

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: 25 April 2012

Measles is still endemic in many countries of Europe due to a low uptake of immunisation. In the past decade the susceptible population has increased, leading to a resurgence of the disease. More than 30 000 cases were reported in EU Member States in each of the last two years.

So far in 2012, outbreaks or clusters were reported by 17 of the 29 reporting EU and EEA countries. The highest numbers were noted in the United Kingdom followed by Romania and Spain. In neighbouring Ukraine, an ongoing major outbreak is of concern, with more than 8 000 cases reported in 2012.

→Update of the week

From the 21 to 27 April there were no new outbreak or cluster detected in EU Member States. Update from the UK outbreaks show that the number of cases is still increasing.

Influenza - Multistate (Europe) - Monitoring 2011-2012 season

Opening date: 2 December 2011

Latest update: 19 April 2012

Following the 2009 pandemic, influenza transmission in Europe has returned to its seasonal epidemic pattern with peaks 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 week 16 all reporting countries experienced low-intensity influenza activity, except Slovakia which reported medium activity.

Non EU Threats

New! Severe respiratory disease of unknown origin – Jordan

Opening date: 26 April 2012

Latest update: 27 April 2012

Eleven people are reported to have been affected by a respiratory disease in an ICU unit in a Jordanian hospital, including one fatality. Most of the affected are said to be health care workers.

Influenza A(H5N1) - Multistate (world) - Monitoring human cases

Opening date: 15 June 2005

Latest update: 12 April 2012

The influenza A(H5N1) virus, commonly known as bird flu, is fatal in about 60% of human infections, and sporadic cases continue to be reported, usually after contact with sick or dead poultry from certain Asian and African countries. No human cases have been reported from Europe.

→Update of the week

In the period 21 to 27 April 2012, WHO did not acknowledge new human cases of avian influenza A(H5N1).

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 26 April 2012

Dengue fever is one of the most prevalent vector-borne diseases in the world, affecting an estimated 50 to 100 million people each year, mainly in the tropical regions of the world. There are no important recent developments in global dengue epidemiology. However, the identification of sporadic autochthonous cases in non-endemic areas in 2010 and 2011 highlights the risk of occurrence of locally acquired cases in EU countries where the competent vectors are present.

→Update of the week

There have been no reports of autochthonous dengue infections in Europe so far in 2012.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 26 April 2012

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. Forty-seven cases have been reported in 2012 worldwide so far.

→Update of the week

During week 16, one new polio case with symptom onset in 2012 was reported to WHO.

II. Detailed reports

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 25 April 2012

Epidemiological summary

I. European Union Member States

UK - update

Source: [HPA Notifications of Infectious Diseases](#) and [Health Protection Report](#)

The UK has already reported 1 206 suspected cases of measles so far this year in several ongoing outbreaks. One outbreak in the Merseyside area is the largest in the north west of England since the MMR vaccine was introduced in 1988 with 186 confirmed cases. The virus genotype is B3. An outbreak in north Wales which began in February has primarily been linked with one secondary school with spread to younger unvaccinated children within families in the locality. The virus genotype associated with this outbreak is D8. The south east and London regions have reported cases during the first months of 2012 and the predominant virus genotype is D4.

II. Neighbouring countries

Ukraine

Source: [MOH](#)

As of 24 April 2012, 8 082 cases of measles were recorded in six western regions.

III. Rest of the world

United States

Source: [Morbidity and Mortality Weekly Report \(MMWR\)](#)

In 2011, the US saw the highest number of measles cases in 15 years with many of the cases linked to foreign travel, especially to Europe. There were 222 cases from 31 states, including 17 outbreaks (defined as three or more cases linked in time or place). The median outbreak size was six cases (range: 3–21 cases), and outbreaks lasted a median of 18 days (range: 6–69 days). No measles deaths were reported, but about a third of the 2011 cases were hospitalised. Almost half (46%) of the 72 measles importations occurred among persons who acquired the disease in Europe. Two hundred cases (90%) were associated with importations from other countries.

