



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 12, 18-24 March 2012

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary **EU Threats**

New! XDR TB - Portugal ex Moldova - Case with travel in 2011 Latest update: 23 March 2012

Opening date: 19 March 2012

Portugal health authorities reported on 20 March a case of extensively drug resistant tuberculosis (XDR TB) who had travelled

from Moldova to Portugal in November 2011 by air and then by bus to Algarve where he was admitted and treated in isolation. The contacts of this patient in Portugal were investigated by Portuguese health authorities and WHO was informed.

→Update of the week

Portugal posted an EWRS on 20 March 2012 with information about the case.

Schmallenberg Virus - Multistate (Europe) - New virus in ruminants

Opening date: 20 December 2011

Schmallenberg virus (SBV), a novel Orthobunyavirus, has been associated with disease in ruminants (cattle, sheep and goats) in several countries in Europe since November 2011. Additionally, one bison has been confirmed positive for Schmallenberg virus in Germany. The disease causes transient clinical symptoms in adult cattle (fever, diarrhoea, reduced milk yield, etc.) and congenital malformation in newborn ruminants. No human cases have been reported by affected countries. ECDC published an assessment of the risk to humans from Schmallenberg virus on 23 December 2011. Transmission to humans is considered unlikely but cannot be ruled out.

Latest update: 15 March 2012

On 13 March 2012, the World Organisation for Animal Health (OIE) reported on the detection of the Schmallenberg virus in Spain.

Last week the Dutch Central Veterinary Institute found anti-SBV antibodies in 70 percent of samples taken from Dutch cattle between 1 November 2011 and 1 February 2012, indicating widespread infection and an underestimation of total cases of SBV infection.

The Institute of Tropical Medicine, Antwerp, found the virus in two out of 23 samples of midges captured outdoors in September and October 2011, confirming the role of biting midges in the transmission and spread of SBV.

The virus was also discovered last week in midges in Denmark which were captured during October 2011. Denmark has not reported Schmallenberg virus in ruminants so far.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 21 March 2012

Measles is still endemic in many countries of Europe and due to a low uptake of immunisation in the past decade the susceptible population has increased, leading to a resurgence of the disease. Outbreaks or clusters were reported by 14 of the 29 reporting EU and EEA countries so far in 2012. The highest numbers were noted in Romania and Spain followed by France, Spain, Italy and the United Kingdom. In neighbouring Ukraine an ongoing major outbreak is of concern, with more than 5 500 cases reported so far in 2012.

→Update of the week

During 17 to 23 March there were no new outbreaks detected in the EU MS. However, the outbreaks in Romania and the United Kingdom are still ongoing and spreading.

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 11, decreasing trends were reported by 15 countries, of which eight reported such trends for at least two consecutive weeks.

Non EU Threats

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

Opening date: 15 June 2005 Latest update: 22 March 2012

The influenza A(H5N1) virus, commonly known as bird flu, is fatal to humans 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 19 March 2012, WHO acknowledged a new human case of avian influenza A(H5N1) in Egypt.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 22 March 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: 22 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. 31 cases have been reported in 2012 so far.

→Update of the week

During 16-22 February, six new polio cases with symptom onset in 2012 were reported to WHO.

II. Detailed reports

New! XDR TB - Portugal ex Moldova - Case with travel in 2011

Opening date: 19 March 2012 Latest update: 23 March 2012

Epidemiological summary

Media reported last week a case of extensively drug resistant tuberculosis (XDR TB) who travelled by bus from Moldova to Portugal and was hospitalised in isolation in Portugal. The Portuguese authorities specified that the patient actually flew from Moldova to Portugal before travelling by bus within Portugal and being hospitalised in November 2011. The contacts of this patient in Portugal are under investigation by Portuguese health authorities.

In 2010, the EU/EEA countries reported nearly 74 000 tuberculosis cases – around 7% less than 2009. While the notifications for multidrug- and extensively drug-resistant tuberculosis (M/XDR TB) have been stable over the past five years, the proportion of extensively drug-resistant patients among this group rose from 8.2% in 2009 to 13.2% in 2010 in the EU/EEA, possibly due to increased reporting. These rising numbers pose a serious threat in the attempt to eliminate TB, highlighting the importance of early detection and adequate treatment of tuberculosis patients in the region.

ECDC published guidance this week on the management of of contacts of MDR and XDR TB cases.

Web source:

Tuberculosis surveillance and monitoring in Europe 2012 | Management of contacts of MDR TB and XDR TB

ECDC assessment

This case highlights the importance of the timely flow of information between concerned health authorities in the EU when there is risk of potential spread of multiple and extensively drug-resistant TB.

The case is reported having travelled while wearing a mask. As the potential exposure happened more than three months ago, and because the flight was less than eight hours, the evidence-based guidelines published by WHO and ECDC do not recommend any further action in relation to the potential exposure on the plane.

