

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: 23 January 2014

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 the third week of 2014, widespread geographic activity was observed in three countries as well as a growing number of countries with increasing proportion of specimens testing positive for influenza virus.

#### 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 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

No new large outbreaks have been reported in the EU since the previous measles report one month ago. The measles epidemic in the Netherlands is still ongoing with more than 2 500 cases reported as of 21 January 2014.

## 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.

Poland has reported 38 577 cases of rubella (100.11 cases per 100,000 population) nationwide from 1 January to 31 December 2013. At the outbreak peak, there were 10 856 rubella cases reported in the month of April 2013. Over the last three months of 2013, the number of monthly cases reported has dropped from 607 to 479.

## Non EU Threats

### Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 16 January 2014

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, the outbreak has affected 15 Chinese provinces, causing 225 cases of human infection, including 55 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, 90 sporadic cases have been reported. The majority of these cases have been reported in previously affected provinces or in patients who visited such provinces prior to illness. However, one new case has been reported in a newly affected province (Guizhou) during the second wave of the outbreak.

→Update of the week

Between 17 and 23 January 2014, 37 new cases of A(H7N9) infection have been reported by local authorities in China: Zhejiang (23), Guangdong (six), Jiangsu (one), Shanghai (four) and Fujian (three).

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

Opening date: 24 September 2012

Latest update: 22 January 2014

Since April 2012, 179 laboratory-confirmed cases, including 76 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, one new fatal case has been reported from Saudi Arabia.

### Chikungunya outbreak - The Caribbean, 2013

Opening date: 9 December 2013

Latest update: 23 January 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 and Dominica. French Guyana reported two confirmed cases imported from Martinique. This is the first documented outbreak of chikungunya with autochthonous transmission in the Americas.

→Update of the week

During the past week, 498 new confirmed cases have been reported: Saint Martin, (192); Martinique (219); Saint Barthélemy (20); Guadeloupe (58) and French Guyana (1). In addition, Saint Martin (NL) acknowledged seven additional cases and Dominica reported one case.

## Zika virus infection outbreak - French Polynesia - 2013-2014

Opening date: 9 January 2014

Latest update: 16 January 2014

There is an ongoing outbreak of Zika virus (ZIKV) infection in French Polynesia (PF). This is the second documented outbreak of ZIKV in the Pacific. It is estimated that more than 26 000 cases sought medical care with Zika-like symptoms since the beginning of the outbreak in early October 2013. No deaths and no hospitalisations for acute infection were reported. There is a simultaneous dengue outbreak in the region.

French Polynesia 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

During the past week, 62 new Zika virus infections have been reported, seven of which were confirmed by RT-PCR. Since the last update, five additional cases of Guillain-Barré syndrome (GBS), two new cases of meningo-encephalitis and one more case of neurological complication were reported. The outbreak seems to be declining in most affected islands in PF.

New Caledonia (NC), another French Overseas territory, reported the first autochthonous infection with Zika virus on 21 January in the community of Dumbea, in Greater Nouméa following increased monitoring of passengers arriving from PF. Since 25 November 2013, 26 imported cases have been reported from French Polynesia (PF) by NC.

## Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 23 January 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.

## Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 16 January 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, and there are currently outbreaks ongoing in five other countries: Cameroon, Somalia, Syria, Ethiopia and Kenya.

### →Update of the week

Since the previous ECDC update, nine new wild poliovirus 1 (WPV1) cases have been reported to WHO: five with date of onset from 2013 and four from 2014.

## II. Detailed reports

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

Opening date: 4 October 2013

Latest update: 23 January 2014

#### Epidemiological summary

For week 3/2014:

- Of the 29 reporting countries, four (Bulgaria, Greece, Portugal and Spain) reported medium intensity of influenza and Portugal, Spain and the UK (England) reported geographically widespread activity.
- Of 1 401 sentinel specimens tested across 27 countries, 447 (32%) were positive for influenza virus.
- Dominant viruses were reported by Bulgaria, Greece, Portugal, Spain, Sweden, the UK (Scotland) (A(H1)pdm09 virus) and Slovenia (A(H3)).
- From week 40/2013, France and Spain reported 33 fatal cases related to influenza virus infection, 19 (58%) of them being infected with influenza A(H1)pdm09 virus.

A growing number of countries reported an increasing proportion of specimens testing positive for influenza virus. Increased numbers of hospitalised laboratory-confirmed and fatal influenza cases have been reported over the last weeks.

