

This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary

### EU Threats

#### Dengue - Portugal - Madeira outbreak

Opening date: 10 October 2012

Latest update: 13 December 2012

On 3 October 2012, the public health authorities of Portugal reported two autochthonous cases of dengue fever in patients residing in the Autonomous Region of Madeira. This signalled the onset of the first recorded outbreak of dengue in Madeira with more than 2 000 cases as of 6 January 2013. Thirteen European countries have reported dengue cases among travellers returning from Madeira. The presence of *Aedes aegypti* mosquitoes, the main vector for transmission of the virus, has been documented in Madeira since 2005.

→Update of the week

There is no new update this week on the number of autochthonous dengue cases in Madeira. As of 6 January 2013, 2 144 cases of dengue infection have been reported.

#### Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 22 October 2012

Measles, a highly transmissible vaccine-preventable disease, is still endemic in many countries of Europe due to a decrease in the uptake of immunisation. More than 30 000 cases were reported in EU Member States in each of the last two years. However, the number of outbreaks and reported cases in Member States in 2012 were significantly lower than during 2010 and 2011. As of 31 October 2012, 7 016 cases of measles had been reported to the European Surveillance System (TESSy) for 2012. France, Italy, Romania, Spain and the United Kingdom accounted for 94% of the reported cases.

→Update of the week

During the week leading up to 18 January 2013, no new outbreaks were detected in EU Member States.

#### Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 19 September 2012

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

During the week leading up to 18 January 2013, no new outbreaks were detected in EU Member States.

## Influenza - Multistate (Europe) - Monitoring 2012-2013 season

Opening date: 2 December 2011

Latest update: 24 May 2012

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. There is currently intense media interest in the 2012-2013 influenza season.

→Update of the week

Of 26 countries reporting clinical data in week 2/2013, 14 reported medium- or high-intensity transmission and 19 reported increasing trends.

## Non EU Threats

### Cholera - Cuba - Monitoring outbreak

Opening date: 4 July 2012

Latest update: 11 January 2013

In July 2012, 85 cases of *Vibrio cholerae* infection were officially confirmed in Cuba, including three fatalities. This is the first time in almost 150 years that Cuba has reported an outbreak of cholera. On 27 August 2012, the Cuban Ministry of Public Health declared the outbreak to be over. In the aftermath of hurricane Sandy, which occurred in October 2012, new cases were reported in three provinces including cases in Havana. On the 14 January, WHO PAHO reported that 51 cholera cases have been confirmed in the capital.

→Update of the week

Fifty-one cholera cases have been confirmed in Havana on 14 January, all of which were characterised as *Vibrio cholerae* toxigenic serogroup O1, serotype Ogawa, biotype El Tor.

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

Opening date: 20 April 2006

Latest update: 17 January 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 the occurrence of locally acquired cases in EU countries where the competent vectors are present. The detection of a dengue outbreak in the Autonomous Region of Madeira, Portugal, further underlines the importance of surveillance and vector control in other European countries.

→Update of the week

There is an ongoing outbreak of dengue in the Autonomous Region of Madeira, Portugal, with some imported cases reported from other EU Member States. No autochthonous cases were reported in other European countries in 2012 and at the start of 2013.

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

Opening date: 8 September 2005

Latest update: 17 January 2013

Polio, a crippling and potentially fatal vaccine-preventable disease mainly affecting children under five years of age, is close to being eradicated from the world after a significant global public health investment and effort. The WHO European Region is polio-free. Worldwide 223 cases had been reported in 2012 compared with 642 cases in 2011.

→Update of the week

During the week leading up to 17 January 2013, one new polio case was reported to WHO from Nigeria.

## II. Detailed reports

### Dengue - Portugal - Madeira outbreak

Opening date: 10 October 2012

Latest update: 13 December 2012

#### Epidemiological summary

On 3 October 2012, the Portuguese public health authorities reported two cases of dengue infection confirmed in patients residing on the island of Madeira in the Autonomous Region of Madeira located around 400 km from the Canary Islands, 650 km from the African coast, and 1 000 km from the European continent. The autonomous region has 268 000 inhabitants.

