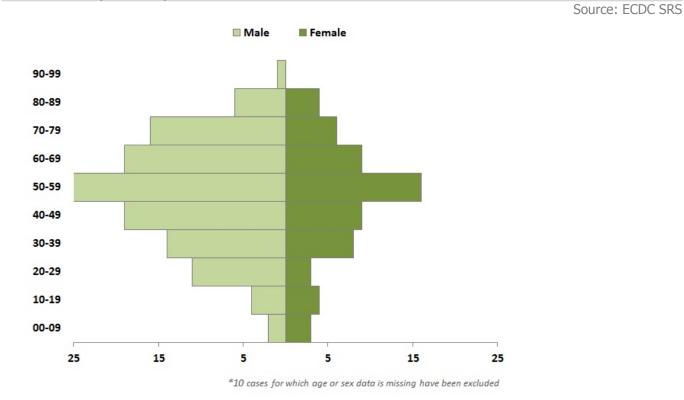
The first 133 cases are described in Eurosurveillance published on 26 September 2013.

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 - 06 March 2014 (n=189*)



Distribution of confirmed cases of MERS-CoV by gender and age group, March 2012 - 06 March 2014 ($n=179^*$)



Source: ECDC SRS UNITED KINGDOM GERMANY FRANCE ITAL TUNISIA 3 KUWAIT JORDAN UNITED QATAR ARAB EMIRATES SAUDI 13 ARABIA 150 OMAN MERS-CoV cases by reporting country, as of 06 March 2014 Number of cases Place of exposure Туре imported 100 by reporting country France local Germany 10 Italy - United Kinadom Tunisia

Distribution of confirmed MERS-CoV cases by place of reporting, March 2012 - 06 March 2014

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 6 March 2014

Epidemiological summary

Four new cases of WPV1 with onset of disease in 2014 were reported during last week from Nigeria (1) and Pakistan (3). Somalia and Syria reported one WPV1 case each with onset of symptoms in 2013. In Syria there are now 25 laboratory-confirmed WPV1 cases. Additionally, there are 13 cases confirmed from contested areas but not yet reflected in official figures.

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; in 2013, 169 positive samples were collected).

The world's leading Islamic scholars adopted the strong "Jeddah Declaration" and a focused six-month Plan of Action to address critical challenges facing polio eradication efforts in the few remaining polio-endemic parts of the Islamic world: a ban on vaccinations and lack of access to children in some areas, deadly attacks on health workers, and misconceptions by the

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community about mass vaccination campaigns.

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.