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

#### ECDC assessment

The influenza season has started in EU/EEA countries since 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

###### *Turkish Cypriot Community*

[Local media](#) report increasing number of measles, mumps and rubella cases concomitantly with the influx of refugees from Turkey.

###### *The Netherlands – update*

The epidemic is still ongoing but is slowing down. Since 1 May 2013 and as of 21 January 2014, [RIVM](#) reports 2 583 cases. This number is considered an underestimate of the actual number of cases. A 17-year-old girl died due to complications of measles. During the last two-week period, 40 new measles patients and six new hospitalisations were reported. 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, causing a local outbreak there with 42 cases.

##### Rest of the world

###### *Russia*

A large [outbreak of measles](#) with more than 100 cases is reported in a religious community in the Kursk region. Another

large [outbreak](#) is ongoing in the Tula region with 43 cases of suspected measles (including 26 Roma), 14 of them children. In addition, several other recent outbreaks have been registered in migrant Roma populations in widely spread areas: Ryazan, Yaroslavl, Kaluga, Orenburg, Saratov, Nizhny Novgorod regions, the republics of Bashkortostan and Adygea, Stavropol Territory.

#### *Vietnam*

The [local media](#) report that since December 2013, more than 100 children have been hospitalised for treatment due to measles. This is the highest reported number of cases in five years.

#### **Publication**

##### [Weekly epidemiological record -WHO](#)

A recent meeting of the Strategic advisory group of experts on immunization (SAGE) in November 2013 reviewed the status of the measles and rubella situation.

There has been a significant reduction in measles incidence and reduction of measles mortality by 75% since 2000. The Americas have maintained elimination of both measles and rubella and the Western Pacific region is approaching interruption of endemic measles transmission. However, based on current trends and programme performance, the 2015 global targets as well as regional elimination targets in the European (2015), Eastern Mediterranean (2015) and African (2020) regions will not be achieved on time.

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

#### **ECDC assessment**

There have been several large outbreaks in the EU during 2013. The largest outbreaks have been in Wales and the Netherlands. In the EU neighbourhood, outbreaks with several thousand cases affecting Georgia and Turkey gave cause for concern.

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**

Poland reported 99% of all rubella cases in the European Union (EU) in the 12-month period between November 2012 and October 2013; 88% of these cases were either unvaccinated or had an unknown vaccination status. Less than 1% of the cases were reported as lab-confirmed. So far there have been two cases of CRS reported.

**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 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 immunization 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](#)

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[countries](#)

## Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 16 January 2014

### 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, 225 cases of human infection with influenza A(H7N9) have been reported from: Zhejiang (88 cases), Shanghai (42), Jiangsu (30), Henan (4), Anhui (4), Beijing (2), Shandong (2), Fujian (12), Hunan (3), Jiangxi (5), Hebei (1), Guizhou (1), Guangdong (26), Hong Kong (3) and Taiwan (2). In addition, the virus has been detected in one asymptomatic case in Beijing. To date, WHO has acknowledged 219 of these cases and the remaining six cases were reported by local health authorities on 23 January 2014.

Most cases have developed severe respiratory disease. Fifty-five patients have died (case-fatality ratio=24.4%).

Ninety cases have been reported since October 2013. The provinces affected are: Taiwan (1), Hong Kong (3), Zhejiang province (42), Guangdong province (25), Jiangsu province (3), Shanghai (8), Fujian (7) and Guizhou (1).

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

### 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.

It is commendable that the Chinese authorities quickly notified the event to WHO under the International Health Regulations. The continued communication of outbreak investigations has facilitated the assessment of the risk to human health from this outbreak in Europe as well as elsewhere. It is essential that this continues.

The first human infection with influenza A(H7N9) virus was identified in March 2013, and this was the first time that human infection with a low pathogenic avian influenza A virus has been associated with a fatal outcome. After a period of several months with only few cases detected, the Chinese authorities have detected new cases with increasing frequency since October 2013. This indicates a persistent reservoir and transmission pattern which might have seasonal characteristics.

The recent fatal case of influenza A(H5N1) imported to Canada 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.

To date, there is no epidemiological evidence that avian influenza can be transmitted to humans through the consumption of cooked food, notably poultry meat and eggs.

There is insufficient evidence to quantify the risk of influenza A(H7N9) developing into a virus that transmits from human to human, thereby increasing the risk of an influenza pandemic. Close monitoring of the outbreak epidemiology, clinical features and the genetic characteristics of the virus will be critical for assessing this risk; instruments like the Influenza Risk Assessment Tool (IRAT) can play a role.

