

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: 8 February 2013

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

The Portuguese authorities have not posted an update on the number of recorded dengue cases since 6 January 2013. Three new imported cases were reported among returning travellers by Finland during the past two weeks. The latest case was reported on 1 February 2013.

#### 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. The 29 participating EU and EEA countries reported 8 326 cases during the last 12-month period from December 2011 to November 2012 to the European Surveillance System (TESSy) for 2012. France, Italy, Romania, Spain and the United Kingdom accounted for 87% of all reported cases.

→Update of the week

During the week leading up to 8 February 2013 no new outbreaks were reported in EU Member States.

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

Opening date: 2 December 2011

Latest update: 8 February 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

For week 5/2013, 19 of the reporting countries indicated concomitantly high/medium-intensity transmission and wide geographic spread. Twenty-two countries reported increasing trends of influenza activity.

## 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 8 February 2013, no new outbreaks were detected in EU Member States.

## Non EU Threats

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

Opening date: 20 April 2006

Latest update: 7 February 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

The Autonomous Region of Madeira, Portugal experienced an outbreak of dengue starting in October 2012 with sporadic cases still being reported. So far in 2013, no autochthonous dengue cases have been reported in other European countries.

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

Opening date: 8 September 2005

Latest update: 7 February 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, 222 cases were reported in 2012 compared with 650 cases in 2011. One polio case has been reported so far in 2013.

→Update of the week

During the week leading up to 8 February 2013, there was one polio case reported to WHO from Pakistan.

## II. Detailed reports

### Dengue - Portugal - Madeira outbreak

Opening date: 10 October 2012

Latest update: 8 February 2013

#### 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.

As of 6 January 2013, 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.

Seventy-seven patients have been diagnosed in European countries with dengue infection after returning from Madeira: 10 in Portugal, 23 in the UK, 19 in Germany, three in France, five in Sweden, seven in Finland, two in Denmark, two in Austria, and two in Norway. Croatia, Slovenia, Spain and Switzerland have all reported one case each. The latest case was reported on 1 February 2013 from Finland.

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.

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 were detected during the past week.

3/8

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

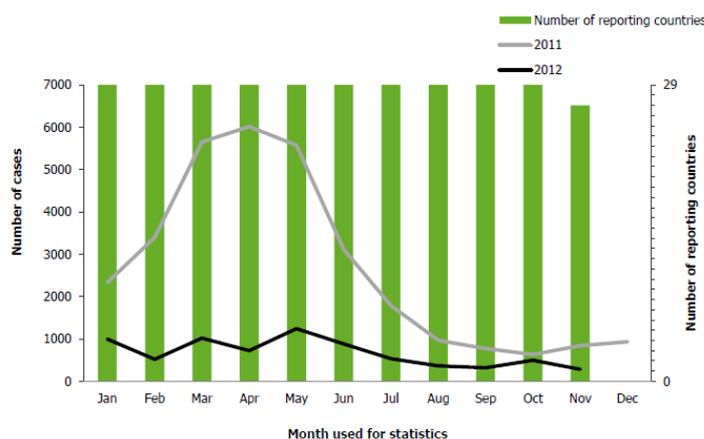
## ECDC assessment

So far in 2013, only the UK has reported outbreaks. In 2012, considerably fewer measles cases were reported in the EU 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. There have been no measles-related deaths during the last 12 months, but seven cases were complicated by acute measles encephalitis. 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.

## Number of measles cases in 2011 and 2012 and number of EU and EEA countries reporting by month in 2012

ECDC



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

Opening date: 2 December 2011

Latest update: 8 February 2013

### Epidemiological summary

Weekly reporting on influenza surveillance in Europe for the 2012–13 season started in week 40/2012 but active influenza transmission began around week 49/2012, approximately six weeks earlier than in the 2011/2012 season.

- For week 5/2013, the proportion of influenza-positive sentinel specimens continued to increase reaching 56%.

- Since week 40/2012, the proportions of influenza A and B viruses have remained similar (51% vs. 49%), but among type A viruses, the percentage of A(H1N1)pdm09 has continued to increase (64% compared to 52% in week 2/2012).
- For week 5/2013, of 71 hospitalised laboratory-confirmed influenza cases reported by six countries, 33 (46%) tested positive for influenza A viruses and 38 (54%) for type B viruses.

