

This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary

### EU Threats

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

Opening date: 2 December 2011

Latest update: 8 March 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.

Weekly reporting on influenza surveillance in Europe for the 2012–13 season started in week 40/2012. Active influenza transmission began around week 49/2012 with influenza-like illness/acute respiratory infection (ILI/ARI) rates peaking in almost all countries between weeks 52/2012 and 8/2013.

→Update of the week

In week 11/2013, 19 countries reported medium intensity and 10 countries reported low intensity. No country reported high intensity anymore, indicating a declining activity in an increasing number of countries.

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

Opening date: 9 February 2011

Latest update: 14 March 2013

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 8 230 cases to the European Surveillance System for 2012. France, Italy, Romania, Spain and the United Kingdom accounted for 94% of all reported cases.

→Update of the week

No new outbreaks were detected during the week leading up to 22 March 2013.

#### 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 22 March 2013, two new outbreaks were detected in Poland.

## Non EU Threats

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### Novel Coronavirus - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012

Latest update: 14 March 2013

From April 2012 to 14 March 2013, the World Health Organization has been notified of 15 laboratory-confirmed cases including nine deaths from an acute respiratory disease caused by a previously unknown coronavirus. Cases have occurred in Saudi Arabia, Qatar, Jordan and the United Kingdom. There have been three clusters of cases with evidence of human-to-human transmission, one in Jordan, one in Saudi Arabia and one in the United Kingdom, where the index case is believed to have been infected during a visit to Saudi Arabia. The reservoir of the novel coronavirus has not been established nor is it clear how transmission is sustained from one sporadic case to another.

→Update of the week

During the week leading up to 22 March 2013 no new cases were reported.

### Acute Respiratory Syndrome -Argentina

Opening date: 2 February 2013

Latest update: 27 February 2013

A cluster of respiratory illness was reported in January 2013 in Buenos Aires province, Argentina, in a local hospital involving 11 patients of which two later died. No additional cases were detected to date.

→Update of the week

On 18 March 2013, health authorities in Buenos Aires province revealed Legionnaires' disease as the cause of the illness.

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

Opening date: 20 April 2006

Latest update: 14 March 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: 21 March 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.

→Update of the week

One new polio case was reported during the week leading up to 22 March 2013, from Nigeria.

## II. Detailed reports

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

Opening date: 2 December 2011

Latest update: 8 March 2013

#### Epidemiological summary

Decreasing or stable trends were reported by 28 countries and increasing trends were only reported by Romania which was the only country where ILI rates have not peaked yet.

In week 11/2013, 46% of tested specimens were positive for influenza virus. This proportion had remained above 50% since week 4/2013 with a peak of 61% in week 5/2013, but the percentage of positive specimens has decreased more sharply from week 10 to 11/2013 (46%), consistent with declining influenza activity.

Since week 40/2012, 48% sentinel specimens tested were type A and 52% type B viruses. Of influenza A viruses subtyped, the proportion of A(H1N1)pdm09 viruses was 63%.

In week 11/2012, 116 hospitalised laboratory-confirmed influenza cases were reported by eight reporting countries. Since week 40/2012, 2 605 hospitalised laboratory-confirmed influenza cases and 154 related fatalities have been reported.

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

#### ECDC assessment

In all reporting countries but one, influenza activity was declining or has already returned to baseline level. After more than three months of active transmission, the 2012-2013 season is subsiding.

#### Actions

ECDC updated its influenza website for the start of the season and published its annual risk assessment for seasonal influenza 2012-2013 in early February based on data up to week 3/2013.

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

Opening date: 9 February 2011

Latest update: 14 March 2013

#### Epidemiological summary

##### UK - update

There are on-going outbreaks in the UK reported earlier in the CDTR.

In [Wales](#), the number of cases in the Swansea area outbreak reached 316 with 64 new cases reported in the last week alone. Measles infection has now spread to children in 111 secondary and primary schools, nurseries and playgroups, increasing the likelihood that unvaccinated children will come into contact with those already infected. Forty two people have been hospitalised.