Actions

ECDC contacted the Portuguese health authorities who have taken appropriate action, including contact tracing. ECDC will not take further action.

Schmallenberg Virus - Multistate (Europe) - New virus in ruminants

Opening date: 20 December 2011 Latest update: 15 March 2012

Epidemiological summary

Since November 2011, *Schmallenberg virus* has been reported in cattle, sheep and goats in Germany, the Netherlands, Belgium, the United Kingdom, France, Luxembourg and Italy. On 13 March 2012, OIE reported detection of *Schmallenberg virus* on a sheep farm in Andalusia, Spain.

The information available on the *Schmallenberg virus* genome suggests that this virus is part of the Simbu serogroup of the *Bunyaviridae* family, genus *Orthobunyavirus*. Simbu serogroup viruses are primarily transmitted by insect vectors (midges, mosquitoes) although the routes of *Schmallenberg virus* transmission have not yet been confirmed. The potential for direct transmission from animal to animal is yet unknown.

As midges, and to a smaller extent mosquitoes, are believed to be the major routes of transmission, significant spread is unlikely during the winter period when these insects are usually inactive. Transmission could increase again during the 2012 vector season.

So far no human cases have been reported from the affected countries.

Web sources: OIE report Spain | Risk Assessment Netherlands | Dutch Central Veterinary Institute | Veterinaerinstittutet

Denmark | ECDC RRA

ECDC assessment

Despite the spread of the virus in ruminants, the ECDC preliminary risk assessment of the impact of the virus on human health remains unchanged: it is unlikely that the virus can cause disease in humans. To date, no specific morbidity has been observed among farmers and veterinarians. However, as other viruses in the same serogroup are known to be zoonotic and genetic reassortment among members within the *Orthobunyavirus* genus occurs, passive monitoring for clinical symptoms has been initiated among potentially exposed people.

Investigations and research projects are ongoing in the affected countries to better understand the epidemiological and the microbiological aspects of this outbreak among ruminants and humans, and to implement relevant preventive measures.

Public health authorities in the EU Member States have been alerted about this outbreak. The animal and human health authorities, both at national and EU levels, are collaborating closely to ensure rapid detection of any change in the epidemiology in animals and humans, particularly among people who have close contact with infected animals.

Farmers, veterinarians and other people who work with animals are advised to follow protective hygiene measures when working with livestock and abortion material. As a general precaution, as for any zoonotic agent, it is advised that pregnant women should not assist with lambing or kidding.

Actions

The Dutch and German authorities have produced a risk assessment that has been published by RIVM and the Ministry of Agriculture in the Netherlands.

ECDC has conducted a rapid risk assessment in consultation with Germany and the Netherlands regarding the potential risks to human health from *Schmallenberg virus*. It was published <u>on the ECDC website</u> on 23 December 2011. ECDC continues to monitor the situation closely.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 21 March 2012

Epidemiological summary

I. European Union Member States UK -update on the ongoing outbreaks

Source: HPA

The UK reported more than 1000 cases during 2011. There are several ongoing outbreaks in the country since January 2012. North Wales

Six additional cases were detected since the last update bringing the number of cases to 42. 30 cases have been associated with an outbreak at a secondary school. Health officials are now contacting 61 people who came in to contact with a health care worker who had worked while contagious.

Cheshire & Merseyside

There are now 85 confirmed cases compared to 48 in the last update, mainly in Liverpool, since end of January. A further 44 probable cases are being investigated.

Greater Manchester

Six confirmed measles cases since the end of January.

France – update on the epidemic

Source: InVS

France has had more than 22 000 measles cases since 2008. Six deaths were recorded last year. Since 1 January 2012, 228 cases were reported including eight cases with severe pneumonia. The number of monthly reported cases has remained relatively stable since December 2011. This does not indicate the start of a significant next wave of the measles epidemic.

Romania – update on the ongoing outbreaks

Source: the media

Romania has reported more than 4 000 cases during 2011 with a peak in May and the decline in the following months. The number of cases started to increase after the summer with 388 cases reported in November and 544 in December. The outbreaks continued this year and during last week the media reported increased number of cases especially in high schools in Suceava, Piatra Neamt, Vaslui, Sibiu and Brasov.

Spain - update on the Elche outbreak

Source: Eurosurveillance

As of 9 March, 109 cases have been notified. The outbreak started in a neighbourhood where the vaccination coverage of the population is inadequate.

II. Neighbouring countries

Ukraine

Source: Ministry of Health

As of 16 March 2012, 5 597 cases of measles were reported since the beginning of January.

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 | JAMA Progress in Global Measles Control, 2000-2011 | Rubella and CRS in Finland

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, 14 countries have reported cases during 2012, indicating the start of the measles transmission season. However, with the exception of Romania, Spain and the UK, the reported numbers so far this year are significantly lower than those reported by EU MS for the corresponding period last year.

