



COMMUNICABLE DISEASE THREATS REPORT

CDTR

Week 46, 11-17 November 2012

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary **EU Threats**

Dengue - Portugal - Madeira outbreak

Opening date: 10 October 2012

Latest update: 8 November 2012

On 3 October 2012, the public health authorities of Portugal reported two cases of autochthonous cases of dengue fever in patients residing in the Autonomous Region of Madeira. This signalled the onset of the first recorded outbreak of dengue in Madeira. The outbreak is ongoing and more cases are expected both in the resident population and among returning tourists. The presence of Aedes aegypti mosquitoes, the main vector for transmission of the virus, has been documented in Madeira since 2005.

→Update of the week

As of 11 November 2012, 1 357 cases cases of dengue fever have been reported from Madeira, of which 669 are laboratory confirmed and 688 probable. Twenty-five cases of dengue were reported among European travellers returning from the island.

Latest update: 28 September 2012

Malaria - Greece - 2012

Opening date: 31 May 2012

Since June 2012, Greece is reporting malaria cases due to Plasmodium Vivax infection. Local control measures have been implemented in accordance with national guidelines.

→Update of the week

As of 26 October, 76 cases of malaria were reported by the national public health authorities: 60 imported and 16 autochthonous cases.

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

Opening date: 21 June 2012 Latest update: 13 November 2012

West Nile fever (WNF) is a mosquito-borne disease which causes severe neurological symptoms in a small proportion of infected people. During the transmission season (between June and November), ECDC monitors the situation in EU Member States and in neighbouring countries in order to identify significant changes in the epidemiology of the disease. In 2011, 130 probable and confirmed cases of WNF were reported from EU Member States and 207 cases in neighbouring countries. To date in the 2012 transmission season 235 probable and confirmed cases have been reported in the EU, and 621 cases in neighbouring countries.

→Update of the week

During the week 9 to 15 November, Tunisia reported 31 additional case cases of WNF, including the two newly affected areas of Tozeur and Sfax. Montenegro reported a probable case of WNF with an uncertain area of infection as the patient had recent travel history within Montenegro.

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 so far in 2012 are significantly lower than during 2010 and 2011. As of 31 August, 5 360 cases of measles were reported to The European Surveillance System in 2012. France, Italy, Romania, Spain and the United Kingdom accounted for 92% of the reported cases.

→Update of the week

There were no outbreaks detected since the last update.

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 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

No new outbreaks were detected in EU Member States during the past week.

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 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 45/2012, all 27 countries reporting clinical data experienced low-intensity influenza activity, but increasing trends were reported by five countries, but not necessarily related to confirmed influenza.

Non EU Threats

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 6 November 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. The identification of sporadic autochthonous cases in non-endemic areas in recent years 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, underlines even more the importance of surveillance and vector control in other European countries (see separate section).

→Update of the week

There is an ongoing outbreak of dengue in the Autonomous Region of Madeira, Portugal described in a separate section of this report with some imported cases reported from other EU member states.

No autochthonous cases were reported in any other European country so far this year.

Novel Coronavirus - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012 Latest update: 5 November 2012

Since June 2012, three patients who presented with symptoms of severe acute respiratory syndrome and a history of travel to or residence in the Middle-East, have tested positive for a novel coronavirus. The novel coronavirus is not genetically similar to the SARS-CoV, and to date the infection has not followed the same epidemiological pattern.

→Update of the week

On 13 November, HPA published the full genome sequence of the virus isolated from the case diagnosed in UK. The analysis of this sequence indicated likely independent sources of infection between the first case reported this year and this case.

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

Opening date: 15 June 2005 Latest update: 27 August 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

WHO has not reported a new case of human infection with avian influenza A(H5N1) virus since 10 August 2012.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 8 November 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. So far in 2012, 187 cases have been reported worldwide compared to 520 cases during the same period last year.

→Update of the week

Six new polio cases were reported to WHO during the week leading up to 14 November.

II. Detailed reports

Dengue - Portugal - Madeira outbreak

Opening date: 10 October 2012 Latest update: 8 November 2012

Epidemiological summary

On 3 October 2012, the Portuguese public health authorities reported two cases of dengue infection confirmed in patients residing on the island of Madeira in the Autonomous Region of Madeira located around 650 km from the African coast, 1 000 km from the European continent and 400 km from the Canary Islands. The autonomous region has 268 000 inhabitants.

As of 11 November, according to an update from the Portuguese Ministry of Health, 1 357 cases of dengue infection have been reported from the public health sector in Madeira, of which 669 were laboratory confirmed and 688 probable cases. Since the beginning of the outbreak, there have been 89 patient hospitalised and five remain in hospital at present. No deaths have been recorded. The sequence analysis of viral genomes (600 nucleotides) from several positive human samples indicates high sequence similarity with DENV-1 circulating in Venezuela and Colombia, strongly suggesting a Latin American origin.

The vast majority of confirmed cases are from the city of Funchal, which is the main port on Madeira island. Cases have also been reported on Porto Santo, the other inhabited island within the Autonomous Region of Madeira, although it is likely that infections happened in Funchal. The island of Madeira has an established mosquito population of *Aedes aegypti*, the main vector of dengue in tropical and subtropical countries.