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.

The risk of influenza A(H7N9) virus being transported to Europe in viraemic poultry through legal trade is negligible. EU regulations do not permit importation of live poultry, day-old chicks and hatching eggs and other birds (captive birds such as parrots, finches and ornamental birds) from China. The only poultry commodities authorised for import from China into the EU are sterilised meat products, heat-treated poultry meat from Shandong, and heat-treated egg products. Given the very heat-labile nature of all influenza viruses, these commodities are not considered to pose a risk of influenza virus transmission to consumers.

The risk of the avian influenza A(H7N9) viruses arriving in Europe with migratory birds cannot be quantified. ECDC and the European Food Safety Authority (EFSA) have performed multiple independent risk assessments in the past regarding avian influenza that also cover pathways for avian influenza A(H7N9). The hypothesis that poultry in the affected area has been infected by wild birds has not been confirmed but neither can it be excluded. Surveillance in wild birds for this novel virus has not been initiated in the EU/EEA.

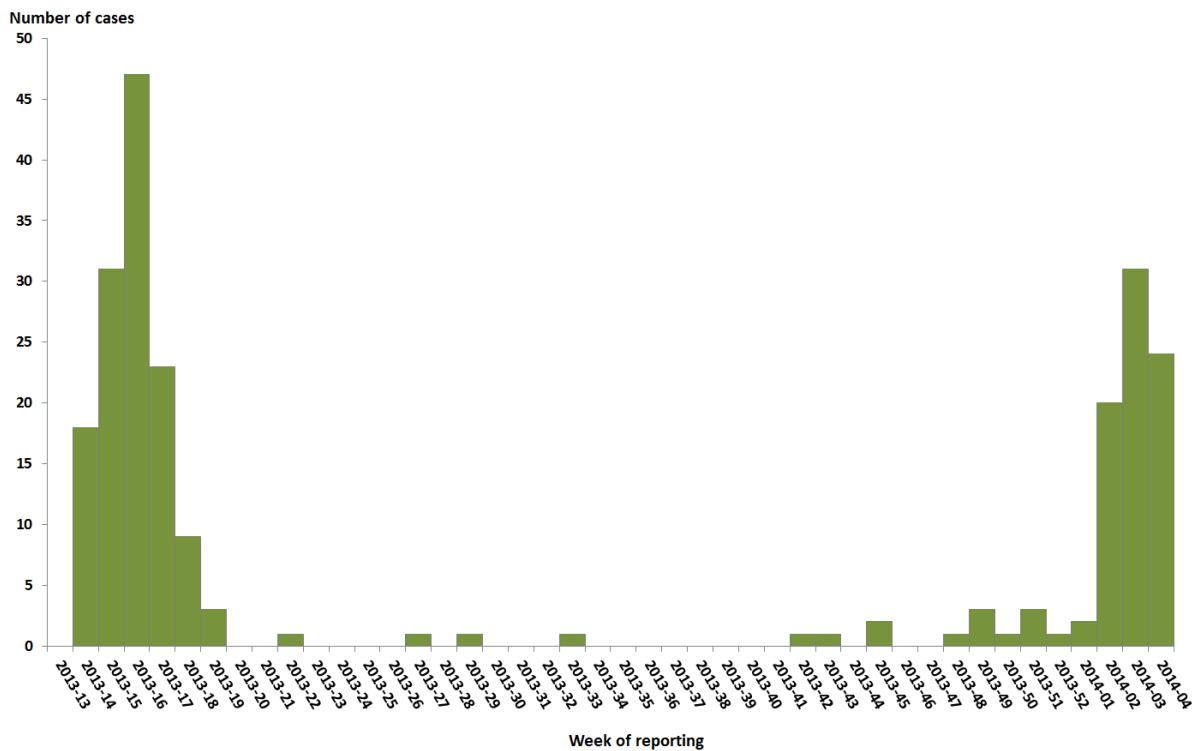
## Actions

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

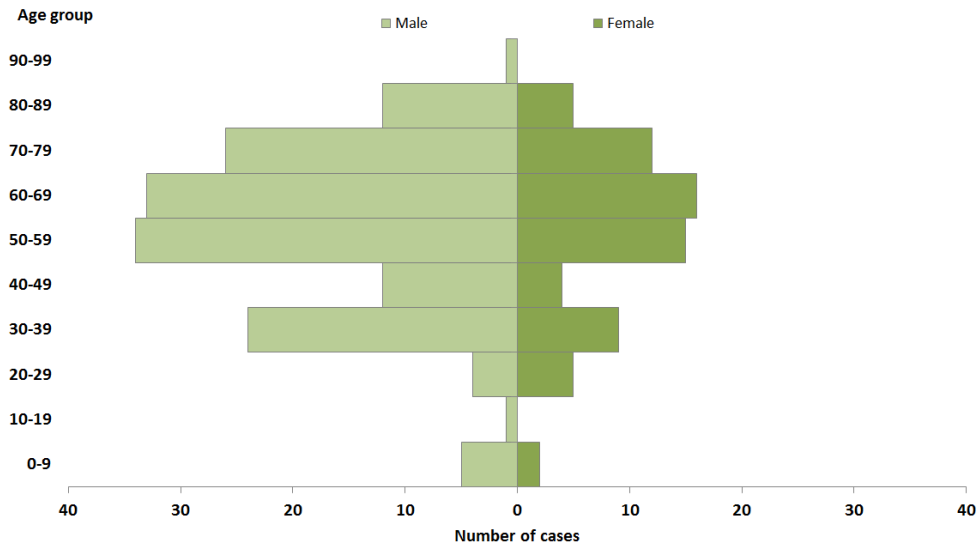
## Distribution of confirmed A(H7N9) cases by week of reporting, week 14/2013 to 04/2014, China (n=225)

Source: ECDC SRS



Distribution of confirmed A(H7N9) cases by age and gender, 31/03/2013-23/01/2014, China (n=220\*)

Source: ECDC SRS

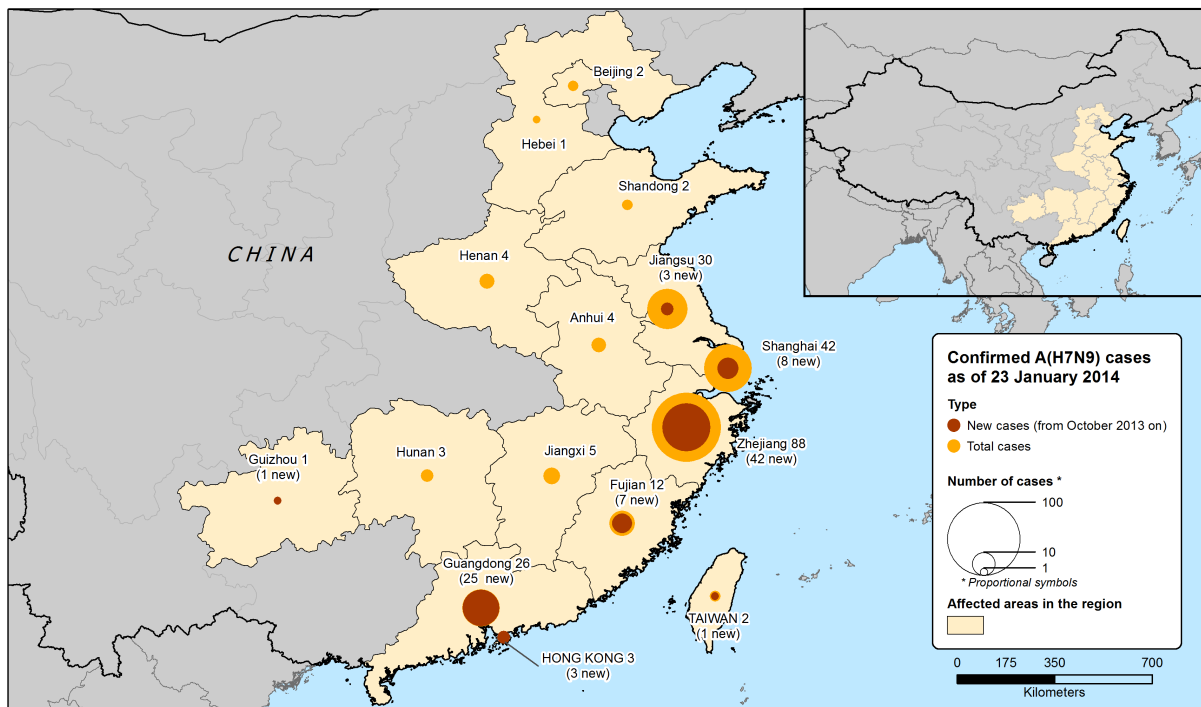


\* 5 cases where age or gender is missing have been excluded



## Distribution of confirmed A(H7N9) cases by place of reporting, week 14/2013 to 04/2014 (n=225)

ECDC SRS



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

Opening date: 24 September 2012

Latest update: 22 January 2014

### Epidemiological summary

The Saudi Arabian Ministry of Health this week confirmed a new fatal case of MERS-CoV in a 54 year old doctor from Riyadh.

