



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: 28 November 2013

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

→ Update of the week

During week 49/2013, all 29 reporting countries experienced low intensity influenza activity.

Non EU Threats

New! Chikungunya -Saint Martin- 2013 autochthonous cases

Opening date: 9 December 2013

Latest update: 11 December 2013

On 6 December 2013, France reported two laboratory confirmed cases of chikungunya of autochthonous transmission in the French part of the Caribbean island of Saint Martin. These two cases were confirmed during an active case search that was implemented following the notification on 18 November 2013 of a cluster of five cases of arthralgia and fever, for which a diagnosis of dengue was excluded. On 10 December, WHO reported two confirmed, four probable and twenty suspected cases of chikungunya infection on the island of Saint Martin. This is the first documented autochthonous transmission of chikungunya virus in the Americas, on the Caribbean island Saint Martin.

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

Opening date: 24 September 2012

Latest update: 12 December 2013

Since April 2012, 165 laboratory-confirmed cases, including 71 deaths, of acute respiratory disease caused by Middle East respiratory syndrome coronavirus (MERS-CoV), have been reported by national health authorities. MERS-CoV is genetically distinct from the coronavirus that caused the SARS outbreak. To date, all cases have either occurred in the Middle East, have had direct links to a primary case infected in the Middle East, or have returned from the Middle East.

→ Update of the week

Between 5 and 13 December 2013, two new cases were reported from Saudi Arabia. The first case is a 26 years old asymptomatic health care worker from Riyadh. The second case is 51 years old from Jawf region with several comorbidities.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 11 December 2013

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, the outbreak has affected 13 Chinese provinces and Taiwan causing 143 cases of human infection, including 45 deaths. Since the end of May 2013, only sporadic cases have been reported. The virus reservoir and the mode of transmission to humans has not been determined. Zoonotic transmission from poultry to humans is thought to be the most likely scenario. There has been no epidemiological link between most of the cases, and sustained person-to-person transmission has not been observed.

→Update of the week

During the past week, two new cases have been reported in China: one in Hong Kong and one in Zhejiang province.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 12 December 2013

Polio, a crippling and potentially fatal vaccine-preventable disease affecting mainly children under the age of five, is close to being eradicated from the world after a significant global public health investment and effort. However, outbreaks, such as the one currently affecting the Horn of Africa and a recently reported cluster of poliomyelitis cases in Syria pose serious challenges to attaining this goal.

→Update of the week

During the past week four new wild polio virus type 1 (WPV1) cases were reported to the World Health Organization from Pakistan (4).

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 12 December 2013

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

So far in 2013, no autochthonous dengue cases have been reported in European countries apart from sporadic cases in Madeira in January.

II. Detailed reports

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

Opening date: 4 October 2013

Latest update: 28 November 2013

Epidemiological summary

During week 49/2013, all 29 reporting countries recorded low intensity influenza activity. Of 428 sentinel specimens tested across 24 countries, 3% were positive for influenza A virus. Eight hospitalised laboratory-confirmed influenza A cases were reported by the UK.

Web sources: [WISO](#) | [ECDC Seasonal influenza](#) | [CDC Seasonal influenza](#)

ECDC assessment

Since the start of the 2013-2014 influenza surveillance period, week 40/2013, there has been no evidence of sustained influenza activity in Europe. The percentage of sentinel specimens testing positive for influenza is increasing in some countries, possibly indicating the start of the epidemic period in those countries.

Actions

ECDC will be producing the weekly influenza surveillance overview on a weekly basis.

New! Chikungunya -Saint Martin- 2013 autochthonous cases

Opening date: 9 December 2013

Latest update: 11 December 2013

Epidemiological summary

On 6 December, France confirmed two cases of autochthonous chikungunya in the French part of the Caribbean island of Saint Martin. These two cases were detected through active case finding, implemented following the notification on 18 November 2013 of a cluster of five cases of arthralgia and fever, for which a diagnosis of dengue was excluded (negative NS1 and IgM). The onset of symptoms of the five notified cases occurred between 12 October and 15 November 2013. They were all residents of the Oyster Pond neighbourhood, located on the border with the Dutch part of the island. On 10 December, WHO reported two confirmed, four probable and 20 suspected cases of chikungunya infection on the island of Saint Martin.

