I. Executive summary

EU Threats

Measles - Multistate (EU) - Monitoring European outbreaks
Opening date: 9 February 2011  Latest update: 5 July 2012

Measles is still endemic in many countries of Europe due to a decrease in the uptake of immunisation. In the past decade the size of 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. However, so far in 2012, the number of outbreaks and reported cases in the Member States are significantly lower than during 2010 and 2011. Romania, France, Italy, the United Kingdom and Spain accounted for the majority of cases reported so far this year. In Ukraine, there is a large ongoing outbreak with more than 11,000 cases reported so far in 2012.

Update of the week
During the period 14 to 21 July 2012, no new outbreaks were detected.

West Nile virus - Multistate (Europe) - Monitoring season 2012
Opening date: 21 June 2012  Latest update: 18 July 2012

During the West Nile virus (WNV) transmission season (between June and November), ECDC monitors the situation in the EU Member States and in neighbouring countries in order to identify any significant changes in the epidemiology of the disease. In 2011, 130 probable and confirmed cases of West Nile fever (WNF) were reported from the EU Member States and 207 cases in neighbouring countries. Transmission of the virus in Europe has now started for the 2012 season, with so far six cases reported in Greece, seven cases in Russia, and five cases in Israel and the occupied Palestinian territory.

Update of the week
This week, Greece reported four new cases in the Attiki region (that includes Athens). In neighbouring countries, Volgograd Oblast in Russia newly recorded two cases, and five cases were reported in Israel and the occupied Palestinian territory.

Anthrax - Multistate - Injecting drug use
Opening date: 18 December 2009  Latest update: 19 July 2012

Five cases of anthrax in intravenous drug users (IDUs) have been reported in the EU since June 2012: three in Germany, one in Denmark, and one in France. One German case and the case from Denmark have died. There was an outbreak of anthrax involving 124 injecting drug users in the UK (England and Scotland with five and 119 cases respectively) and Germany (three cases) in 2009-2010.

Update of the week
During the period 14 to 20 July, one case of anthrax was reported in an intravenous drug user in France.
Olympics 2012 - MG surveillance (weekly update)

Opening date: 13 July 2012

From 20 July, the CDTR includes a section on threats related to the 2012 Summer Olympics. It contains information gathered through epidemic intelligence activities concerning health events or public health measures relevant for the Games. The information is grouped geographically by UK (as host country), Europe and rest of world.

Update of the week

No major health events were detected or reported this week through the enhanced international surveillance.

Malaria - Greece - 2012

Opening date: 31 May 2012  Latest update: 17 July 2012

Two cases of probable autochthonous transmission of *Plasmodium vivax* malaria were reported by Greece on 22 June and 17 July 2012. Control measures have been put in place in accordance with local guidelines. An additional two cases of malaria were reported by Greece earlier in 2012 but investigations have indicated that these cases are most likely related to late clinical manifestations of an infection acquired in the past, and not related to a recent infection after exposure in Greece.

Update of the week

On 17 July, Greece reported a second autochthonous case of *Plasmodium vivax* infection this year, probably infected in Evrotas, Lakonia. Climatic conditions are now considered favourable for local vector development.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012  Latest update: 11 July 2012

Rubella, caused by the rubella virus and commonly known as German measles, is a usually mild and self-limiting disease and attacks often pass 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 measles vaccine using the MMR vaccine.

Non EU Threats

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006  Latest update: 5 July 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 significant 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. High activity is reported in several endemic areas worldwide.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005  Latest update: 12 July 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. Ninety-six cases have been reported worldwide so far in 2012.

Update of the week

During the period 14 to 19 July 2012, five new polio cases were reported by WHO.

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

Opening date: 15 June 2005  Latest update: 12 July 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

Between 14 and 20 July 2012, WHO reported no new cases of human infection with avian influenza A(H5N1) virus.
Chikungunya - Multistate (world) - Monitoring seasonal epidemics

Opening date: 7 July 2005  Latest update: 19 July 2012

ECDC monitors reports of chikungunya outbreaks worldwide through epidemic intelligence activities in order to identify significant changes in epidemiological patterns.