As of 23 January 2014, 179 laboratory-confirmed cases of MERS-CoV have been reported by local health authorities worldwide, including 76 deaths. The following countries have reported MERS-CoV cases:

Saudi Arabia: 142 cases / 58 deaths  
 United Arab Emirates: 12 cases / 4 deaths  
 Qatar: 7 cases / 4 deaths  
 Oman: 2 case / 2 death  
 Kuwait: 2 cases / 0 deaths  
 Jordan: 2 cases / 2 deaths

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UK: 4 cases / 3 deaths  
Germany: 2 cases / 1 death  
France: 2 cases / 1 death  
Italy: 1 case / 0 deaths  
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 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. Twenty-two asymptomatic cases have been reported by Saudi Arabia and three by the United Arab Emirates.

The 4th 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) have not been met at present.

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](#) |

## 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.

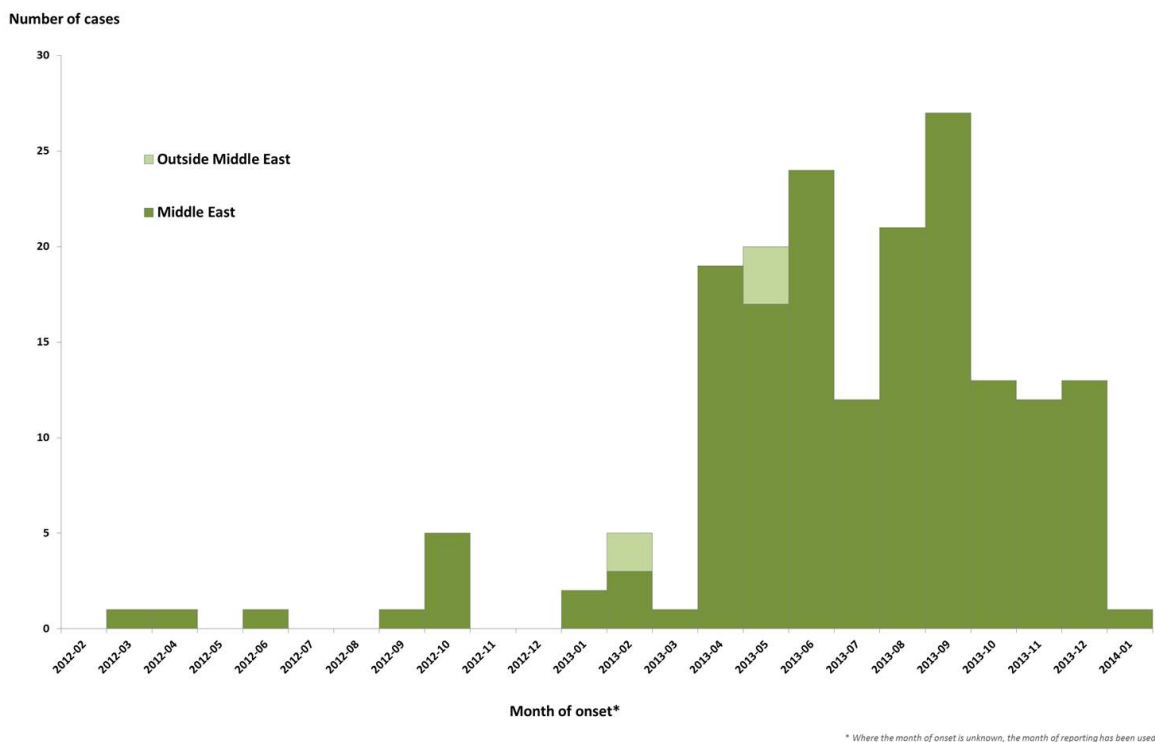
The latest update of a [rapid risk assessment](#) was published on 7 November 2013.

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.