Web sources: [WHO DON](#)

ECDC assessment

Saint Martin is a small island in the Caribbean of around 71 000 inhabitants, divided between France and the Netherlands. Given the size of the island, it cannot be excluded that a similar epidemiological situation might be on-going on the Dutch part of the island.

Saint Martin is a popular travel destination for EU residents and increased travel can be expected during the Christmas holidays. Therefore, travel related cases of chikungunya, as well as of dengue, returning from the island Saint Martin can be expected. ECDC detailed risk assessment can be found [here](#).

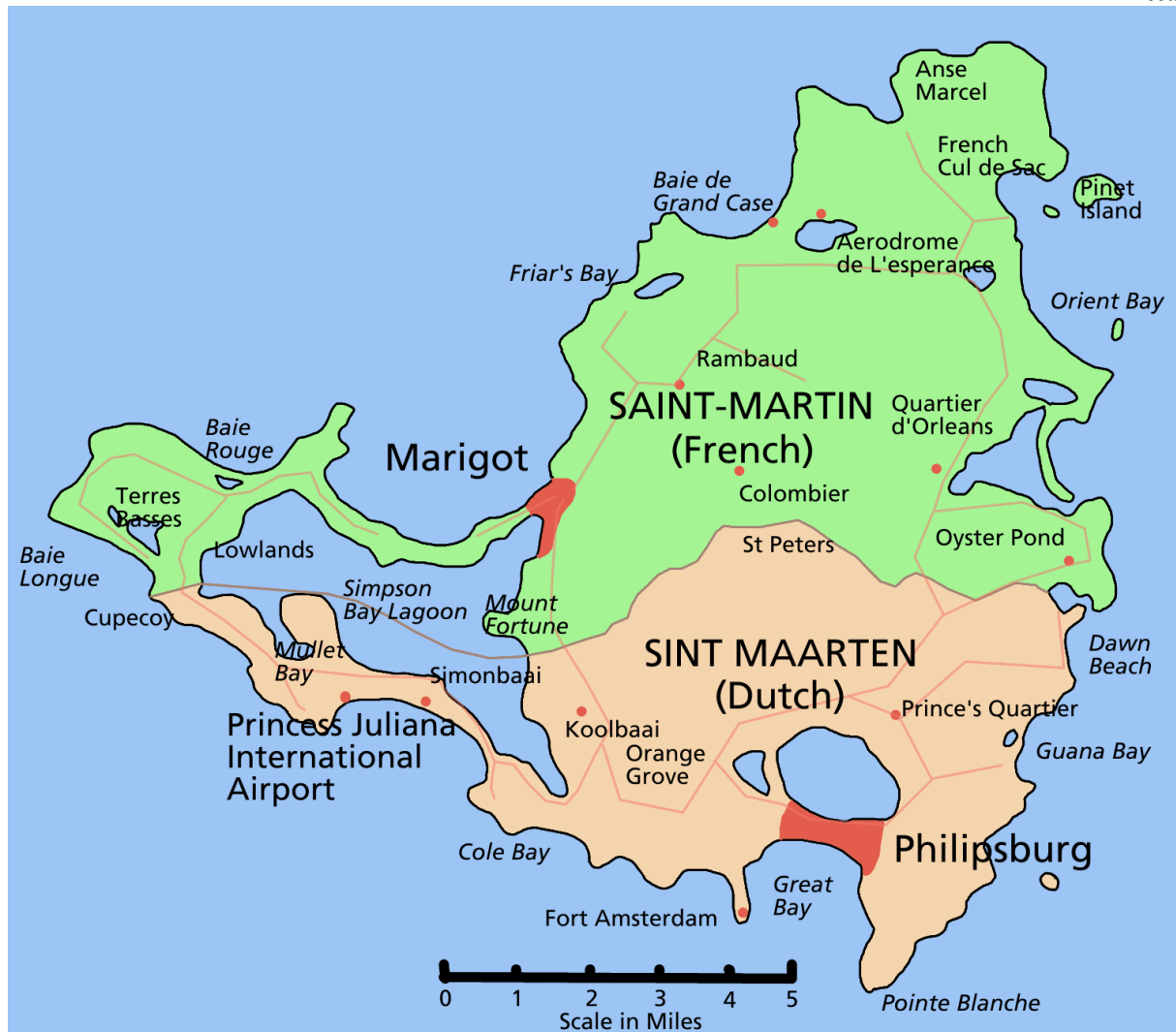
Local authorities on Saint Martin Island are working together in close coordination with public health authorities in France and the Netherlands to implement actions in response to this outbreak. These activities include epidemiological surveillance and vector control activities in the affected area. The measures will rapidly be extended to the entire island, including around airports, schools, hospitals. Information is being disseminated to health professionals to the public and to the travellers in the airports. Blood safety procedures are already in place due to the on-going outbreak of dengue in Saint Martin.

