



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 14, 1-7 April 2012

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary EU Threats

New! Contamination of a medical product - ViaSpan - Multistate (worldwide)

Opening date: 4 April 2012

Latest update: 4 April 2012

On 30 March, after reports of potential contamination with *Bacillus cereus*, Bristol-Myers Squibb issued a voluntary precautionary recall of all batches of ViaSpan® - a solution used for the preservation of kidney, liver and pancreas before transplantation - produced since 4 July 2011.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 2 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 14 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 6 500 cases reported so far in 2012.

→Update of the week

During 31 March to 6 April there was a cluster reported by the media in Murcia, Spain. The number of cases is increasing in the UK outbreaks.

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

Opening date: 2 December 2011 Latest update: 22 March 2012

Following the 2009 pandemic, vaccine-preventable 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 13, decreasing trends were reported by 19 countries, 15 of which have reported such trends for at least two consecutive weeks while only Slovakia reported an increasing trend.

Non EU Threats

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

Opening date: 15 June 2005 Latest update: 29 March 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. There are currently no indications from a human health perspective of significant changes in the epidemiology associated with any clade or strain of the A(H5N1) virus, and no human cases have been reported from Europe. 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.

→Update of the week

On 2 April 2012, WHO acknowledged two new human cases of avian influenza A(H5N1) in Egypt.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 2 April 2012

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. 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: 29 March 2012

Polio, a crippling and potentially fatal vaccine-preventable disease, 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, WHO reported 650 cases in 2011. Thirty-six cases have been reported in 2012 so far.

→Update of the week

During week 13, four new polio cases with symptom onset in 2012 were reported to WHO.

II. Detailed reports

New! Contamination of a medical product - ViaSpan - Multistate (worldwide)

Opening date: 4 April 2012 Latest update: 4 April 2012

Epidemiological summary

On 30 March, Bristol-Myers Squibb issued a voluntary precautionary recall of all batches of ViaSpan®, produced since 4 July 2011, after reports of potential contamination with *Bacillus cereus*. Viaspan® is a solution used for the preservation of kidney, liver and pancreas before transplantation. This solution is manufactured by a third party, Fresenius Kabi in Austria and is supplied to a number of countries around the world.

ECDC assessment

A potential contamination of an organ perfusion solution with *B. cereus* has been identified. Currently, *B. cereus* has not been isolated in the organ perfusion solution itself but only in the media fill process. No cases of *B. cereus* infection following transplantation were reported up to date. However, *B. cereus* may cause serious infection in immune-compromised patients. The product is widely distributed to several countries in the world.

Therefore, the following approach should be considered for mitigating this risk:

- 1. Patients who underwent transplantation of organs or tissues which were maintained between procurement and transplantation in Viaspan® since July 2011 should be monitored according to standard practices aimed at early detection of signs and symptoms of infection or rejection.
- 2. In the event of a patient presenting with such symptoms, a thorough microbiological investigation should be conducted, according to standard practices, and *B. cereus* be considered as cause rather than a contaminant if isolated. Patient should be treated accordingly. Clinicians and laboratories should be alerted about this potential risk.
- 3. Alternatives for preservation fluid for organs and tissues should be considered whenever possible for patients who need to undergo transplantation of organs or tissues maintained in Viaspan® of the suspected batches. The peri-operative prophylaxis regimen should be adjusted and include antibiotics that are likely to be effective against *B. cereus* such as ciprofloxacin or vancomycin.

The results of the on-going investigation of the possible contamination of the product, its geographical distribution, and of the microbiology characteristics of the incriminated strain will allow further refining of this rapid risk assessment.

The remaining uncertainties regarding the confirmation and extent of contamination of the implicated batches, the microbiological characteristics and antibiotic susceptibility pattern of the implicated strain are limiting the ability to accurately assess the risk. This assessment will be updated as new information is made available.

Actions

ECDC has prepared a rapid risk assessment, which has been distributed to national and EC authorities responsible for organ safety.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 2 April 2012

Epidemiological summary

I. European Union Member States

UK - update on ongoing outbreaks

Source: HPA weekly report

There are several ongoing outbreaks in the country since January 2012. One outbreak in the Merseyside area is the largest in the North West of England since the MMR vaccine was introduced in 1988 with 127 confirmed cases and additional cases under investigation. In the North Wales outbreak, there are now 49 cases (28 confirmed), all within the geographical area of the secondary school that was originally implicated.

As of 1 April 2012, 977 suspected cases of measles were notified in the UK compared to around 500 during the same period in 2011.

Spain - new cluster and area

Source: media and <u>Instituto de Salud Carlos III</u>

Spain had 669 suspected cases during the first three months of this year compared to around 2 000 cases for the whole of 2011, most of them in Valencia and Alicante.

During this week, there was a cluster of three cases (two children of 16 and 4 years of age and a baby of ten months) detected in a village in the <u>Murcia region</u>, which is neighbouring Alicante. Control measures include mass vaccination of all schoolchildren in the village and neighbouring populations, and home visits in Roma areas, extended to the whole municipality, to check the children's immunisation status.

There was a second suspected case of measles in <u>Navarra</u> where a toddler was diagnosed with measles as reported last week. Only two cases were detected in the area since 2006.