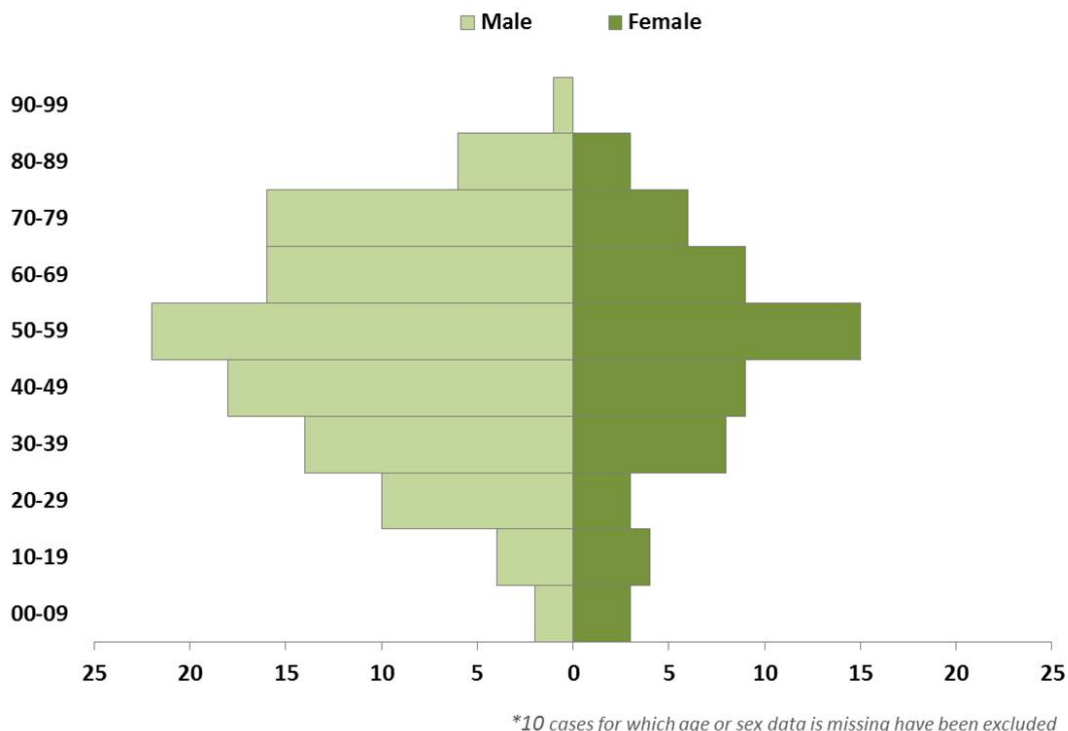
### Distribution of confirmed cases of MERS-CoV by month of onset and place of probable infection, March 2012 - January 2014 (n=179\*)