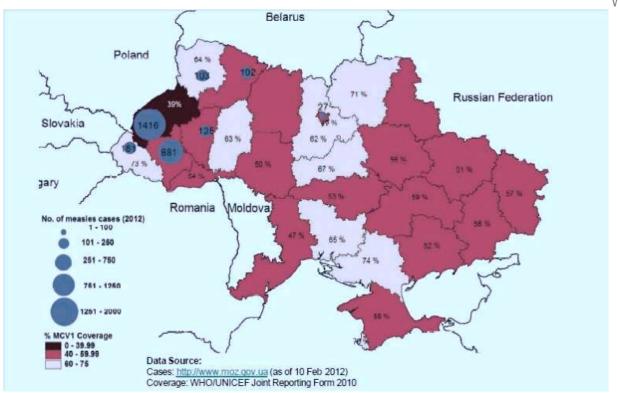
ECDC closely monitors measles transmission and outbreaks in the EU and neighbouring countries in Europe through enhanced surveillance and epidemic intelligence activities. The countries in the WHO European Region, which includes all EU Member States, have committed to eliminate measles and rubella transmission 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 millions 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.

Measles cases in 2012 and MCV1 coverage in 2010 by Region, Ukraine





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

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

Epidemiological summary

The 2011/2012 influenza season started late this season and has been without any clear geographic progression. In week 11, decreasing trends were reported by 15 countries. Of 1 203 sentinel specimens tested, 502 (41.7%) were positive for influenza virus. The proportion of sentinel specimens that tested positive for influenza virus has been decreasing now for three consecutive weeks. Of the sentinel specimens tested and positive for influenza virus, 82.9% were type A and 17.1% type B. The proportion of influenza B viruses reported has doubled over the past two weeks. 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, a total of 1 378 severe acute respiratory infection cases, including 69 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 this season.

The decrease in the proportion of positive sentinel specimens and the increasing number of countries with a continuous decreasing trend in the incidence of influenza-like illness and acute respiratory infection indicate that the epidemic peak has

passed in most European countries. As often observed in the late season, the proportion of influenza B viruses among detected influenza viruses has been increasing in the past few weeks.

Web source: ECDC Weekly Influenza Surveillance Overview

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

Opening date: 15 June 2005 Latest update: 22 March 2012

Epidemiological summary

On 19 March 2012, WHO confirmed a new human case of avian influenza A(H5N1) virus infection from Dakahlia governorate, Egypt. This 40-year old female case, who had contact with backyard poultry, died on 15 March.

Since 2003, 597 cases (including 351 deaths) have been notified in 15 countries. Of these, 19 (including 11 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 Organization 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: 22 March 2012

Epidemiological summary

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

Africa: No significant developments reported recently.

South Asia: No significant developments reported recently; Pakistan is still confirming sporadic cases in Punjab province and in Karachi. The health authorities in the Republic of Maldives issued the first warning for this year to the general public due to a possible increase in cases in the coming weeks.

South-East Asia: WHO Western Pacific Regional Office made available this week an update for the region. The activity is stable overall, with only Laos and Cambodia reporting more cases than in recent years but with no alerting situations. China is reporting a case in Guangdong province, investigation is ongoing to define if this is a local case. Local outbreaks are reported in other areas, mostly in the Philippines and Indonesia.

Pacific: there is no update about the significant recent increase in cases in East Timor however Japanese authorities are reporting this week three imported cases from Dili (DEVN-3, not reported previously). US CDC updated about the situation in the Marshall Islands, which is facing a DENV-4 outbreak.

South America: In Brazil, despite an overall stable situation reported by national authorities, Rio de Janeiro is still reporting an increase in cases (DENV-4) and the first two fatalities of the year in the last two weeks. Several other countries in the Region are reporting local outbreaks, in particular Paraguay (mainly Asuncion), where authorities are expecting a peak in cases between now and mid-April. Peru is facing a recent increase in Cajamarca subregion while in Ecuador, due to the recent relevant increase in

severe cases, the authorities have decided to sell anti inflammatory drugs only by prescription throughout the country to avoid severe cases.

Central America: Local outbreaks are reported in several countries, in particular El Salvador

Caribbean: No major developments have been reported.

North America: No recent developments have been reported but authorities in Hawaii (US) have reported concern this week for possible outbreaks due to the identification of Aedes Aegypti at Honolulu airport for the first time in more than 60 years. Hawaii experienced a limited local cluster last year for the first time since 2001; Aedes albopictus is the usual competent vector.

Web sources:

DengueMap CDC/HealthMap| MedISys dengue|ProMED latest update| WPRO dengue update | ECDC dengue fever factsheet | 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: 22 March 2012

Epidemiological summary

The weekly WHO polio update of 21 March 2012 reports six new polio cases with disease onset in 2012: four cases (two WPV1, two WPV3) in Nigeria, one case (WPV3) in Pakistan and one case (WPV1) in Chad.

31 cases with onset of disease in 2012 have been reported globally compared with 67 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 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.