Actions

ECDC published a [rapid risk assessment](#) on 12 December 2013.

Island of Saint Martin

Wikipedia



Saint Martin in its region

Wikipedia



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

Opening date: 24 September 2012

Latest update: 12 December 2013

Epidemiological summary

As of 13 December 2013, 165 laboratory-confirmed cases of MERS-CoV have been reported by local health authorities worldwide, including 71 deaths.

Saudi Arabia has reported 132 symptomatic and asymptomatic cases including 55 deaths; Jordan two fatal cases; United Arab Emirates nine cases, including three deaths; Qatar seven cases, including five deaths; Oman one fatal case and Kuwait two cases.

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 United Kingdom, there has been local transmission among patients who have not been to the Middle East but have been in close contact with laboratory-confirmed or probable cases. Person-to-person transmission has occurred both among close contacts and in healthcare facilities. However, with the exception of a possible nosocomial outbreak in Al-Ahsa, Saudi Arabia, secondary transmission has been limited. Sixteen asymptomatic cases have been reported by Saudi Arabia and two

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by the United Arab Emirates (UAE). Seven of these cases were healthcare workers.

The 4th meeting of the IHR Emergency Committee concerning MERS-CoV was held on 4 December 2013. The Committee concluded that it saw 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) have not at present 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 such 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](#) | [Spain MoH](#)

ECDC assessment

The continued detection of MERS-CoV cases in the Middle East indicates that there is an on-going source of infection present in the region. The source of infection and the mode of transmission have not been identified. There is therefore a continued risk of cases occurring in Europe associated with travel to the area. Surveillance for cases is essential.

The risk of secondary transmission in the EU remains low and could be reduced further through screening for exposure among patients presenting with respiratory symptoms and their contacts, and strict implementation of infection prevention and control measures for patients under investigation.

Actions

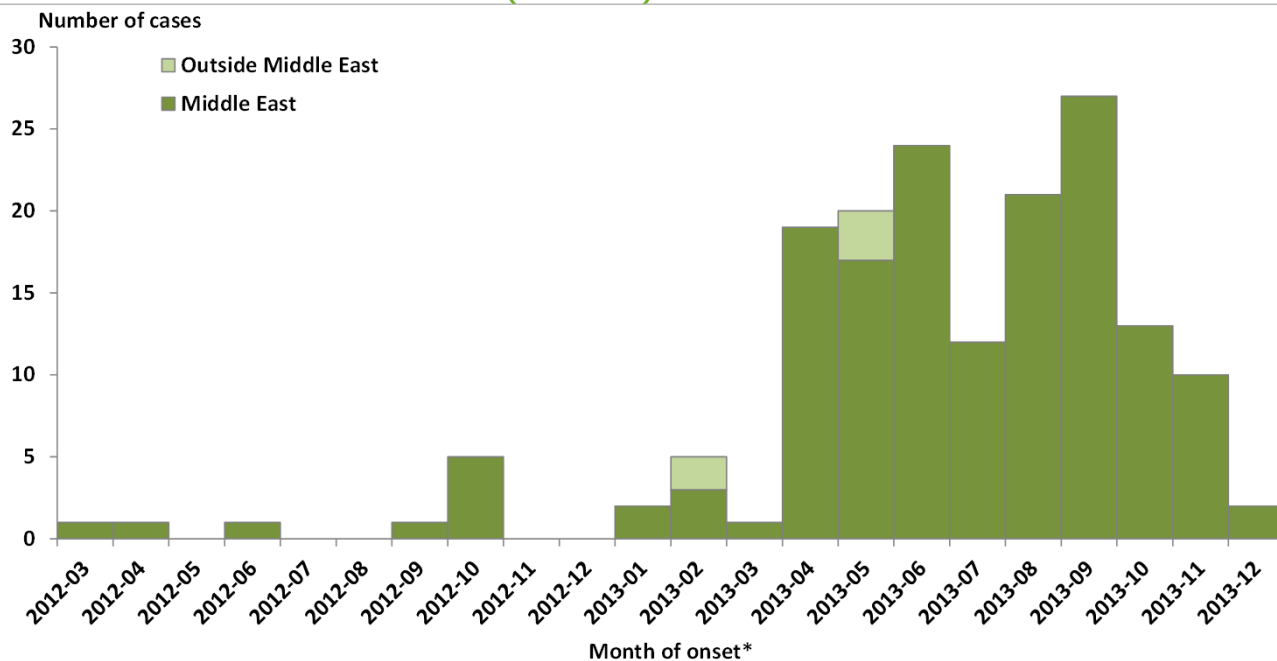
ECDC's latest [epidemiological update](#) was published on 25 November 2013.