Twenty-five patients have been so far diagnosed with dengue after returning from Madeira in Portugal (nine), the UK (six), Germany (seven), Sweden (one) and France (two).

Web sources: ECDC fact sheet for health professionals | PT Directorate-General of Health | National Institute of Health Dr. Ricardo Jorge | ECDC Rapid Risk Assessment | WHO | Madeira Institute of Health Administration and Social Affairs

ECDC assessment

This is the first known occurrence of locally transmitted dengue infection in the Autonomous Region of Madeira, and consequently a new geographical area reporting autochthonous cases in the EU.

This is a significant public health event but not entirely unexpected because of the known presence of <u>Aedes aegypti</u>, a competent vector for dengue. The updated figures indicate that the outbreak is ongoing and more cases among the island's population as well as returning tourists should be expected. The cases of dengue among returning travellers from the island highlights the need for travellers to the island of Madeira to take measures to reduce mosquito bites during the day. Travellers experiencing febrile symptoms with severe headache, retro-orbital pain, myalgia, arthralgia and maculo-papular rash in the 14 days after visiting the island of Madeira are advised to seek medical advice.

Neighbouring geographical areas (e.g. Canary Islands) and other EU Member States need to assess the risk for the establishment of *Aedes* mosquito populations and introduction of dengue. The epidemiological situation does not imply the need for any trade or travel restriction beyond the disinfestation currently implemented.

Actions

ECDC has published a <u>rapid risk assessment</u> concerning the autochthonous dengue cases in Madeira. The latest epidemiological update was posted on the <u>ECDC website</u> on 8 November.

Portuguese authorities have published recommendations regarding <u>personal protective measures</u>, and <u>measures for the safety</u> of blood, cells, tissues and organ donations.

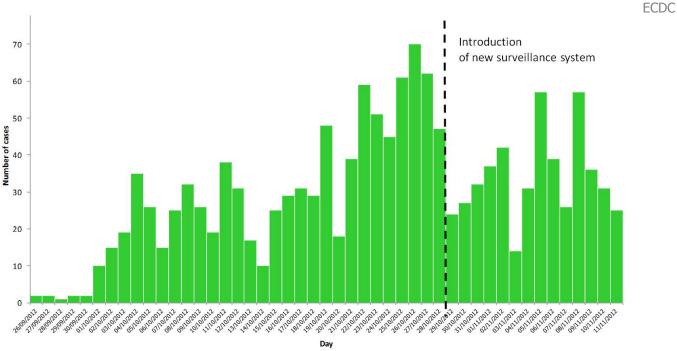


Figure 1: distribution of probable and confirmed cases of dengue, by date of reporting, 26 September – 11 November 2012, Madeira (n=1.357)



Figure 2: distribution of cumulative incidence rates of probable and confirmed cases of dengue/10 000 population by parish, weeks 39 to 45, Madeira.

Malaria - Greece - 2012

Opening date: 31 May 2012 Latest update: 28 September 2012

Epidemiological summary

Since 22 June 2012, Greece has reported 16 cases of malaria due to *Plasmodium Vivax* infection in patients who did not have a travel history to endemic areas. Eight of the autochthonous cases are residents in Laconia, four in Attica, two in Karditsa and one

5/12

ECDC

in Xanti and Viotia each. Sixty cases are reported as imported in 2012. All these cases are *Plasmodium vivax* infections as well.

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 from Greece in 2011 as well. Between 21 May and 9 December 2011, 63 cases of P. vivax infection were reported, of whom 33 were affecting Greek citizens without travel history to an endemic countries. The main affected area was Evrotas, located in the district of Lakonia in Pelloponese, southern Greece. Cases were also reported from the municipalities of Attica, 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 | ECDC Epidemiological update: Local case of malaria in Greece | Eurosurveillance autochthonous Plasmodium vivax malaria Greece 2011|

ECDC assessment

The Marathon and Evrotas areas are environments well suited for malaria transmission, combining humid zones and intensive agricultural activities. Climatic conditions are now considered favourable for local vector development. Frequent migration and travel patterns from endemic areas of the world provide opportunities for introduction of the parasite into the area. Also in 2011 autochthonous cases occurred in these locations.

Actions

ECDC has been requested to provide technical support to the Hellenic Centre for Disease Control and Prevention and is in close communication with them to see where this can best be provided. Greece is currently implementing a "Strategic work programme for malaria control in Greece 2012-2015".

A joint ECDC-WHO mission is currently in Greece to assess the malaria and West Nile Fever situation in the country.

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

Opening date: 21 June 2012 Latest update: 13 November 2012

Epidemiological summary

EU and neighbouring countries

As of 15 November, 235 probable and confirmed cases of WNF have been reported in the EU in 2012. In neighbouring countries 621 cases have been reported. Within the EU, Greece, Italy, Romania and Hungary are affected. This is the third consecutive year for these countries to be affected, however the geographic distribution in each country has expanded to affect new areas. Seventeen WNF associated deaths have been reported in the EU (16 in Greece, one in Romania).

