



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 15, 8-14 April 2012

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary EU Threats

Contamination of a medical product - ViaSpan — Multistate (worldwide)

Opening date: 4 April 2012 Latest update: 12 April 2012

On 30 March 2012, 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: 12 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 7 200 cases reported so far in 2012.

→Update of the week

From the 7 to 13 April there were no new outbreaks or clusters 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: 12 April 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 14, decreasing trends were reported by 20 countries, 18 of which have reported such trends for at least two consecutive weeks while no country reported an increasing trend.

Non EU Threats

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 5 to 12 April 2012, WHO acknowledged two new human cases of avian influenza A(H5N1).

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 12 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: 12 April 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 15, one new polio case with symptom onset in 2012 was reported to WHO.

II. Detailed reports

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

Opening date: 4 April 2012 Latest update: 12 April 2012

Epidemiological summary

On 30 March, Bristol-Myers Squibb (BMS) 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.

Bacillus cereus, a germ commonly found in the environment, was isolated from an aseptic process simulation (so called "media fill") which is performed every 6-8 months in the production plant to test sterility. B. cereus has not been isolated from batches of the ViaSpan® perfusion solution. According to a BMS risk assessment dated 11 April, 240 samples taken from 4 batches of ViaSpan retained at the plant had no growth after 5 days of incubation. ViaSpan® solution inoculated with B. cereus and incubated for 15 days at 4° C indicated no growth (the recommended storage temperature of ViaSpan® is 2-8° C). Antibiotic Behaviour Study (Antibiogram) for B. cereus performed by BMS found it to be sensitive to Clindamycin, Erythromycin, Moxifloxacin, Gentamycin, Imiprenem, Linezolid, Tigecyclin and Vancomycin. Bacillus cereus was found to be resistant to Cefepim, Cefuroxim, Penicillin and Ampicillin.

ECDC assessment

No cases of *B. cereus* infection in transplanted patients have been reported to date. However, *B. cereus* can cause serious infection in immune-suppressed patients. The product is widely distributed to several countries in the world.

The ECDC rapid risk assessment of 3 April recommends the following approach for reducing the 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*.

Actions

ECDC prepared a rapid risk assessment dated 3 April 2012, which has been distributed to national and EC authorities responsible for organ safety.

On 12 April, ECDC received additional information from Bristol-Meyer-Squibb (BMS) and the rapid risk assessment is being reviewed in light of this new information. The reports from BMS has been shared with the European Commission.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 12 April 2012

Epidemiological summary

I. European Union Member States

United Kingdom - update Source: <u>HPA</u> and <u>WalesNHS</u>

The UK has reported 1 046 suspected cases of measles so far this year compared to 621 during the same period last year. 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 147 confirmed cases (an increase by 20 cases since last week) and additional cases are under investigation. In Wales, 112 suspected cases were notified during the first three months of 2012 (compared to 120 for the whole of 2011), most of them within the geographical area of a secondary school where a large outbreak started in early 2012.

Italy - other news Source: the media

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A court in Italy has ruled that the parents of an autistic child born in 2002 are entitled to financial compensation on the grounds that the condition was caused by the MMR vaccination. Media attention is high and the scientific community is concerned as this ruling might be a precedent for other similar cases with consequences for the vaccination programme in Italy.

II. Neighbouring countries

Ukraine - update on the number of cases

Source: MOH

As of 10 April 2012, 7 283 cases were reported. No information is available on complications, hospitalisations or eventual fatalities.

Russian Federation - update on number of cases

Source: the media

During 2012 so far, around 1 500 cases of measles were reported in the Russian Federation in 39 regions.

Web sources: ECDC Monthly Measles Monitoring 19 March 2011 | MedISys Measles Webpage | 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: 12 April 2012

Epidemiological summary

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

During week 14, decreasing trends were reported by 20 countries, 18 of which have reported such trends for at least two consecutive weeks while no country reported an increasing trend.

Of 439 sentinel specimens tested, 132 (30.1%) were positive for influenza virus. The proportion of sentinel specimens testing positive for influenza virus has decreased over six consecutive weeks. Of the positive sentinel specimens 65.2% were type A and 34.8% type B. This is the highest proportion of B type viruses in sentinel samples this season.

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, 1 685 severe acute respiratory infection cases, including 97 fatalities, have been reported by seven countries. Of these cases, most were influenza-related.

No resistance to neuraminidase inhibitors (oseltamivir and zanamivir) has been reported so far this season.

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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.

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

Opening date: 15 June 2005 Latest update: 12 April 2012

Epidemiological summary

In the period 5 to 12 April 2012, WHO confirmed two new human cases of avian influenza A(H5N1) virus infection: one in Cambodia and one in Egypt. The Cambodian case was a 6 year-old female child from Kampong Chhnang Province, who developed symptoms on 22 March 2012 and died on 30 March. The Egyptian case was a 36 year-old female from Giza governorate, who developed symptoms on 1 April 2012 and died on 7 April 2012. Both cases had exposure to poultry.

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

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: 12 April 2012

Epidemiological summary

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

Africa: No major developments have been reported. No updates are available this week about the current situation on La Reunion, where authorities are reporting locally acquired cases since several weeks in the west of the island.

South Asia: In Pakistan cases are still registered in Karachi. Local outbreaks are reported in India.

South-East Asia: No updates available from WHO Western Pacific Region. The activity in the region is still reported as relatively low and stable, with increasing numbers in recent weeks only in Cambodia and Singapore. High activity is reported this week in Malaysia (Selangor).

Pacific: Sporadic cases are still reported in Niue but only in mild to moderate forms.

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South America: WHO Pan American Health Organization warned that there may be a high risk of dengue outbreaks in the region in the second semester of 2012, and has therefore recently published new recommendations to the national health authorities in order to implement further prevention and control measures. During recent months Bolivia, Colombia, Ecuador and Suriname have been reporting unusual activities compared to previous years. The media report local increases in the number of cases in several areas of Brazil and Paraguay (mainly in Asuncion).

Central America: Local outbreaks are reported in several areas of Mexico this week. El Salvador reports a new recent increase in cases in the San Salvador area.

Caribbean: No major developments have been reported. Institut de Veille Sanitaire (InVS) recently made updates available for some Overseas Territories. Martinique reports sporadic cases since February under the expected threshold, with circulation of DENV-1 and 4. Sporadic cases are also reported in St. Bartolomew, St. Martin and Guadeloupe. Guyana is experiencing isolated outbreaks.

North America: No recent developments have been reported.

Web sources:

<u>DengueMap CDC/HealthMap| MedISys dengue|ProMED dengue lates update|WPRO dengue latest update| ECDC dengue fever factsheet| PAHO latest dengue alert|MoH Brazil summary 2012| INVS update for French Overseas Territories |N Engl J Med dengue review article Apr 2012</u>

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: 12 April 2012

Epidemiological summary

During week 15, one new polio case was reported to WHO. It involves a wild poliovirus type 1 (WPV1) case with onset of symptoms in 2012, in a new district in Afghanistan.

So far, 41 cases with onset of disease in 2012 have been reported globally compared with 88 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.