##### Publications

A [new research article](#) demonstrates that direct contact tracing of aeroplane passengers seated immediately around an infected person is not an effective strategy to prevent further cases. Despite secondary measles transmission occurring in one in five international flights with infectious cases, the risk was not clearly related to seating proximity and contact tracing was ineffective, especially given delays in diagnosis, notification, and accessing flight manifests. The 45 people in the study appeared to have infected 22 fellow passengers. Fifty-five percent had been seated further away than the two-row zone closest to the original case. The authors recommend that direct contact tracing to identify susceptible people exposed to measles cases on aeroplanes should not be undertaken routinely. Other strategies should be considered, such as the media, email and mobile phone text messages, to try to alert everyone who was on a plane that they may have been exposed to measles.

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

#### ECDC assessment

So far in 2013, only the UK and Sweden have 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.

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

Opening date: 7 March 2012

Latest update: 19 September 2012

### Epidemiological summary

#### Poland

There is an on-going outbreak in [Poznan](#) since the beginning of March 2013 with approximately 200 cases affected, most of whom are young men. Another outbreak is reported in [Wielkopolska](#) where 854 cases of rubella were notified during the first quarter of 2013, almost five times more than in the past two years.

There were 27 267 cases of rubella reported during 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 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.

## Novel Coronavirus - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012

Latest update: 14 March 2013

### Epidemiological summary

The first described case of novel coronavirus infection was a 60-year-old male resident of Saudi Arabia who died from severe pneumonia complicated by renal failure in June 2012. A previously unknown coronavirus isolated from this patient was identified and named Human Coronavirus-Erasmus Medical Center (HCoV-EMC/2012). In September 2012, a second case was reported,

a Qatari man, who was transferred for care to Europe. In November 2012, additional cases with similar symptomatology were diagnosed in Qatar and Saudi Arabia. These included a family cluster of three confirmed and one probable case. Subsequently, two fatal cases were confirmed retrospectively by testing stored samples from a cluster of 11 cases of lower respiratory infection linked to a hospital in Jordan in April 2012.

In February 2013, a cluster of novel coronavirus cases was reported from the United Kingdom where the index case had travelled to Pakistan and Saudi Arabia ten days before symptom onset and where contact tracing identified two secondary cases among family members without recent travel. One person died, the other had a self-limiting influenza-like illness which did not require hospitalisation. Three additional sporadic cases have been reported since February, all from Saudi Arabia and fatal. The latest case was notified on 12 March 2013.

This brings the number of cases to 15 globally, including nine deaths.

**Web sources:** [WHO| HPA press release 11 February](#) | [HPA press release 15 February](#) | [HPA update 19 February](#) | [ECDC updated RRA 19 February](#) | [WHO revised interim case definition 19 February](#) | [ECDC novel coronavirus website](#) | [WHO update 21 February 2013](#) | [WHO update 6 March 2013](#) | [WHO update 12 March 2013](#)

### ECDC assessment

Research on the complete genome sequence of the novel coronavirus has characterised the virus as a new genotype that is closely related to bat coronaviruses. It is genetically distinct from SARS-CoV. The routes of transmission to humans and the virus reservoir have not been determined. This is a common problem with emerging zoonoses where there is often simultaneous possibilities including environmental, animal and human exposures.

The cluster of three cases in the UK is evidence of limited human-to-human transmission. However, several hundred contacts of the UK cluster and the case treated in Germany have now been actively followed up without evidence of novel coronavirus infection indicating that the risk of transmission remains low.