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* and place of probable infection, March 2012 - 13 December 2013 (N=165*)



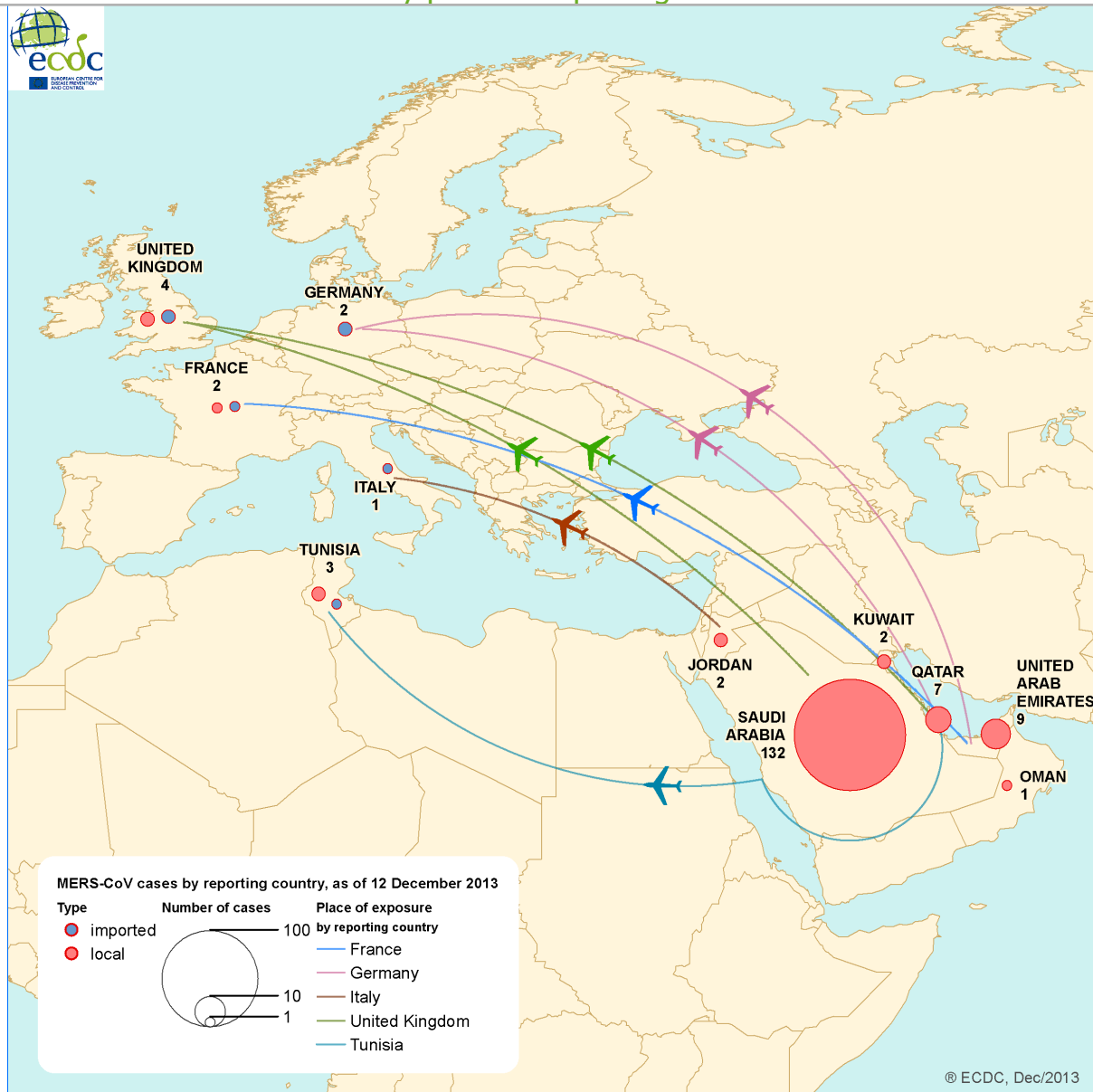
* Where the month of onset is unknown the month of reporting has been used.
 ** Data for December 2013 incomplete

