I. Executive summary

**EU Threats**

**Measles - Multistate (EU) - Monitoring European outbreaks**
Opening date: 9 February 2011  
Latest update: 10 May 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, the number of outbreaks and reported cases in the Member States are much lower than during 2011 and 2010. In neighbouring Ukraine, an ongoing major outbreak is of concern, with more than 9 100 cases reported in 2012.

⇒ Update of the week
From 5 to 11 May there was a cluster of two cases reported in Lithuania imported from the Russian Federation. The outbreaks in the UK are still ongoing.

**Influenza - Multistate (Europe) - Monitoring 2011-2012 season**
Opening date: 2 December 2011  
Latest update: 3 May 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 18 all reporting countries experienced low-intensity influenza activity, except Slovakia which reported medium activity.
Non EU Threats

Dengue - Multistate (world) - Monitoring seasonal epidemics
Opening date: 20 April 2006  Latest update: 10 May 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. On 1 May the French health authorities started the seasonal surveillance for dengue and chikungunya in areas of the country where the vector is present.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks
Opening date: 8 September 2005  Latest update: 3 May 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. Fifty three cases have been reported in 2012 worldwide so far.

➔ Update of the week
One new case was reported in the past week in Pakistan.

Influenza A(H5N1) - Multistate (world) - Monitoring human cases
Opening date: 15 June 2005  Latest update: 3 May 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 11 May 2012, no new human cases of avian influenza A(H5N1) were notified by WHO.
II. Detailed reports

Measles - Multistate (EU) - Monitoring European outbreaks
Opening date: 9 February 2011  Latest update: 10 May 2012

Epidemiological summary

I. European Union Member States

Lithuania

Source: Lithuanian Centre for Communicable Diseases and AIDS

Lithuania reported two cases of measles on 30 April in a mother and her daughter who visited St Petersburg and met a relative with measles. Both cases were unvaccinated and both were hospitalised. These are the first laboratory confirmed measles cases this year in Lithuania.

UK-update

The Cheshire & Merseyside area has now 225 confirmed cases since January (an increase of 25 cases since the last update) and there are several new clusters reported in different regions of the country, mostly in schools.

II. Neighbouring countries

Ukraine-update

Source: MOH

Since the beginning of this year as of 10 May 2012, 9 173 cases of measles were registered.

Web sources: Latest ECDC Monthly Measles Monitoring | ECDC/Euronews documentary | MedISys Measles Webpage | EUVAC-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. This year measles transmission is at a much lower level during the ongoing peak transmission season compared to the previous two years. Only three countries have noted large outbreaks in 2012: the UK, Romania and Spain.

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.
Measles cases by month, Italy April 2007-March 2012

Institute of Health (ISS), Italy

Measles cases January 2007- March 2012 United Kingdom

HPA

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

Opening date: 2 December 2011     Latest update: 3 May 2012
Epidemiological summary

The 2011-2012 season is now drawing to a close. However, although decreasing since week 09/2012, virological and epidemiological indicators of influenza activity show that influenza viruses are still circulating in the EU.

Almost all reporting countries experienced low-intensity influenza activity. Decreasing or stable trends were reported by almost all reporting countries. During week 18/2012, of 154 sentinel specimens tested, 23 (14.9%) were positive for influenza virus. This proportion has been continuously decreasing over the past 10 weeks and this is the lowest proportion to date.

The A(H3N2) influenza viruses examined at the WHO Collaborating Centre (WHO-CC) in London show increasing evidence consistent with an imperfect match between the circulating viruses and the current relevant vaccine antigen used in 2011. Similarly the balance has moved towards a predominance of B/Yagamata viruses being seen at the WHO-CC. This supports the WHO and EMA recommendation to modify two components in the trivalent vaccines for the 2012/2013 Northern Hemisphere season.

The absolute number of detected influenza viruses is decreasing, but the proportion of B viruses in comparison with A viruses is increasing. One severe acute respiratory infection case, unrelated to influenza, was reported by Romania.

Web source: ECDC Weekly Influenza Surveillance Overview, WHO recommendation

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.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Epidemiological summary

Europe: No autochthonous cases have been reported to date in 2012. On 1 May the health authorities in France started the seasonal prevention and control activities for dengue and chikungunya for 2012. These include reinforcement of entomological surveillance, enhanced human surveillance for suspected cases, vector-control measures, population awareness and community mobilisation in areas where the presence of the mosquito has been recorded.

Middle East: Increased number of cases were reported in Yemen, in the south west of the coastal governorate of Hodeida. There are reports of dengue cases on the Yemen-Saudi Arabia border where there are a lot of migrants from the Horn of Africa.

Africa and Indian Ocean islands: There are no updates from the region.

Asia: Outbreaks are reported in India and the Philippines. Dengue season has started in Taiwan.

Caribbean: Several provinces are affected in the Dominican Republic.

Latin America: High activity is reported in the entire region. In Brazil several states are affected with DENV-4 as the main strain circulating. Ecuador reports cases in most of its provinces including the Galapagos Islands. Also Paraguay has a high number of cases, nearly 70% in the area of the capital.

Pacific: The Cook Islands reported dengue cases for the first time since 2009.

Web sources:
DengueMap CDC/HealthMap| MedISys dengue| ProMED dengue latest update | ECDC dengue fever factsheet | MoH France, starting of 2012 seasonal surveillance activities |

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.

A review of status and public health importance of invasive mosquitoes in Europe has been funded and coauthored by ECDC and was published on 30 April 2012. A summary is available on ECDC website.

**Poliomyelitis - Multistate (world) - Monitoring global outbreaks**

Opening date: 8 September 2005  Latest update: 3 May 2012

**Epidemiological summary**

One new case of WPV3 was reported in the past week in Pakistan (from Khyber Agency, Federally Administered Tribal Areas). So far, 53 cases with onset of disease in 2012 have been reported globally compared with 145 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.

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

Opening date: 15 June 2005  Latest update: 3 May 2012

**Epidemiological summary**

Since 2003, 603 cases (including 356 deaths) have been notified in 15 countries. Of these, 25 (including 16 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 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.
The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.