IV. Publications

An analysis published in the [Lancet](#) said measles deaths had fallen by 74% between 2000 and 2010 (from 535 300 to 140 000). The target of 90% reduction was not reached due to outbreaks in Africa and delays in vaccination programmes in India.

European Immunization Week (EIW)

ECDC organised a "Free Thinkers" meeting gathering public health experts, behavioural specialists and social marketing professionals to find innovative ways on how to fight the spread of measles in Europe that took place at ECDC on 25 April and launched the guide '[Communication on immunisation - building trust](#)'. ECDC also produced a [documentary](#) in collaboration with Euronews, dedicated to measles elimination in the EU.

Web sources: [ECDC Monthly Measles Monitoring 19 March 2011](#) | [ECDC/Euronews documentary](#) | [MedISys Measles Webpage](#) | [EU-VAC-net ECDC](#) | [ECDC measles factsheet](#) | [ECDC RRA on the measles outbreak in Ukraine](#) |

ECDC assessment

A decline in the uptake of immunisation in the past decade in Europe has increased the susceptible population, and measles has re-emerged in the region. When the number of susceptible individuals increases, the incidence of measles increases as well, and the interval between epidemic peaks decreases.

Transmission follows the traditional seasonal pattern of measles. Last year's outbreaks in Europe peaked in May and declined over the rest of the year. The number of reported cases started to increase in some of the EU Member States (Romania and France) towards the end of 2011. To date, three countries have noted large outbreaks in 2012: the UK, Romania and Spain. In other EU Member States the reported numbers are lower so far this year than those reported for the corresponding period last year.

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 eliminate 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.

Actions

In June 2012, Ukraine and Poland will host the UEFA European Championship with hundreds of thousands of visitors expected from several European countries. ECDC has prepared a [rapid risk assessment](#) to assess the risk of visitors to Ukraine becoming infected and subsequently importing and spreading measles within the EU on their return.

Influenza - Multistate (Europe) - Monitoring 2011-2012 season

Opening date: 2 December 2011

Latest update: 19 April 2012

Epidemiological summary

The 2011/2012 influenza season started late and has been without any clear geographic progression across Europe.

During week 16, all reporting countries experienced low-intensity influenza activity except Slovakia that reported medium activity. Decreasing or stable trends were reported by 23 countries. Of 315 sentinel specimens tested, 24.1% were positive for influenza virus. This percentage of specimens positive for influenza viruses has been decreasing since week 8/2012. In addition, the absolute number of detected influenza viruses is decreasing, but the proportion of B viruses in comparison with A viruses is increasing (22.1% vs. 77.9%). Of the severe acute respiratory infection (SARI) cases reported during week 16/2012, two were confirmed to be related to influenza virus infection, one type A and one sub-type A(H3).

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

ECDC assessment

The decrease in the proportion of influenza-positive sentinel specimens together with the growing number of countries reporting continuously decreasing trends in the incidence of influenza-like illness or acute respiratory infection indicate that the epidemic peak has passed in most European countries.

As often observed late in the season, the proportion of influenza B viruses among the detected influenza viruses has been increasing over the past eight weeks.

New! Severe respiratory disease of unknown origin – Jordan

Opening date: 26 April 2012

Latest update: 27 April 2012

Epidemiological summary

An outbreak of a [respiratory illness](#) was reported by media in an ICU unit in a hospital in Zarqa, Jordan. Seven nurses, a doctor and a family member of one of the nurses, were infected with the disease that is believed to be pneumonia. One of the nurses died. According to unconfirmed [media](#) reports there are additional cases and fatalities.

ECDC assessment

ECDC is following this event due to its severity including one fatality and the unusualness of the disease affecting health care staff. These cases drew high media attention this week.