On 8 February 2012, ECDC published its annual [risk assessment](#) for seasonal influenza 2012-2013 based on data up to week 03/2013.

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

## ECDC assessment

Influenza activity continued to rise across Europe in week 5/2013, but epidemics may have passed their peaks in some countries, despite some of them experiencing a resurgence of ILI rates.

## Actions

ECDC has updated its influenza website for the start of the season.

## 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.

There were 26 438 cases of rubella reported from January to November 2012 by the 26 EU and EEA countries which contribute to the enhanced surveillance for rubella. Poland and Romania accounted for 99% of all reported rubella cases in the 12-month period.

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

### ECDC assessment

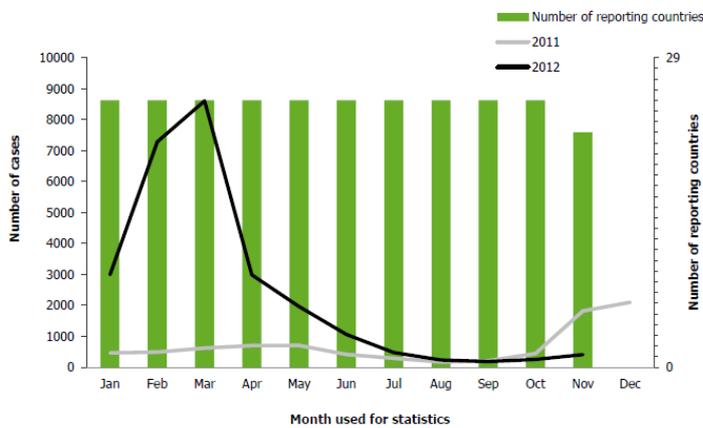
As rubella is typically a mild and self-limiting disease with few complications, the rationale for eliminating rubella would be weak if it were not for the virus' teratogenic effect. When a woman is infected with the rubella virus within the first 20 weeks of pregnancy, the foetus has a 90% risk of being born with congenital rubella syndrome (CRS), which entails a range of serious incurable illnesses. CRS surveillance plays an important role but tends to be biased towards the severe end of the spectrum as the rubella infection is known to cause a wide range of conditions from mild hearing impairment to complex malformations which are incompatible with life. 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.

## Number of rubella cases in 2011 and 2012 and number of EU and EEA countries reporting by month in 2012

ECDC



No comprehensive surveillance system in place in Belgium, France, and Germany.

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

Opening date: 20 April 2006

Latest update: 7 February 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.

**Latin America:** A notable dengue activity is reported across Central America this week. In Mexico, overall dengue activity remains high but there has been a recent declining trend across some states. For South America, an overall high dengue activity is reported across Brazil, Colombia, Bolivia, Ecuador and Paraguay. Uruguay has reported a limited number of cases this week. According to media reports in Montevideo, Uruguay, local health authorities have confirmed that all suspected cases of indigenous dengue in the country have proven to be negative following analysis. There is relatively strong dengue activity reported this week in French Guyana (French Overseas Department). The two main serotypes co-circulating are DENV-2 and DENV-4, but predominantly DENV-2.

**The Caribbean:** There is no new update from the CDC on the dengue situation in Puerto Rico. The Cayman Islands is experiencing increased dengue activity with 23 suspected cases so far this year. An epidemiological update from InVS this week indicates an elevated risk of a dengue epidemic in St. Martin.

### Web sources:

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

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

6/8

## 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: 7 February 2013

### Epidemiological summary

One new case was reported in the past week, a WPV1 from Pakistan in a 14-month old child with onset of paralysis on 14 January 2013. It is the first WPV case of 2013 (compared with 12 cases for the same period in 2012).

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

### ECDC assessment

Although the Global Polio Eradication Initiative missed its end-2012 milestone of stopping all wild poliovirus transmission globally, the programme brought the world very close to eradicating polio as 2012 ended, with the fewest wild polio cases ever reported. Two hundred and twenty-two wild polio cases were reported in 2012 – a reduction of over 60% compared with 2011. However, there are profound concerns about the polio situation for 2013, especially due to difficulties in the implementation of the immunisation programme in Pakistan. The programme has been severely affected by the recent attacks that have 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 where a polio outbreak in 2011 was imported from Pakistan, will be equally at risk. The new discovery of the wild polio virus strain in Egypt linked to Pakistan gives further cause for unease.

The WHO European Region so far 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.