

This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary

### EU Threats

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

Opening date: 9 February 2011

Latest update: 27 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

A new outbreak in Denmark was detected during the week leading up to 27 March 2013 with five laboratory confirmed cases in school children in Silkeborg.

The outbreak in Wales is still expanding affecting mostly Swansea area.

#### 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 rates peaking in almost all countries between weeks 52/2012 and 8/2013.

→ Update of the week

In week 12/2013, nine countries reported medium intensity and among those seven countries reported low intensity. No country reported high intensity anymore, indicating a declining activity in an increasing number of countries.

## 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 27 March no new outbreaks were detected.

## Non EU Threats

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

Opening date: 20 April 2006

Latest update: 29 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 few sporadic cases still being reported between week 01 and 09 of 2013. 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

Five new polio cases from Nigeria were reported to WHO.

### Novel Coronavirus - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012

Latest update: 31 March 2013

From April 2012 to 28 March 2013, 17 laboratory-confirmed cases including eleven deaths from an acute respiratory disease caused by nCov have been notified. The new virus is genetically distinct from the coronavirus that caused the SARS outbreak. Cases have occurred in Saudi Arabia, Qatar, Jordan, United Arab Emirates 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 28 March 2013 a case was reported by Robert Koch Institute (RKI), Germany. This is second imported case to be reported in this EU Member State. The patient, a 73 year old male with underlying clinical conditions, had been hospitalised in United Arab Emirates and transferred to a hospital in Germany for specific clinical care where subsequent diagnosis of nCoV infection was confirmed. Despite intensive care treatment the patient died on 26 March. Contact tracing and investigations are underway by German public health authorities.

## II. Detailed reports

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

Opening date: 9 February 2011

Latest update: 27 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 432 with 116 new cases reported in the last week alone and 51 people have been hospitalised. The majority of cases are in the Swansea area, but cases are increasingly being reported across the mid and west Wales region corresponding to the biggest outbreak in Wales in more than a decade. 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.

**Denmark:** The Danish [Statens Serum Institute](#) reports that in the week leading up to 27 March there have been five laboratory confirmed cases in Silkeborg, three of the children go to the same school. The index case is a school child returning from a holiday abroad diagnosed with measles on 8 March 2013.

**France:** 43 cases are reported by national health authorities for January and February 2013.

**Sweden:** The outbreak in Stockholm and Uppsala is now considered to be over by national health authorities (SMI). A total of 17 people became ill during the outbreak, which began in January.

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

#### 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.

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

Opening date: 2 December 2011

Latest update: 8 March 2013

#### Epidemiological summary

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

Nine countries reported wide geographic spread with seven of them reporting medium intensity activity. Decreasing or stable trends were reported by almost all reporting countries.

In week 12, 45% of tested sentinel specimens were positive for influenza virus. This proportion has declined since week 5/2013, but still remains at a high level, consistent with continuing significant influenza activity.

Since week 40/2012, 47% of sentinel surveillance specimens testing positive for influenza virus have been type A, and 53% type B. Of the influenza A viruses subtyped, the proportion of A(H1N1)pdm09 viruses has been 63%.

For week 12/2012, 24 hospitalised laboratory-confirmed influenza cases were reported by four reporting countries.

In all reporting countries, influenza activity continued to decline or had already returned to baseline levels. After more than three months of active transmission, a long period compared to other years, the 2012–2013 influenza season is waning and slowly

moving towards its close.

**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.

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

Opening date: 7 March 2012

Latest update: 19 September 2012

### Epidemiological summary

#### Poland

There has been 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.

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

Opening date: 20 April 2006

Latest update: 29 March 2013

### Epidemiological summary

**Europe:** There have been no reports of confirmed autochthonous dengue infections in Europe in 2013, besides the dengue outbreak in Madeira (only sporadic cases during the first month of 2013).

**Asia:** Philippines, Thailand and Singapore are facing on-going outbreaks. The outbreak in Singapore is occurring outside of the

seasonal pattern with a two-fold increase of case compared to the same period in 2013. The three serotype are almost equally contributing to the outbreak. The trend is decreasing in Philippines.

**Africa:** In Kenya, the Kenya Medical Research Institute confirmed several cases of Dengue in Mombasa the second largest city. At least 15 dengue suspected cases of dengue have been recorded recently in the Mombasa region.

**Indian ocean:** Seychelles island reported 74 cases from late January 2013 to 8 March 2013. A limited number of cases is reported in Reunion island (six cases since 15 March 2013).

**The Caribbean:** In Guadeloupe 500 people were recorded to have dengue fever since January 2013, including eight hospitalisations. Of these, four cases were diagnosed as severe dengue infection. Three serotypes, DENV-1, DENV-2 and DENV-4 have been co-circulating since the beginning of 2013 with the predominant strain being DENV-1. The outbreak in Puerto Rico is still above the epidemic threshold.