→ Update of the week

Since the beginning of the year, no autochthonous cases have been reported in Europe.
II. Detailed reports

Measles - Multistate (EU) - Monitoring European outbreaks
Opening date:  9 February 2011  Latest update:  5 July 2012

Epidemiological summary

I. European Union Member States
There were no new outbreaks reported/detected.

II. Neighbouring countries
Ukraine – update
Source: MOH
As of 17 July 2012 there were 11 719 cases of measles cases reported in Ukraine.

Web sources:  ECDC measles and rubella monitoring | ECDC/Euronews documentary | MedISys Measles Webpage | EUVAC-net ECDC | ECDC measles factsheet | WHO Epidemiological Brief 25

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. This year measles transmission was at a much lower level during the peak transmission season compared with the previous two years.

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.
Number of measles cases by country June 2011-May 2012 and two-dose measles vaccine coverage 2010

West Nile virus - Multistate (Europe) - Monitoring season 2012

Opening date: 21 June 2012  Latest update: 18 July 2012

Epidemiological summary
This season, as of 18 July 2012, six human cases of West Nile fever (WNF) were reported in the EU and 12 in neighbouring countries. The West Nile virus (WNV) transmission season has now started in Europe.

EU Member States
Greece
Between 7 and 18 July, Greece reported six autochthonous WNF cases, all in the Attiki region. Additionally, KEELPNO has reported three cases, including a fatality, which are still under investigation - the location of residence of these cases is not yet known.

Neighbouring countries
Russia
Between 2 and 18 July, seven cases of WNF were reported in Russia: five in Astrakhan oblast and two in Volgograd oblast.

Israel and the occupied Palestinian territory
On 12 July, Israel reported five cases of WNF, including one case in the occupied Palestinian territory, previously also reported by the Palestinian Authority through EpiSouth. Affected areas are the Centre (three cases) and Haifa (one case) districts, and Jericho in the West Bank (one case).


ECDC assessment
West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures by the national health authorities are considered important for ensuring blood safety when human cases of West Nile fever occur. In accordance with the EU Blood Directive, efforts should be made to defer blood donations from affected areas that have ongoing virus transmission.
Actions
On 13 July, ECDC updated its Rapid Risk Assessment concerning the epidemiological situation of West Nile virus infection in the European Union. ECDC produces weekly West Nile fever risk maps to inform blood safety authorities regarding affected areas.

Anthrax - Multistate - Injecting drug use
Opening date: 18 December 2009 Latest update: 19 July 2012

Epidemiological summary
In June 2012, Germany reported two cases of anthrax in injecting drug users (IDU) in Regensburg. One of them died. The strain from these cases is reported to be almost identical to the strain from the 2009-2010 outbreak that mostly affected Scotland. A third confirmed case in an IDU was reported on 4 July in Berlin, Germany. This case presented as cutaneous anthrax. Initial molecular typing of B. anthracis DNA from this patient suggests that it could be genetically similar to the first two cases in the Regensburg region, as one of the two indicative single nucleotide polymorphism (SNP) markers showed the expected pattern. As the patient started antibiotic treatment prior to sample collection, living bacteria could not be isolated in order to provide sufficient DNA for further typing.

Denmark also reported a confirmed case of cutaneous anthrax in an IDU in Copenhagen. The person bought heroin in Copenhagen around 1 July 2012 and injected it intravenously in the following days. He died on 8 July. Remains of the purchased heroin have been secured and will be analysed.

Furthermore, France informed ECDC of a case of anthrax in a French IDU. The patient’s onset of symptoms occurred on 11 June 2012. The case is now recovering. The strain will be genotyped and compared with those isolated from German patients. The investigation determined that the heroin used in this case was purchased in France in the Rhône-Alpes region, and that the patient did not travel out of France.

There were three similar cases reported in Germany from December 2009 to March 2010. England and Wales reported five cases during that same period, including four deaths. In Scotland 119 cases had been notified, including 13 deaths during the outbreak in 2009 and 2010.

