COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 5, 27 January-2 February 2013

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

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 1 February 2013, no new outbreaks were detected in EU Member States.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 22 October 2012

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. As of 31 October 2012, 7 016 cases of measles had been reported to the European Surveillance System (TESSy) for 2012. France, Italy, Romania, Spain and the United Kingdom accounted for 94% of the reported cases.

➔Update of the week

During the week leading up to 1 February 2013, the United Kingdom reported an outbreak involving more than 100 confirmed and suspected cases in the North East.

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

Opening date: 2 December 2011 Latest update: 24 May 2012

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.

➔Update of the week

For week 4/2013, approximately two-thirds of the 29 countries reporting indicated medium-intensity transmission, wide geographic spread and increasing trends in a range of combinations, as reported for week 3/2013.

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Non EU Threats

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 31 January 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 sporadic cases still being reported. 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: 31 January 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. Worldwide, 222 cases were reported in 2012 compared with 650 cases in 2011. No cases have been reported with onset of disease in 2013 so far.

➔Update of the week

During the week leading up to 1 February 2013, there were no new polio cases reported to WHO.

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

Opening date: 15 June 2005 Latest update: 25 January 2013

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

Since the last update on 25 January 2013, two new laboratory-confirmed human cases with influenza A(H5N1) virus infection were reported by WHO, both of them from Cambodia, and both fatal.

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II. Detailed reports

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012 Latest update: 19 September 2012

Epidemiological summary

No new outbreaks have been identified since the last update.

From 1 January to 31 October 2012, 26 014 cases of rubella were reported by the 26 EU/EEA countries, contributing to the enhanced surveillance for rubella. Poland and Romania accounted for 99% of all reported rubella cases. Romania in particular has experienced a significant increase in the number of reported cases compared with the same period in 2011. Other countries that reported an increased number of rubella cases in 2012 include the UK, Spain and Sweden.

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 (TESSy) 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.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 22 October 2012

Epidemiological summary

HPA posted an update on their website on 22 January regarding a new outbreak in the North East of the UK. Forty-six confirmed cases have been reported since the beginning of September last year with a further 50 suspected cases compared to 18 confirmed cases in 2011. The majority of cases occurred in unvaccinated school children and young adults with over half of the cases aged between 10 and 30 years. Furthermore, a quarter of cases required hospital treatment.
Nationally the HPA is seeing increasing reports of measles. To the end of September 2012, 1 389 confirmed cases of measles were reported in England and Wales compared to 1 086 for the whole of 2011. During 2012 there have been large outbreaks in the North West in Liverpool (over 500 confirmed cases) and in the South East.

Web sources: ECDC measles and rubella monitoring | ECDC/Euronews documentary | WHO Epidemiological Brief | MedISys Measles page | EUVAC-net ECDC | ECDC measles factsheet

ECDC assessment

So far in 2013, only the UK has reported outbreaks. In 2012, considerably fewer measles cases have been 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. 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.

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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: 24 May 2012

Epidemiological summary

Weekly reporting on influenza surveillance in Europe for the 2012–13 season started in week 40/2012 with active influenza transmission beginning around week 49/2012, approximately six weeks earlier than in 2011/2012.

- For week 4/2013, the proportion of influenza-positive cases among sentinel specimens was high (52%), representing an increase compared to that seen in week 3/2013 (45%).
- Since week 40/2012, an even distribution of influenza types has been observed, 50% each for type A and type B viruses. Among influenza A viruses, an increasing proportion of A(H1)pdm09 over A(H3) has been reported over the past two weeks.
- In the course of week 4/2013, 71 hospitalised laboratory-confirmed influenza cases were reported by five countries (Belgium, Ireland, Romania, Spain, and the UK), 36 (51%) tested positive for influenza A viruses and 35 (49%) for type B.

Web source: ECDC Weekly Influenza Surveillance Overview |

ECDC assessment

Influenza activity continued to rise in week 4/2013 across Europe, although the epidemic may have passed its peak in some north-western countries such as Norway and the UK.

Actions

ECDC has updated its influenza website for the start of the season and is preparing its annual seasonal influenza risk assessment.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 31 January 2013

Epidemiological summary

Europe: There have been no reports of confirmed autochthonous dengue infections in Europe in 2013, apart from the on-going dengue outbreak in Madeira.

Asia: According to an update from WHO Western Pacific Region this week, regional dengue activity is variable across the region. Australia (Cairns, North Queensland), Malaysia, Philippines, Singapore, Cambodia, Lao PDR, Thailand and Viet Nam all reported more cases as compared to the previous year for the same time period. The recent trend is declining or remains low in Australia, Indonesia (East Java), Philippines, Cambodia, Lao PDR and India. However, Singapore and Malaysia are seeing an increase in activity, and New Caledonia has been seeing high activity since late 2012. In the Middle East, 13 new cases of dengue fever were recorded in Jeddah (Saudi Arabia) last week.

A recent study in India (Kerala) indicates the possibility of a recent exotic introduction and also a shift from the existing lineage DENV-3 strains to DENV-4. Lineage shifts in DENV-3 strains have been attributed to increase in disease severity in many parts of the world. This is the first notification of the presence of DENV-4 strains in the Indian subcontinent.

Latin America: Notable dengue activity is reported across Central America, in particular in Mexico and Honduras. For South

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America, as expected, overall high and increasing dengue activity reported, especially across Colombia, Ecuador, Venezuela, Brazil, Bolivia, Paraguay and northern parts of Argentina. Peru and Uruguay reported a limited number of cases.

The Caribbean: According to local health authorities, dengue outbreaks are on-going in Puerto Rico, St. Martin (French and Dutch sides), Dominican Republic and Cuba.