Distribution of confirmed cases of MERS-CoV by age and gender, March 2012 - 13 December 2013 (n=158*)



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

Distribution of MERS-CoV cases by place of reporting as of 13 December 2013



Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 11 December 2013

Epidemiological summary

In March 2013, Chinese authorities announced the identification of a novel reassortant A(H7N9) influenza virus in patients in eastern China. Since then, 143 cases of human infection with influenza A(H7N9) have been reported from: Zhejiang (51 cases), Shanghai (34), Jiangsu (27), Henan (4), Anhui (4), Beijing (2), Shandong (2), Fujian (5), Hunan (3), Jiangxi (5), Hebei (1), Guangdong (2), Hong Kong (2) and Taiwan (1). In addition, the virus has been detected in one asymptomatic case in Beijing. Most cases have developed severe respiratory disease. Forty-five patients have died (case-fatality ratio=31%). The median age is 58 years, ranging from four to 91 years; 41 of 143 patients are female, with gender being unknown in five cases.

Eight cases have been reported in China since October 2013. Six of these cases have occurred in previously affected provinces (Zhejiang and Guangdong) and two cases have been reported in Hong Kong.

Web sources: [Chinese CDC](#) | [WHO](#) | [WHO FAQ page](#) | [OIE](#) | [Chinese MOA](#) | [Hong Kong NHFPC](#) | [Hong Kong government news release](#) | [WHO DON](#) |

ECDC assessment

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

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

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

Actions

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

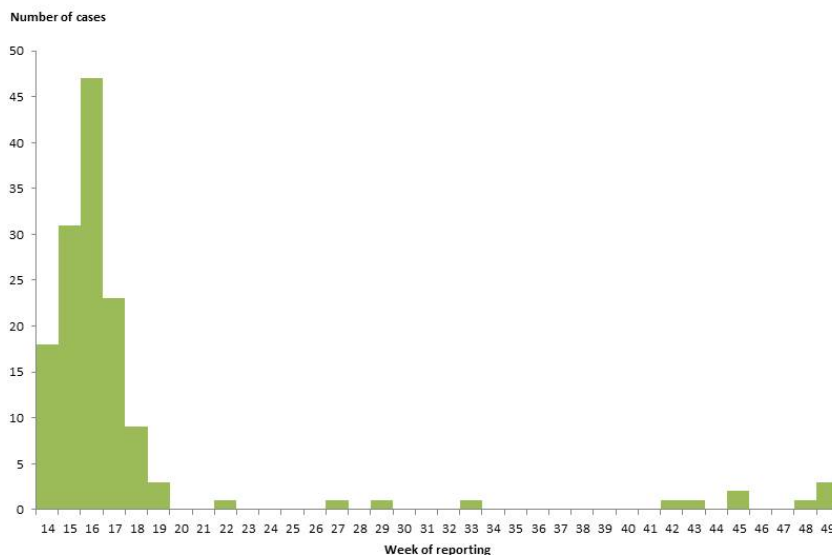
ECDC is closely monitoring developments.