Public Sources: RKI statement on German cases 2012 | Eurosurveillance article on 1st case in 2012 | SSI statement on Danish case | Statement on French case | Last HPA report | RKI report | Last NHS report | NHS publication | RKI serological investigation

ECDC assessment
The conclusions of the rapid risk assessment published by ECDC and EMCDDA in February 2010 are still valid; the risk of exposure to contaminated heroin for IDU remains present and that accidental contamination seems the most plausible explanation. The report of a case of anthrax in an IDU in Denmark in addition to Germany strongly suggests that contaminated heroin might be circulating in several countries in Europe. The geographical distribution of the contaminated heroin is unknown at this time, but it is possible it has the same source as the contaminated heroin incriminated in the outbreak in 2009 and 2010. The possibility that additional cases among IDUs will be identified in the near future cannot be excluded.

Actions
ECDC and EMCDDA updated their joint rapid risk assessment (RRA) on 13 July.

Olympics 2012 - MG surveillance (weekly update)
Opening date: 13 July 2012

Epidemiological summary
Hosting country - UK
Food poisoning, Australian athletes in UK
Source: media
Three Australian badminton players were confined to bed on Wednesday with symptoms of food poisoning. Two other members of the team are well. The players were in Derby, England which is the location of the Australian team badminton training base.

Toxic caterpillars, London, UK
Source: Local authority and UK Forestry Commission
The UK Forestry Commission reports increased numbers of Oak Processionary Moth caterpillars (Thaumetopoea processionea, OPM) in south London within two distinct areas, including one 12 miles from the Olympic Village. The caterpillar is native to southern and central Europe, and was first identified in the UK in west and south-west London in 2006. Their hairs cause itchy skin rashes as well as eye and throat irritations; hairs can be active for up to five years. Outbreak Management Teams from 2007-2011 have included HPA representation. Advice to anyone coming into contact with these hairs is to seek standard healthcare. Bromley council, at the outbreak site closest to the Olympic village, has set up a 500m monitoring zone.

Europe and rest of world
In addition to those reported elsewhere in this CDTR report, the following events have been monitored this week due to the global public health dimension of the Olympics:

Hand Foot Mouth and Disease, Hunan province, China
Source: Media report quoting Chinese Ministry of Health and a provincial Center for Disease Control and Prevention.
Hunan Province, China reported 34 768 cases of hand, foot and mouth disease in June, of which 17 deaths. This is regarded as much higher than reported in June in 2011 in this province, according to Hunan provincial Center for Disease Control and Prevention. In total in China there were 381 000 HFMD cases and 112 HFMD deaths in June. At least four Chinese provinces and regions have issued warnings for HFMD.

Cholera, Cuba
The total number of cases reported officially since the start of the outbreak on 3 July has now reached 158, with three deaths. V. cholerae El tor O1 serotype Ogawa has been identified as the aetiological agent.

ECDC assessment
Hand foot and mouth disease is endemic in this area of China and elsewhere in Asia and ECDC considers this event to be of very low risk for visitors and participants to the Olympic Games/UK.

Cuba has not reported a cholera outbreak in the last 130 years. A rapid risk assessment on the outbreak in Cuba and relevance for travellers was published by ECDC on 12 July. ECDC considers the risk of spread of cholera to the UK and Olympic Games to be very low.

Actions
ECDC continues to monitor these events. It is working with the Health Protection Agency in the UK in monitoring and assessing international public health threats that could have potential impact on the games.
In 2012, two autochthonous cases of *Plasmodium vivax* infection have so far been reported from Greece.

On 22 June, Greece reported the first case this season in a 78 year old Greek resident who did not report a history of travel to endemic areas in the past five years. He is a resident of a suburb of Athens, but has a summer house in Marathon, Attiki region, where he is believed to have been infected. Onset of symptoms was around 7 June. Laboratory investigation revealed *Plasmodium vivax*, confirmed by molecular biology (PCR). The Marathon area is a known place of malaria transmission, combining humid zones and intensive agricultural activities. Climatic conditions are now considered favourable for local vector development. In 2011, an autochthonous case occurred in a nearby location.