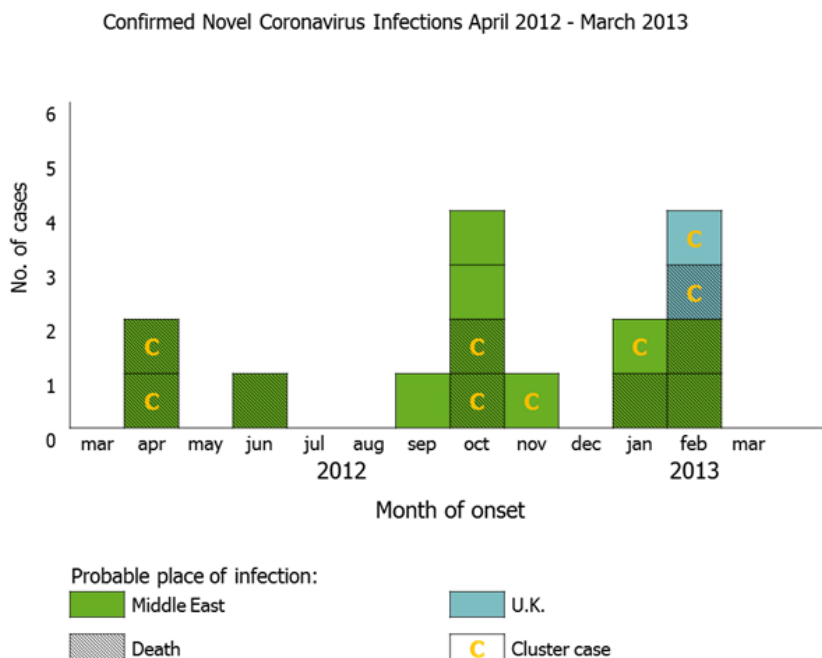
### Actions

ECDC updated its [rapid risk assessment](#), first published on 7 December 2012. The results of an ECDC coordinated survey on laboratory capacity for testing for the novel coronavirus in Europe were published in [EuroSurveillance](#). On 18 March, WHO posted interim surveillance recommendations for human infection with novel coronavirus on their [website](#).

ECDC is closely monitoring the situation in collaboration with WHO and the European Union Member States. If new sporadic cases of confirmed NCoV infection are reported, ECDC will communicate them through this report.

## Novel Coronavirus Infections April 2012 - March 2013

ECDC



## Acute Respiratory Syndrome -Argentina

Opening date: 2 February 2013

Latest update: 27 February 2013

### Epidemiological summary

A cluster of acute severe respiratory disease was reported in January in Carmen de Areco, Buenos Aires province, in a local hospital. Of the 11 affected patients ten were health care workers. Besides respiratory symptoms, patients complained of headache, myalgia, fever and gastrointestinal symptoms, such as nausea, vomiting and diarrhoea. Two of the patients died, the others were discharged. In four of ten [samples analysed](#) influenza A virus was detected by PCR. On 18 March, local health authorities in Buenos Aires province announced in a [press conference](#) that Legionnaires' disease caused the outbreak. The source of the outbreak was not identified.

### ECDC assessment

The diagnosis of Legionnaires' disease as reported by the health authorities in Buenos Aires province is consistent with the disease presentation.

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

Opening date: 20 April 2006

Latest update: 14 March 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:** Cambodia, Lao PDR and Singapore have all reported more cases so far in 2013 than in 2012 for the same time period. Recent trends show declining dengue activity in Australia, Cambodia and the Philippines. In Thailand, there are currently 1 000–1 500 new cases reported each week throughout the country, four times higher than during the same period last year.

**The Caribbean:** In Guadeloupe 500 people were recorded to have dengue fever since January 2013, including eight

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hospitalisations. Of these, four cases were diagnosed as severe dengue infection. Three serotypes, DENV-1, DENV-2 and DENV-4 are co-circulating since the beginning of 2013 the predominant strain being DENV-1.

Central and South-America: High dengue activity is reported across Central America. In South America, continued high number of cases are seen in Argentina, Ecuador, Paraguay, Brazil and Venezuela. Increasing number of cases are reported in French Guyana with three serotypes co-circulating: DENV-1, DENV-2 and DENV-4.

Pacific: New Caledonia continues to see sustained dengue activity. A dengue outbreak with over 300 clinical dengue cases including two fatalities is still on-going in the Solomon Islands where the Solomon Islands Cabinet has approved the establishment of a National Task Force to address the outbreak. Vanuatu's Department of Health has reported six suspected cases of dengue fever. Samples have been sent to New Caledonia for confirmation. In addition, there are two imported confirmed cases in law students from the Solomon Islands.

#### 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. 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.

### 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: 21 March 2013

### Epidemiological summary

One new wild poliovirus 1 (WPV1) case was reported to WHO from Nigeria during last week. Worldwide, 11 polio cases have been reported so far in 2013 compared to 31 cases for the same time period in 2012.

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

### ECDC assessment

The WHO European Region so far remains polio-free.

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.

### 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 (WPV) into the EU.



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