Source: ECDC SRS



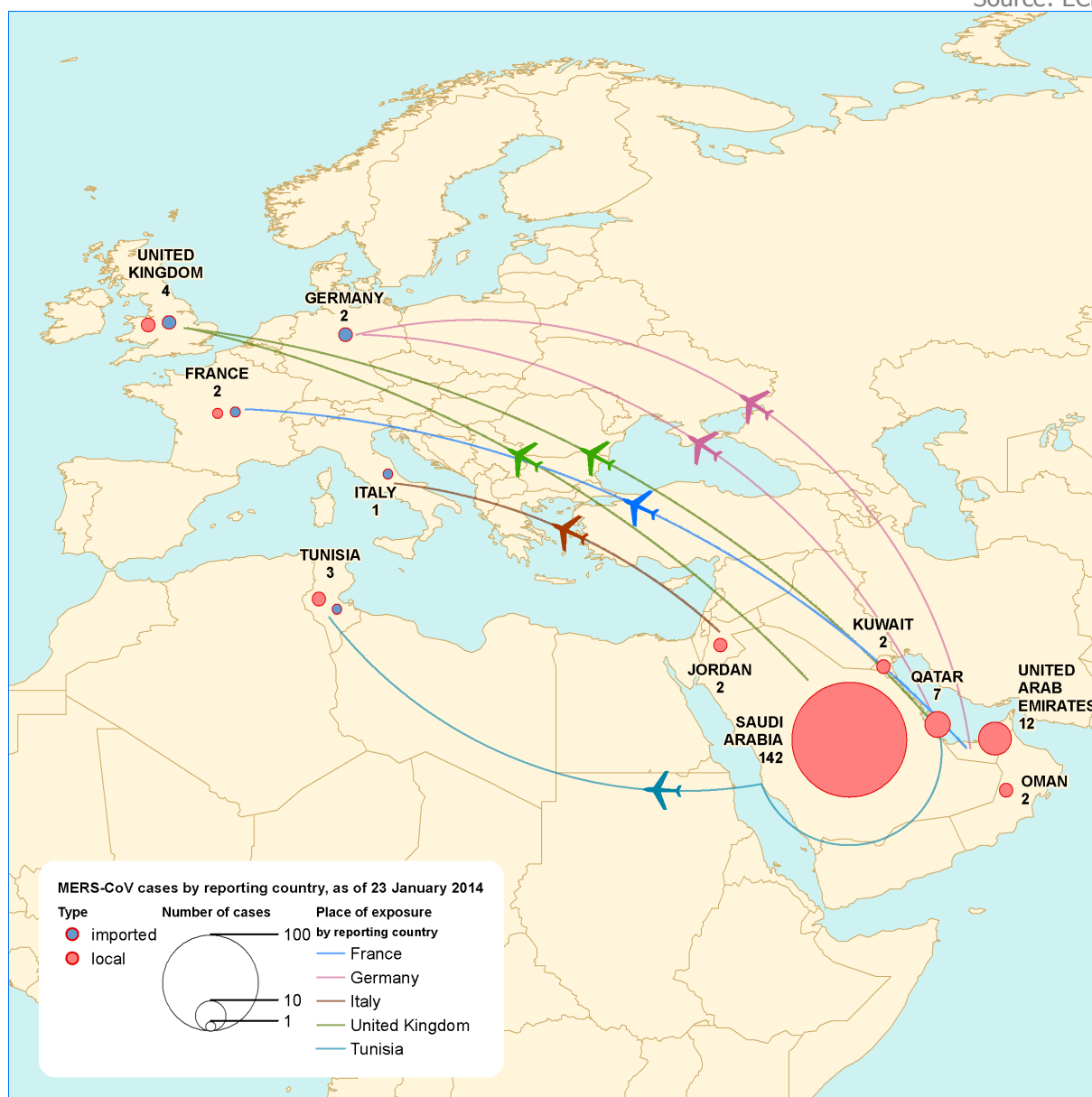
### Distribution of confirmed cases of MERS-CoV by gender and age group, March 2012 - 23 January 2014

Source: ECDC SRS



## Distribution of confirmed MERS-CoV cases by place of reporting, March 2012 - 23 January 2014

Source: ECDC SRS



## Chikungunya outbreak - The Caribbean, 2013

Opening date: 9 December 2013

Latest update: 23 January 2014

### Epidemiological summary

Cases reported as of 23 January 2014:

- Virgin Islands (UK), 3 confirmed cases;
- Saint Martin (FR), 393 confirmed cases;
- Saint Martin (NL), 9 confirmed cases;
- Martinique, 267 confirmed cases and probable cases;
- Saint Barthélemy, 45 confirmed cases and probable cases;
- Guadeloupe, 68 confirmed and probable cases;

- Dominica, 1 confirmed case
- French Guyana, 2 confirmed case that were imported. Thirteen suspected cases are being investigated.

**Web sources:** [Bureau de Veille Sanitaire](#)

### 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 from the Caribbean in the EU, including awareness among clinicians, travel clinics and blood safety authorities.

### Actions

ECDC published a [rapid risk assessment](#) on 12 December 2013 and an [epidemiological update](#) on 10 January 2014.

### The Caribbean islands



### Zika virus infection outbreak - French Polynesia - 2013-2014

Opening date: 9 January 2014

Latest update: 16 January 2014

### Epidemiological summary

Since early October 2013, 7 218 suspected cases of ZIKV infection were reported by the syndromic surveillance sentinel network of French Polynesia of which 368 were confirmed by RT-PCR. It is estimated that more than 26 000 cases have sought medical care with Zika-like symptoms in French Polynesia since the beginning of the outbreak.

Since early November 2013, 68 cases presented with neurological or auto-immune complications, including 38 cases of Guillain-Barré syndrome (GBS), 12 cases of encephalitis or meningo-encephalitis (ME), 11 other neurological complications, such as paraesthesia, facial paralysis and subdural haematoma. Seven cases had autoimmune illnesses, four of which were immune thrombocytopenic purpura (ITP), two were ophthalmologic complications and one had cardiac complication. The apparent clustering of such cases is considered very unusual, as the GBS cases only occurred during two months, compared with the three

or four cases per year on average in French Polynesia. All cases developed neurological symptoms following a viral infection compatible with symptoms of Zika virus infection but were not tested initially. All the GBS cases were born in French Polynesia. Sixteen of these patients required hospitalisation in the intensive care unit. No deaths have been reported.