France - awareness and immunisation campaign

Source: media

A pilot awareness programme is being launched in the south of France, in Lacaune, including a vaccination campaign and a public debate on the perception of immunisation, barriers to vaccination, the influence of social networks, the benefits and side effects of vaccination. An evaluation of this programme is also planned to measure the impact on the population and among health professionals involved.

II. Neighbouring countries

Ukraine - update on the number of cases

Source:MOH

As of 2 April 2012, 6 570 cases were reported, still mostly in the western parts of the country.

Russian Federation - update on number of cases and outbreaks

Source: Rospotrebnadzor and media

During the first two months of 2012, 1 050 cases of measles were reported in the Russian Federation in 39 regions. The largest number of cases (86%) was registered in the Central, Southern and Northern Caucasus federal district.

The earlier reported outbreak in St Petersburg has reached 142 cases of which 117 were laboratory confirmed. There were an unknown number of fatalities.

A cluster of nine cases is reported in the Rybinsk region of Yaroslav Oblast where no cases were detected in the past 15 years. A further 700 people may have been exposed to measles infection.

Web sources: ECDC Monthly Measles Monitoring 19 March 2011 | MedISys Measles Webpage | EUVAC-net ECDC | ECDC measles factsheet | ECDC RRA on the measles outbreak in Ukraine | WHO Epidemiological brief |

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 includes 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 <u>rapid risk assessment</u> 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: 22 March 2012

Epidemiological summary

The 2011/12 influenza season started late and has been without clear geographic progression across Europe.

In week 13/2012, decreasing trends were reported by 19 countries, 15 of which have reported such trends for at least two consecutive weeks while only Slovakia reported an increasing trend.

Of 678 sentinel specimens tested, 244 (36%) were positive for influenza virus. The proportion of sentinel specimens testing positive for influenza virus has decreased over five consecutive weeks. Of the positive sentinel specimens 77.9% were type A and 22.1% type B. There has been a degree of heterogeneity in the antigenicity of the A(H3) viruses this season and an imperfect fit with the A(H3) component in the seasonal vaccine. Since week 40/2011, 1 638 severe acute respiratory infection (SARI) cases, including 87 fatalities, have been reported by seven countries. Of these cases, 1 177 were influenza-related. No resistance to neuraminidase inhibitors (oseltamivir and zanamivir) has been reported so far this season.

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 seven weeks.

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

Opening date: 15 June 2005 Latest update: 29 March 2012

Epidemiological summary

On 2 April 2012, WHO confirmed two new human cases of avian influenza A(H5N1) virus infection. The first case was a two years old female from Demiatta Governorate. Epidemiological investigations into the source of infection indicate that the case had exposure to dead backyard poultry. The second case was a fifteen year old female from Giza Governorate. Epidemiological investigations into the source of infection is ongoing. Of the 166 cases confirmed to date in Egypt, 59 have been fatal.

Since 2003, 600 cases (including 352 deaths) have been notified in 15 countries. Of these, 22 (including 12 deaths) were notified in 2012.

Web sources: ECDC Rapid Risk Assessment | WHO Avian Influenza | Avian influenza on ECDC website

ECDC assessment

The H5N1 virus is fatal to humans in about 60% of cases. 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: 2 April 2012

Epidemiological summary

Europe: There have been no autochthonous cases in 2011 or in 2012 to date.

Africa: Since 1 January 2012, 46 suspected dengue cases have been investigated on La Reunion including seven autochthonous cases, four of which were confirmed. Control measures and enhanced surveillance are ongoing. According to a study 97% of the population had no immunity against dengue virus. An outbreak in 2004 affected several hundreds of people on the island. **South Asia:** Cases are still being reported in Karachi, Pakistan. Intensive awareness and control campaigns are taking place. **South-East Asia:** Relatively low and stable activity in the region. The number of cases has increased in Cambodia during the three past weeks compared to historic seasonal baseline. In Singapore, the disease trend has been increasing during the last three weeks but the overall trend remains low.

Pacific: In Niue there was a decline in cases after an outbreak at the end of February but there has been a resurgence in the number of cases last week after heavy rains.

South America: Increasing number of cases are reported from several countries. In Brazil, Mato Grosso state reports an increase of 117 per cent compared to the same period last year. In Paraguay, the epidemic is concentrated in Asuncion and the metropolitan area, as well as in the Central department adjacent to the capital. In Ecuador, the circulation of DENV-4 is confirmed. In 2011, types 1, 2, and 4 predominated.

Central America: In Mexico, Acapulco is the region with the most cases followed by the north region and the central area.

Caribbean: No major developments have been reported. **North America:** No recent developments have been reported

Web sources:

<u>DengueMap CDC/HealthMap| MedISys dengue|ProMED latest update| WPRO dengue update| ECDC dengue fever factsheet|</u>
PAHO Brazil press release|MoH Brazil summary 2012|

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: 29 March 2012

Epidemiological summary

During week 13, four new polio cases (three WNV3 and one WNV 1) from three new districts in Nigeria were reported to WHO. All cases had a date of onset of disease in 2012.

So far, forty cases with onset of disease in 2012 have been reported globally compared with 78 for the same period in 2011.

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis

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.