**Central and South-America:** A high dengue activity is still reported across Central America notably in Costa Rica, El Salvador and Mexico (Yucatan Peninsula, Guerrero, Veracruz, Michoacan, Quintana Roo, Tobasco and Yucatan). In Costa Rica, the current outbreak is the highest one in the last decade for this period (5615 cases in 2013 compared to 1437 cases in 2012 and 1158 cases in 2011 for the same period).

In South America, continued high number of cases are recorded with an intense circulation of virus in Uruguay (four-fold number of cases compare to the same period in 2012) and in the southern part of Brazil (especially in the Espitito Santo, Mato Grosso, Minas Gerais, Parana and Rio de Janeiro states). In Paraguay, the dengue epidemic is still rising mainly due to DENV-2 serotype. Bolivia, Ecuador, Peru, Venezuela are notifying outbreaks. Sporadic cases are reported in the northern part of Argentina and Colombia (Province of Mares).

**Pacific:** In New Caledonia, the epidemic due to DENV-4 is strongly increasing and health authorities are re-enforcing prevention measures. A dengue epidemic (DENV-1 and DENV-3) is reported in French Polynesia by health authorities. The World Health Organization and the Solomon Islands health authorities are working on community measures to respond to the outbreak and to disrupt mosquito breeding sites in the 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

On 26 Mar 2013, 16 polio cases have been reported worldwide so far in 2013 compared to 33 cases for the same time period in 2012: Nigeria (10 cases, among those 5 cases during the last week from Borno and Yobe states), Pakistan (five cases) and Afghanistan (one case).

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.

## Novel Coronavirus - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012

Latest update: 31 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.

A case was reported on 25 March by Robert Koch Institute (RKI), Germany, and is the second imported case to be reported in this EU Member State. The patient, a 73 year old male with underlying clinical conditions, had been hospitalised in United Arab Emirates and transferred to a hospital in Germany (Munich) for specific clinical care where subsequent diagnosis of nCoV infection was confirmed. Despite intensive care treatment the patient died on 26 March.

This brings the number of cases to 17 globally, including eleven deaths.

Latest news : A study focusing on the susceptibility of several human and animal cell lines to novel coronavirus (NCoV) is published suggesting that the range of human tissues that are susceptible to infection appears to be broader than all other human coronaviruses (such as SARS) and that NCoV can infect cells from non-human primates ([Editorial](#) : McIntosh K, J Infect Dis 2013 ; [Study](#): Chan JF et al. Differential cell line susceptibility to the emerging novel human betacoronavirus 2c EMC/2012: implications on disease pathogenesis and clinical manifestation. J Infect Dis 2013).

**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](#) | [RKI risk assessment 26 March](#) | [WHO update 26 March](#)

### 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

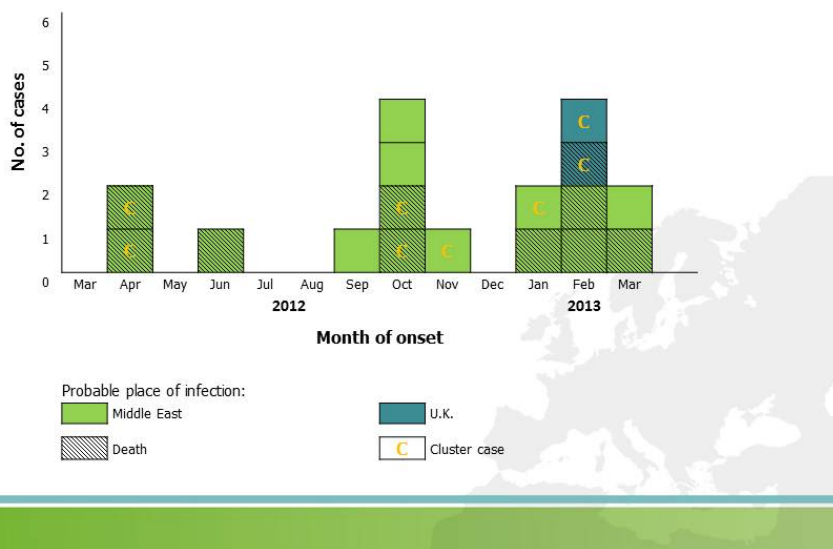
ECDC updated its [rapid risk assessment](#), first published on 7 December 2012 and an epi-update the 27th of March ([Epidemiological update ECDC](#)). The results of an ECDC coordinated survey on laboratory capacity for testing for the novel coronavirus in Europe were published in [EuroSurveillance](#). 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.

## Confirmed Novel Coronavirus Infections, April 2012 - March 2013



Confirmed Novel Coronavirus Infections, April 2012 - March 2013



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