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

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

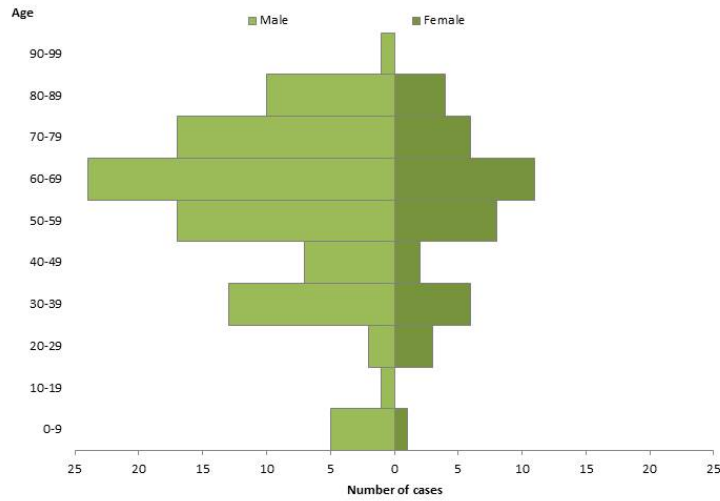
Number of A(H7N9) cases by the date of reporting as of 12 December 2013 (n=143)

ECDC

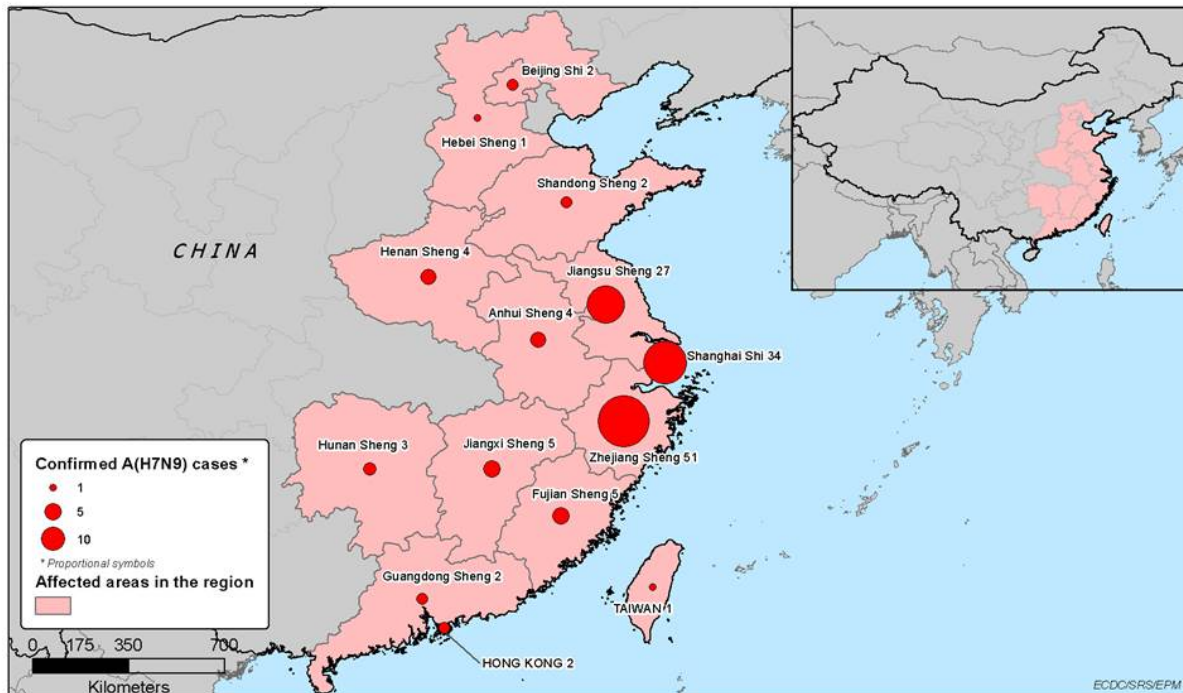


Number of A(H7N9) cases by gender and age distribution as of 12 December 2013 (n=138)

ECDC



Reported cumulative number of confirmed cases of novel influenza A(H7N9) by province in China, as of 12 December 2013, 15.00 CEST



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 12 December 2013

Epidemiological summary

Worldwide

As of 12 December 2013, 359 cases of poliomyelitis have been notified to WHO compared with 223 for the same period in 2012. Eight countries have recorded cases in 2013: Somalia (183), Nigeria (50), Pakistan (74), Kenya (14), Afghanistan (11), Ethiopia (6), Syria (17) and Cameroon (4).