A second case was reported by Greece on 17 July. The case concerns a 48 year old female resident of the municipality of Evrotas, Lakonia, the same area where most cases were reported in 2011. Laboratory investigation revealed *Plasmodium vivax*, confirmed by PCR. The patient reported onset of symptoms on 29 June and had not travelled to a malaria-endemic area during the last five years.

According to the Greek authorities, active screening of neighbours and seasonal immigrants is being carried out to detect malarial infection, and vector control measures are being implemented.

Autochthonous transmission of malaria was reported in 2011: between 21 May and 9 December 2011, 63 cases of *Plasmodium vivax* infection were reported in Greece, of whom 33 were Greek citizens without travel history to an endemic country. The main affected area was Evrotas, located in the district of Lakonia in Pelloponese, southern Greece. Cases were also reported from the municipalities of Attiki, Evoia, Viotia and Larissa. In addition, 30 cases of *P. vivax* infection in migrant workers were reported from the area of Evrotas.

**Web sources:** KEELPNO malaria page | KEELPNO report on malaria case, June 2012 | ECDC Epidemiological update: Local case of malaria in Greece | KEELPNO report on second case, July 2012 (in Greek)

**ECDC assessment**

The report of two autochthonous cases of malaria and the current temperature and entomological indicators suggest that local
transmission of malaria has started.

**Actions**

ECDC is carefully monitoring the situation in Greece and is coordinating with the Hellenic Centre for Disease Control and Prevention (KEELPNO) in order to remain up to date on current epidemiological and entomological findings. ECDC is currently preparing an epidemiological update.

Greece is currently implementing a "Strategic work programme for malaria control in Greece 2012-2015". The programme includes the following activities:

- epidemiological surveillance
- laboratory diagnostic capacity
- vector surveillance and vector control
- clinical management
- communication, information and training activities

### Rubella - Multistate (EU) - Monitoring European outbreaks

**Opening date:** 7 March 2012  
**Latest update:** 11 July 2012

**Epidemiological summary**

From 1 January to 31 May 2012, 16 729 cases of rubella were reported to ECDC by the 25 contributing EU and EEA countries. Poland and Romania accounted for 99% of the total number of cases during the past 12 month period.

**Web sources:** [ECDC measles and rubella monitoring](#) | [WHO epidemiological brief 25](#) | [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 early in pregnancy, within the first 20 weeks, the foetus has a 90% risk of becoming infected and the child may be born with congenital rubella syndrome (CRS), which entails a range of serious incurable illnesses. Spontaneous abortion occurs in up to 20% of cases. Selective vaccination of girls against rubella in a country can paradoxically increase the risk of CRS because partial population immunity will increase the intervals between outbreaks and therefore increase the number of unvaccinated women who reach child-bearing age without having been infected with rubella virus. Elimination of CRS depends on interrupting endemic transmission of the virus and monitoring immunity in pregnant women. Elimination of CRS and rubella transmission is intimately linked to the measles elimination target because of the use of the MMR vaccine. CRS surveillance plays an important role but because rubella virus can cause a wide range of conditions from mild hearing impairment to complex malformations which are incompatible with life, such surveillance is biased towards the severe end of the spectrum. 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.

**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 for the achievement of the 2015 rubella and congenital rubella elimination target.
**Distribution of rubella cases January 2010 - March 2012 by month**

**Dengue - Multistate (world) - Monitoring seasonal epidemics**

*Opening date: 20 April 2006*  
*Latest update: 5 July 2012*

**Epidemiological summary**

**Europe:** No autochthonous cases have been reported in 2011 or in 2012 to date. Seasonal surveillance activities are ongoing in several regions in France but only sporadic imported cases have been reported so far.