Since the beginning of the outbreak, 2 144 cases of dengue infection have been reported from the public health sector in Madeira. The sequence analysis of viral genomes (600 nucleotides) from several positive human samples indicates high sequence similarity with DENV-1 circulating in Venezuela and Colombia, strongly suggesting a Latin American origin.

The vast majority of confirmed cases are from the city of Funchal, which is the main port on Madeira island. The island of Madeira has an established mosquito population of *Aedes aegypti*, the main vector of dengue in tropical and subtropical countries.

As of 17 January 2013, 74 patients have been diagnosed with dengue after returning from Madeira: 10 in Portugal, 23 in the UK, 19 in Germany, three in France, five in Sweden, four in Finland, two in Denmark, two in Austria, and two in Norway. Croatia, Slovenia, Spain and Switzerland have all reported one case each. The last reported case was on 3 January 2013.

Web sources: [ECDC fact sheet for health professionals](#) | [PT Directorate-General of Health](#) | [National Institute of Health Dr. Ricardo Jorge](#) | [ECDC Rapid Risk Assessment](#) | [WHO](#) | [Madeira Institute of Health Administration and Social Affairs](#)

#### ECDC assessment

This is the first known occurrence of locally transmitted dengue infection in the Autonomous Region of Madeira, and consequently a new geographical area reporting autochthonous cases in the EU.

This is a significant public health event but not entirely unexpected because of the known presence of *Aedes aegypti*, a competent vector for dengue.

The updated figures indicate that the outbreak has peaked, with a decrease in the number of cases being reported since mid-November. Entomological surveillance has shown a decrease in mosquito activity as well.

The cases of dengue among returning travellers from the island highlight the need for travellers to Madeira to take measures in order to reduce mosquito bites. Travellers experiencing febrile symptoms with severe headache, retro-orbital pain, myalgia, arthralgia and maculo-papular rash within 21 days of visiting the island of Madeira are advised to seek medical advice.

Neighbouring geographical areas (e.g. Canary Islands) and other EU Member States need to assess the risk of establishment of *Aedes* mosquito populations and the introduction of dengue. The epidemiological situation does not imply the need for any trade or travel restriction beyond the disinfestation policies currently implemented.

#### Actions

ECDC published an updated [rapid risk assessment](#) concerning the autochthonous dengue cases in Madeira. An epidemiological update was published on the ECDC website on 13 December 2012.

Portuguese authorities published recommendations regarding [personal protective measures](#), and [measures for the safety](#) of blood, cells, tissues and organ donations within the region.

Blood donor deferral for 28 days from day of departure for travellers returning from the Autonomous region of Madeira is now recommended in other EU countries.

### Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 22 October 2012

## Epidemiological summary

No new outbreaks have been detected in EU Member States since the last update.

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

## ECDC assessment

Considerably fewer measles cases have been reported in 2012 than in 2011, primarily due to the dramatic decrease in the number of cases reported from France. There was no increase in the number of cases during the peak transmission season from February to June and there have been very few outbreaks detected by epidemic intelligence methods in 2012. The reduction in notified cases in 2012 indicates that the incidence at EU/EEA level is back at the level before the 2010–2011 outbreaks, but does not signify a long-term downward trend in measles notifications.

ECDC closely monitors measles transmission and outbreaks in the EU and neighbouring countries in Europe through enhanced surveillance and epidemic intelligence activities. The countries in the WHO European Region, which include all EU Member States, have committed to eliminating measles and rubella transmission by 2015. Elimination of measles requires consistent vaccination coverage above 95% with two doses of measles vaccine in all population groups, strong surveillance and effective outbreak control measures.

## Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 19 September 2012

### Epidemiological summary

No new outbreaks have been identified since the last update.

From 1 January to 31 October 2012, 26 014 cases of rubella were reported by the 26 EU/EEA countries, contributing to the enhanced surveillance for rubella. Poland and Romania accounted for 99% of all reported rubella cases. Romania in particular has experienced a significant increase in the number of reported cases compared with the same period in 2011. Other countries that reported an increased number of rubella cases in 2012 include the UK, Spain and Sweden.