Actions

ECDC contacted both Episoth, WHO and US CDC for further information. Both WHO and US CDC are following this event

Influenza A(H5N1) - Multistate (world) - Monitoring human cases

Opening date: 15 June 2005

Latest update: 12 April 2012

Epidemiological summary

No new cases of A(H5N1) were reported by WHO during the last week.

Since 2003, 602 cases (including 355 deaths) have been notified in 15 countries. Of these, 24 (including 15 deaths) were notified in 2012.

Web sources: [ECDC Rapid Risk Assessment](#) | [WHO Avian Influenza](#) | [Avian influenza on ECDC website](#)

ECDC assessment

Most human infections are the result of direct contact with infected birds, and the World Health Organisation notes it has never identified a 'sustained human-to-human spread' of the virus since it re-emerged in 2003. Countries with large poultry populations in close contact with humans are considered to be most at risk of bird flu outbreaks. Hong Kong reported the world's first recorded major outbreak of bird flu among humans in 1997, when six people died.

ECDC follows the worldwide A(H5N1) situation through epidemic intelligence activities in order to identify significant changes in the epidemiology of the virus. ECDC re-assesses the potential of a changing risk for A(H5N1) to humans on a regular basis. There are currently no indications that from a human health perspective there is any significant change in the epidemiology associated with any clade or strain of the A(H5N1) virus. This assessment is based on the absence of sustained human-to-human transmission, and on the observation that there is no apparent change in the size of clusters or reports of chains of infection. However, vigilance for avian influenza in domestic poultry and wild birds in Europe remains important.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 26 April 2012

Epidemiological summary

Europe: No autochthonous cases in 2011 or in 2012 to date.

Africa: No recent updates for La Reunion. Suspected cases are still reported in the western region. According to official data there were 10 autochthonous cases this year.

Asia: According to the latest dengue update from the WHO Western Pacific Regional Office the activity in the region is stable. Laos and Australia report more cases than in 2011 but the overall trend is declining. Local outbreaks are reported by the media in the south of the Philippines and in Sri Lanka where cases have reached 10 000 this year, half of them from the western province. Cambodia is experiencing a recent increase in activity, and there is fear that a situation similar to the 2007 outbreak could occur. Malaysia and Indonesia (West Java) reached their highest activity this year.

Latin America: High activity reported in the region. In Brazil the municipality of Rio de Janeiro has declared an epidemic alert this week. DENV-4 is the circulating strain. Argentina is reporting a recent increase in cases in Salta province with more than 50 cases confirmed. The area is bordering a Bolivian municipality where more than 1 000 suspected cases were reported.

Pacific: Niue authorities are considering that the outbreak has peaked this week, with around 50 cases confirmed (the last outbreak was in the 1980s). Three more cases were reported this week in New Caledonia bringing the total this year to 32 (the last outbreak - chikungunya/dengue - occurred in 2010).

Web sources:

[DengueMap CDC/HealthMap](#) | [MedISys dengue](#) | [ProMED dengue latest update](#) | [WPRO dengue latest update](#) | [ECDC dengue fever factsheet](#)

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 were detected in other European countries, highlighting the risk of locally acquired cases occurring in countries where the competent vectors are present.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 26 April 2012

Epidemiological summary

On 26 April 2012, WHO reported one new case (WPV1) from northern Nigeria (Katsina). A continued surge in cases in northern

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Nigeria poses the risk of renewed spread of the virus to other nations in west Africa. In the past, the polio virus has spread from northern Nigeria to Niger, then onto Burkina Faso and Mali.

Several media quoting the Niger State Commissioner for Health reported this week the first wild polio virus in Niger after three years of polio-free status. The case seems to be imported from Zamfara area, Nigeria. Niger health authorities are organising a mop-up campaign in the area of detection.

So far, 48 cases with onset of disease in 2012 have been reported globally compared with 120 for the same period in 2011.

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

ECDC assessment

ECDC follows reports of polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and to identify events that could indicate the re-introduction of wild poliovirus (WPV) into the EU.

The WHO European Region is 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.

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