**Asia:** Australia, Cambodia, Lao PDR, Malaysia and the Philippines have reported more cases in 2012 than in 2011 during the same time period. In Lao PDR the number of cases registered for the last four weeks has been above the mean for the last five years. The trend is declining in Australia and the Philippines, and activity remains low in Malaysia and Singapore. Cambodia continues to see sustained high and increasing activity. In recent weeks several local outbreaks have been reported in India, with the first cases registered in Delhi where the monsoon season is starting. Ongoing activity reported in Pakistan (Sindh).

**The Pacific:** Around ten suspected dengue cases have been reported recently in New Zealander citizens coming back from Samoa, where the last outbreak was in 2008.

**Latin America:** Local outbreaks are reported in several areas of Central America, in particular in Mexico. Health authorities in El Salvador report a recent increase in cases in the capital. High activity is reported in Ecuador where a four-fold increase in cases is reported compared with the same period of 2011. Several states in Brazil are also affected.

**Web sources:**  
[DenqueMap CDC/HealthMap](http://DengueMap CDC/HealthMap) | [MedISys dengue](http://MedISys dengue) | [ProMED dengue latest update](http://ProMED dengue latest update) | [ECDC dengue fever factsheet](http://ECDC dengue fever factsheet) | [WPRO dengue latest update](http://WPRO dengue latest update) | [InVS Languedoc-Roussillon Epidemiological Update](http://InVS Languedoc-Roussillon Epidemiological Update) | [Latest PAHO update](http://Latest PAHO update) | [Surveillance sanitaire en Midi-Pyrénées](http://Surveillance sanitaire en Midi-Pyrénées)

**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 are 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 was published on 30 April 2012 with a summary available on the ECDC website.
**Poliomyelitis - Multistate (world) - Monitoring global outbreaks**

**Opening date:** 8 September 2005  
**Latest update:** 12 July 2012

**Epidemiological summary**

Five polio cases were notified by WHO last week: two cases, both WPV1, in Afghanistan; one WPV1 case in Pakistan; one WPV1 case in Nigeria; and one WPV1 case in Chad. So far, 96 cases with onset of disease in 2012 have been reported globally compared with 274 for the same period in 2011.

On 17 July, WHO reported that one WHO staff member and one international consultant, both supporting the ongoing polio National Immunisation Days (NIDs), were injured when their vehicle was shot at by armed men in Gadap Town, Karachi, Pakistan. The WHO employees are in stable condition.

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 increase the risk of 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:** 12 July 2012

**Epidemiological summary**

WHO reported no new human cases of influenza A(H5N1) virus infection this week.

Worldwide, 29 cases (including 18 deaths) were notified to WHO since the beginning of 2012.

Web sources: [ECDC Rapid Risk Assessment](#) | [WHO Avian Influenza](#) | [Avian influenza on ECDC website](#) | [WHO H5N1 Table](#)

**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.

**Chikungunya - Multistate (world) - Monitoring seasonal epidemics**

**Opening date:** 7 July 2005  
**Latest update:** 19 July 2012

**Epidemiological summary**

In the EU, seasonal surveillance activities have been ongoing in the south of France since 1 May 2012 in accordance with the [national surveillance plan](#). The aim is to identify imported cases early in order to implement appropriate control measures to prevent further spread. This week, one imported case was identified in the Bouches-du-Rhône department, in the
Provence-Alpes-Côte d'Azur (PACA) region.

No autochthonous cases have been reported in Europe so far this year.

In the overseas territories of France, six autochthonous cases were reported in Mayotte between March and May 2012. There has been no update on the situation since 19 June.

There is an outbreak of chikungunya in Jaipur, India with 29 cases reported since January 2012.

Web sources: MedISys Chikungunya | INVS latest update for Mayotte | INVS PACA latest update | INVS Languedoc-Roussillon latest update | ProMED chikungunya report

**ECDC assessment**

Although the geographic range of the virus is primarily in Africa and Asia there has been a rapid expansion of epidemics over the past decade to new regions of the world due to the worldwide distribution of the main vectors, *Aedes albopictus* and *Aedes aegypti*, combined with increased human travel. There is a risk of further importation of the chikungunya virus into previously unaffected areas of the EU by infected travellers.
The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.