Web sources: [ECDC measles and rubella monitoring](#) | [WHO epidemiological brief summary tables](#) | [ECDC rubella factsheet](#)

### 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. CRS surveillance plays an important role but because the rubella virus can cause a wide range of conditions from mild hearing impairment to complex malformations which are incompatible with life, such surveillance is biased towards the severe end of the spectrum. Routine control of immunity during antenatal care is important for identifying susceptible women who can be immunised after giving birth and for surveillance of the size of the susceptible female population. The increase in the number of rubella cases reported in 2012 compared with 2011 and the potential for an increase in the number of babies born with CRS are of concern.

### Actions

ECDC closely monitors rubella transmission in Europe by analysing the cases reported to the European Surveillance System (TESSy) and through its epidemic intelligence activities. 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.

## Influenza - Multistate (Europe) - Monitoring 2012-2013 season

Opening date: 2 December 2011

Latest update: 24 May 2012

## Epidemiological summary

Weekly reporting on influenza surveillance in Europe for the 2012–13 season started in week 40/2012 and the period of influenza transmission started around week 49/2012, considerably earlier than in 2011/2012.

In week 02/2013:

- Twenty six countries reported clinical information.
- Increasing trends were reported by 19 countries compared to 16 countries in week 01/2013.
- Fourteen countries reported medium or high intensity transmission.
- Of 1 238 sentinel specimens tested across 20 countries in week 2/2013, 521 (42%) were positive for influenza virus - a percentage similar to that seen in the two previous weeks.
- Since week 40/2012, 383 hospitalised laboratory-confirmed influenza cases have been reported, of which 14 had a fatal outcome.
- Of the 2 102 influenza virus detections in sentinel specimens since week 40/2012, 991 (47%) were type A, and 1 111 (53%) were type B viruses. Of 846 influenza A viruses subtyped, 444 (52%) were A(H1)pdm09 and 402 (48%) were A(H3).
- In the UK there has been an apparent rise in a specific severe pneumonia due to toxin-producing strains of *Staphylococcus aureus* (PVL-SA), possibly associated with influenza.

**Web source:** [ECDC Weekly Influenza Surveillance Overview](#) |

## ECDC assessment

Influenza activity continued to increase in week 2/2013. The virological pattern being identified in the EU/EEA is different from that being reported so far from North America.

## Actions

ECDC has updated its influenza website for the start of the season and is preparing its annual seasonal influenza risk assessment.

## Cholera - Cuba - Monitoring outbreak

Opening date: 4 July 2012

Latest update: 11 January 2013

### Epidemiological summary

In June and July 2012, the communicable diseases surveillance system in Cuba recorded an increasing trend in diarrhoeal diseases, which were thought to be caused by high temperatures and heavy rains. In Granma province, around 1 000 patients were reported to have been treated for gastrointestinal infections and among them 85 were confirmed to be infected with *Vibrio cholerae*. Three of the confirmed cholera cases have died. Control measures were put in place and on 27 August 2012, the Cuban Ministry of Public Health declared the outbreak to be over.

Another 47 cases were confirmed in the aftermath of hurricane Sandy (October 2012), in the provinces of Santiago de Cuba, Camagüey and Guantanamo. By the end of 2012, the cumulative number of cases reached 500. On 6 January 2013, the Cuban public health authorities notified an increase of acute diarrhoeal diseases in Havana. As of 14 January 2013, 51 cases of cholera have been confirmed in the capital and were subtyped to be *Vibrio cholerae* toxigenic serogroup O1, serotype Ogawa, biotype El Tor.

In response to the outbreak, the Cuban authorities are strengthening public health education to raise awareness among the population with an emphasis on hand hygiene and safe food and drinkable water consumption.