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: 31 January 2013

Epidemiological summary

During the past week no new polio cases were reported to WHO. So far there have been no cases reported with onset of disease in 2013, compared with four for the same period in 2012.

Attacks on polio workers in Pakistan continue with two of them killed by a landmine in the Kurram tribal region of north-west Pakistan on 31 January 2013. A policeman who was accompanying two polio vaccination workers in the same region was also shot dead during the past week. At least 11 polio workers have now been killed in Pakistan in the past month.

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet | WHO EMRO |

ECDC assessment

Although the Global Polio Eradication Initiative missed its end-2012 milestone of stopping all wild poliovirus transmission globally, the programme brought the world very close to eradicating polio as 2012 ended, with the fewest wild polio cases ever reported. Two hundred and twenty-two wild polio cases were reported in 2012 – a reduction of over 60% compared with 2011. However, there are profound concerns about the polio situation for 2013, especially due to difficulties in the implementation of the immunisation programme in Pakistan. The programme has been severely affected by the recent attacks that have killed several polio vaccination campaign workers in Pakistan. This may well have an effect on neighbouring Afghanistan, which, together with Pakistan and Nigeria, is one of the three remaining polio-endemic countries in the world. Other neighbouring countries, such as China where a polio outbreak in 2011 was imported from Pakistan, will be equally at risk. The discovery last week of the wild polio virus strain in Egypt linked to Pakistan gives cause for further unease.

The WHO European Region so far remains polio-free.

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.

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

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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.

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

Opening date: 15 June 2005 Latest update: 25 January 2013

Epidemiological summary

On 25 January 2013, WHO reported three confirmed cases of A(H5N1) virus infections in Cambodia. Two of them, a 15-year old girl and a 35 year old man, died. The third patient, an 8 months old baby, has recovered. The three patients came from three different provinces in Cambodia. All three had contact with poultry prior to their onset of illness.

On 29 January 2013, the Cambodian Ministry of Health published a joint press release with WHO confirming that two more cases of avian influenza have tested positive for the A(H5N1) virus. These are the fourth and fifth confirmed cases of avian influenza in Cambodia so far this year. Both the fourth case, a 17-month-old girl from Kampong Speu province and the fifth case, a 9 year old girl from Kampot Province, died. In both cases, there is evidence of recent deaths among poultry in the village.

Since 2005, there have been twenty six cases of A(H5N1) in Cambodia including 23 fatalities. Out of the twenty six confirmed cases, seventeen were children aged under 14 years and seventeen occurred in females.

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

ECDC assessment

Hong Kong reported the world's first recorded major outbreak of bird flu among humans in 1997, when six people died. Most human infections are the result of direct contact with infected birds, and countries with large poultry populations in close contact with humans are considered to be most at risk of bird flu outbreaks. 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.

Actions

WHO is now reporting H5N1 cases on a monthly basis. ECDC will continue monthly reporting in the CDTR to coincide with WHO reporting.
The CDTR includes the A(H5N1) threat this week due to the new reported cases in Cambodia.

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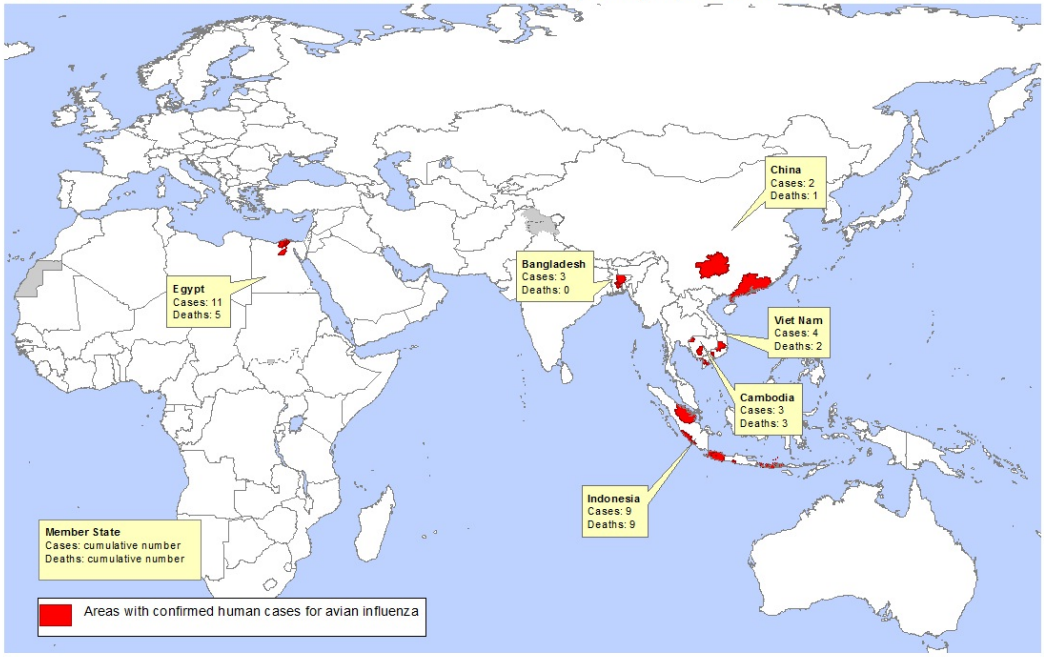
Areas with human cases of A(H5N1)

WHO

Areas with confirmed human cases for avian influenza A(H5N1) reported to WHO, 2012- to-date*,



*All dates refer to onset of illness
Data as of 16 January 2013
Source: WHO/HIP

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