Israel

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

Syria

Following reports of a cluster of 22 acute flaccid paralysis (AFP) cases on 17 October 2013 in Syria, wild poliovirus type 1 (WPV1) has been isolated from 17 of the cases. Genetic sequencing indicates that the isolated viruses are most closely linked to the virus detected in environmental samples in Egypt in December 2012 (which in turn has been linked to wild poliovirus circulating in

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Pakistan). The strain is also closely related to the wild poliovirus strains that have been detected in environmental samples in Israel and the occupied Palestinian territory since February 2013. Wild poliovirus was last reported in Syria in 1999. A comprehensive outbreak response is being implemented across the region.

The joint WHO/UNICEF [draft strategic plan](#) for outbreak response in the Middle East was published on 26 November 2013.

Web sources: [Polio Eradication: weekly update](#) | [MedISys Poliomyelitis](#) | [ECDC Poliomyelitis factsheet](#) | [WHO mission to Israel](#) | [Somalia Humanitarian Bulletin](#)

ECDC assessment

Europe is declared polio free. The last polio cases in the EU occurred in 2001 in Bulgaria with a WPV that originated from India. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when WPV1 imported from Pakistan caused an outbreak of 460 reported cases. The last indigenous WPV case in Europe was in Turkey in 1998. An outbreak in the Netherlands in a religious community opposed to vaccinations caused two deaths and 71 cases of paralysis in 1992.

The recent detection of WPV in environmental samples in Israel and the confirmed cases in Syria highlight the risk of re-importation in Europe. Recommendations are provided in the recent 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 on polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identify events that increase the risk of re-introduction of wild poliovirus into the EU.

Due to the current situation of polio, the threat will be followed weekly.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 12 December 2013

Epidemiological summary

Europe: An isolated case of autochthonous dengue (local transmission) was diagnosed in the department of Bouches du Rhône in France on 21 October 2013. Active case finding in the area has not identified any further cases to date. The risk of detecting further autochthonous cases is minimal due to the low uptake of the mosquito *Aedes albopictus* (Asian tiger mosquito) in the area and the arrival of the winter period, according to Institut de Veille Sanitaire ([InVS](#)).

Asia: As of 2 December, the authorities in Delhi, India have recorded 5 387 cases and six deaths. In Pakistan, Sindh province continues to report dengue activity and the most affected municipality is Karachi with 4 587 cases and 25 deaths. The recent trend has increased in the Punjab province.

Caribbean: Despite a recent declining trend over the past four weeks on the French Caribbean island Saint Martin, the dengue epidemic is still ongoing and 3 095 dengue cases have been recorded since the beginning of the year. InVS reported a second dengue related death in Saint Martin this week. The dengue outbreak on Martinique continues despite a recent downward trend. DENV-2 remains the predominant serotype. In Saint-Barthélemy, the number of new dengue infections has decreased but the outbreak is still active with 966 cases and one death reported since March 2013. The recent trend is increasing in Saint Lucia and the latest update from the US Centers for Disease Control and Prevention ([US CDC](#)) reports that Puerto Rico has recorded nearly 16 000 suspected dengue cases (up to week 41) so far this year.

Americas: High dengue activity is reported across most states of Mexico. In Central America, the recent trend has decreased in Honduras and as of 5 December 2013, 37 666 cases and 27 deaths have been reported nationally, according to the Honduras Ministry of Health. In South America, Venezuela recorded 52 587 cases during the first 11 months of the year and 545 (1%) of these were severe dengue cases. According to a scientific opinion article published on the [Nature website](#), the risk of dengue at venues in Brazil during the 2014 FIFA football World Cup may reach peak transmission season in Fortaleza, Natal, and Salvador states. In French Guiana, the dengue epidemic in Kourou is considered to be over, according to [InVS](#).

Oceania: French Polynesia continues to report dengue activity with Tahiti and Morrea the most affected areas.

Websources: [ECDC Dengue](#) | [Healthmap Dengue](#) | [MedISys](#) | [ProMED Asia update](#) | [ProMED Americas update](#) |

ECDC assessment

South-East Asia, Central America and the Caribbean appear to be experiencing a severe season this year.

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 onwards, ECDC has been monitoring dengue on a bi-weekly basis.

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