In addition, there is a suspicion about the recurrence of the infection in patients previously presenting with ZIKV infection, which may indicate the presence of several genotypes of the Zika virus, similar to dengue virus.

Public health control measures, including increased surveillance and the promotion of mosquito bite avoidance measures, have been implemented.

Web sources: [ECDC fact sheet](#) | [Bureau de Veille Sanitaire](#) | [NaTHNaC](#) | [Tahiti Infos](#)

## ECDC assessment

This is the second documented outbreak of ZIKA infection in the Pacific affecting now two French Overseas territories. The first documented transmission outside of the virus' traditional endemic areas in Africa and Asia occurred on the island of Yap in Micronesia in 2007. ZIKV is a member of the *Flaviviridae* family and is transmitted to humans by mosquitoes. It is related to other pathogenic vector borne flaviviruses including dengue, West-Nile and Japanese encephalitis viruses. ZIKV 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. Travellers can protect themselves by preventing mosquito bites.

Zika 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 ZIKV. However, they have temporal relationship to the simultaneous outbreaks of Zika and dengue. Investigations are currently underway to identify the cause of the increase in reported neurological and autoimmune complications to determine their possible association with the ongoing transmission of DENV-1, DENV-3 and ZIKV, and whether ZIKV has several genotypes. The ongoing research involves WHO, experts of the Secretariat of the Pacific Community and researchers at the Pasteur Institute.

## Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 23 January 2014

### Epidemiological summary

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

**Asia:** Up to 15 January, WHO reports that the recent trend has continued to decrease in Cambodia, Lao PDR and Philippines. However, Malaysia, Singapore and Vietnam all continue to report sustained dengue activity.

According to [media](#) reports, Cambodia reported significantly less dengue cases in 2013 compared to the same time period in 2012 (42 362 cases in 2012 compared to 17 533 cases in 2013). In Pakistan, Karachi in Sindh province continues to report dengue activity.

**Caribbean:** The dengue outbreaks on the French Caribbean islands of Saint Martin, Martinique and Saint-Barthélemy, are all still ongoing at the same time as a chikungunya outbreak in the Caribbean region.

**Oceania:** In the South Pacific, Kiribati and more recently Fiji have been reporting high dengue activity since December 2013. The outbreak in Fiji is still progressing with 1 039 cases recorded from 30 October 2013 to 16 January 2014, according to the latest figures from the Ministry of Health. The majority of these cases are in the capital Suva, and its suburbs. The pre-dominant circulating serotype is DENV-3 which has recently re-emerged in several other countries and territories across the South Pacific after an absence of nearly 20 years.

According to [media](#) reports, Queensland in Australia has reported additional dengue cases in several affected areas, particularly in Cairns and Port Douglas.

French Polynesia continues to experience sustained dengue activity. As of 17 January 2014, the number of dengue cases was 1 583 with 91 cases reported so far in January, according to InVS. The majority of cases continue to be reported in Tahiti and Moorea.

New Caledonia has confirmed two cases of DENV-3 imported from Vanuatu, according to the Pacific Surveillance Network

(PacNet).

[WHO Western Pacific Region \(WPRO\)](#) reports that the number of dengue cases is expected to continue to increase in the coming months in many places including Fiji, French Polynesia and Kiribati. In Solomon Islands, the dengue epidemic seems to be slowing down.

According to [InVS](#), since 15 November, Mayotte has been reporting imported dengue cases from Comores but no autochthonous dengue cases have been reported to date. However, surveillance has been reinforced in light of the large population traffic between Comores and Mayotte as well as in La Reunion.

**Americas:** In Central America, Panama has been experiencing high dengue activity since declaring the start of a dengue epidemic on 30 December 2013.

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

## Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 16 January 2014

### Epidemiological summary

This week, WHO reported nine new confirmed WPV1 cases: five with date of onset from 2013 and four from 2014.

In 2013, 389 cases of poliomyelitis were notified to WHO worldwide, all cases due to WPV1. Eight countries have recorded cases in 2013: Somalia, Nigeria, Pakistan, Kenya, Afghanistan, Ethiopia, Syria and Cameroon.

In 2014, four new cases were recorded, all from Pakistan.

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

### 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. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases. The last indigenous WPV case in the WHO European Region 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 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 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.



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