**Websources:** [Official press release](#) | [PAHO update 7 Jan 2013](#) | [PAHO update 15 Jan 2013](#) | [ECDC Factsheet](#) | [Cuban press release January 2013](#)

## ECDC assessment

The report of 51 confirmed cases in Havana, Cuba, raises the risk for European travellers for contracting the disease, compared to the previous [rapid risk assessment](#) in July 2012 taking into account that half of the tourist arrivals to Cuba is to Havana. However, the overall risk should still be considered low. Applying suitable preventive hygiene measures plays a key role in the prevention of the disease. Visitors to cholera-endemic or cholera-epidemic countries should always follow appropriate precautionary measures and drink only safe water (bottled water/water treated with chlorine), wash all fruits and vegetables with bottled or chlorinated water before consumption, regularly wash hands, avoid consuming raw sea-food products, and only eat sea food when thoroughly cooked.

Travellers should seek advice from travel medicine clinics to assess their personal risk. Physicians in the EU should consider the diagnosis of cholera in returning travellers from cholera endemic/epidemic countries including Haiti, the Dominican Republic and Cuba presenting with compatible symptoms. Physicians and clinical laboratories need to follow public health guidance on the notification of cholera cases.

## Actions

ECDC is preparing an updated [rapid risk assessment](#) in January 2013.

## Provinces of Cuba (provinces with confirmed cases coloured)

ECDC



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

Opening date: 20 April 2006

Latest update: 17 January 2013

## Epidemiological summary

**Europe:** There have been no reports of confirmed autochthonous dengue infections in Europe in 2013, besides the on-going dengue outbreak in Madeira.

**Asia:** There is no new update from WHO Western Pacific Region this week. In other parts of Asia, Sri Lanka has reported over 4 000 dengue cases, including 9 deaths, so far in 2013. The on-going outbreak of dengue fever in Cairns, Australia, has now spread to four suburbs, taking the total number of reported cases to 26, according to local health authorities.

**Latin America:** There is increasing dengue activity across most states of Mexico and in Central America, particularly in Costa Rica and Honduras. According to the media, high dengue activity is reported across South America, especially in Brazil, Paraguay and Bolivia. Of note this week is that the Ministry of Health for Bolivia has recorded more than 2 200 suspected cases so far in 2013 with most cases being reported in Beni. The Ministry of Health of Paraguay has raised an epidemiological alert across the country in response to the increased number of dengue cases reported so far this year.

**The Caribbean:** Puerto Rico is showing a declining trend in suspected dengue cases with 318 suspected cases reported up to week 51. However, the level of reporting still remains above the epidemic threshold. In other regions, Barbados reported a decreasing number of dengue cases in the final weeks of 2012.

#### Web sources:

[HealthMap](#) | [MedISys](#) | [ProMED Asia update](#) | [ProMED Americas update](#) | [WPRO](#) | [CDC](#) |

### 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. Local transmission of dengue was reported for the first time in France and Croatia in 2010, and imported cases are detected in other 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](#).

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

Opening date: 8 September 2005

Latest update: 17 January 2013

### Epidemiological summary

During the past week one new WPV1 case was reported to WHO from Nigeria with onset of paralysis in December 2012. So far there have been no cases reported with onset of disease in 2013.

13 January 2013 marked two years since the last wild poliovirus case in India.

Web sources: [Polio Eradication: weekly update](#) | [MedISys Poliomyelitis](#) | [ECDC Poliomyelitis factsheet](#) | [WHO EMRO](#) |

### ECDC assessment

The year 2012 ends with the fewest wild polio cases reported ever. Two hundred and twenty-two wild polio cases were reported – a reduction of over 60% on 2011. There are, however, concerns about the polio situation for 2013, due to difficulties in the immunisation programme in Pakistan. The programme has been severely affected by the recent attacks that killed several polio vaccination campaign workers in Pakistan. This may well have an effect on neighbouring Afghanistan, which, together with Pakistan and Nigeria, is one of the three remaining polio-endemic countries in the world. Other neighbouring countries, such as China will be equally at risk. A polio outbreak there in 2011, the first one since 1999, was imported from Pakistan. There were 18 cases including one death.

The WHO European Region remains polio-free.

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 (WPV) into the EU.

The last polio cases in the European Union occurred in 2001 when three young Bulgarian children of Roma ethnicity developed flaccid paralysis from WPV. Investigations showed that the virus 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 Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.