Outside of the EU, affected countries include Croatia, Montenegro, Serbia, Kosovo*, the former Yugoslav Republic of Macedonia, the Russian Federation, Ukraine, Israel and the occupied Palestinian territory, Algeria and Tunisia. This is the first year that human cases of WNF have been reported from Croatia, Serbia, Kosovo and Montenegro. However, WNV circulation in horses was demonstrated through serological studies in Serbia in 2009-2010, and in Croatia in 2010 and 2011. A detailed breakdown of affected countries and areas, and maps illustrating the recent historical distribution, are available on the ECDC website.

Only one case within the EU is reported to have been acquired through blood products in 2012. This case occurred in Greece and involved an immuno-compromised patient, where both the blood donation and the transfusion occurred before the first case of WNF for 2012 was reported. In Italy, as per a 2012 national directive, nucleic acid amplification test (NAT) screening of blood donations is implemented from 15 July to 30 November in areas which were affected in 2011. Notably, an infected donation was detected in Italy on 15 July, the first day of screening. Four other cases of asymptomatic WNF were detected by NAT screening of blood donations in Italy.

* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

Websources: ECDC West Nile fever risk maps | ECDC Rapid Risk Assessment (13 July) | MedISys West Nile Disease | ECDC summary of the transmission season 2011 | Official Journal of the EU - Notifiable Diseases | European Commission Case

<u>Definitions</u> | <u>EU Blood Directive</u> | <u>Italian Weekly update</u> | <u>KEELPNO weekly epidemiological report</u> | <u>Institut de Veille Sanitaire</u>| <u>EpiSouth</u> | <u>Tunisian West Nile Surveillance Bulletin</u>

ECDC assessment

The epidemiology of WNV in Europe is still evolving and is not yet fully understood. It is unclear if the increase in cases reported this year, the earlier season, and the geographic expansion, is due to a true epidemiological change, or a reflection of increased awareness amongst clinicians and the enhanced surveillance implemented in some areas.

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 WNF. Taking into account the <u>EU WNV and blood safety preparedness plan</u> and the <u>EU blood directive</u>, the main measures of prevention of transmission through blood products should be geographical donor deferral or the implementation of systematic NAT screening of blood donors or visitors from affected areas. ECDC provides a weekly updated overview of affected areas in order to support this activity.

Actions

On 13 July, ECDC updated its <u>rapid risk assessment</u> concerning the epidemiological situation of West Nile virus infection in the European Union. ECDC produces weekly <u>West Nile fever risk maps</u> to inform blood safety authorities regarding affected areas.

Measles - Multistate (EU) - Monitoring European outbreaks

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

Epidemiological summary

EU Member States

No new outbreaks detected in EU Member States since the last update.

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

ECDC assessment

Considerably fewer measles cases have been reported in 2012 than during the same period 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 so far in 2012.

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.

Rubella - Multistate (EU) - Monitoring European outbreaks

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

Epidemiological summary

No new outbreaks were identified since the last update.

From 1 January to 31 August 2012, 25 570 cases of rubella were reported by the 26 EU/EEA countries contributing to the enhanced surveillance for rubella compared to 30 128 cases during the same period in 2011. 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 to 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 be born with congenital rubella syndrome (CRS), which entails a range of serious incurable illnesses. 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. The increase in the number of rubella cases reported so far in 2012 compared to 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 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.

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

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

Epidemiological summary

Weekly report on influenza surveillance for the 2012-2013 season, started in week 40/2012 in Europe. In week 45/2012, all 27 reporting countries experienced low intensity of clinical influenza activity, but an increasing trends was reported by five countries. Out of 386 sentinel specimens collected from twenty-one countries, 13 (3.4%) were positive for influenza viruses, of which nine were type A and four type B.

No hospitalised laboratory-confirmed influenza cases were reported.

Though there were some indications of rising rates of influenza-like illness in five countries in week 45, there is no suggestion that substantial influenza transmission has started in any European country yet. The rising rates in five countries are likely to be due to other respiratory viruses.

Web source: ECDC Weekly Influenza Surveillance Overview

ECDC assessment

Influenza activity in sentinel practices is slightly rising in five EU countries.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 6 November 2012

Epidemiological summary

Europe: There have been no reports of other confirmed autochthonous dengue infections in Europe so far in 2012 besides the ongoing dengue outbreak in Madeira.

Asia: There is no new update this week from WHO Western Pacific Region. An overall declining trend activity has been reported previously in Australia, Cambodia, Philippines and Vietnam, whilst current levels remain low overall in Malaysia and Singapore. For the rest of Asia, the dengue epidemic in India continues to show an increasing trend across most states, especially in New Delhi.

Americas: The Pan American Health Organization has reported that up to week 42 in 2012, there have been more than 982 000 dengue cases at the regional level (incidence rate of 180 cases per 100 000 inhabitants). All four serotypes (DEN1, DEN2, DEN3 and DEN4) are circulating in all of the Americas. The highest incidence rate has been recorded in the Southern Cone (242 cases per hundred thousand inhabitants) where around 58% of total dengue deaths in the continent have been concentrated. The Pan American Health Organization recommends Member States (especially those in the southern hemisphere) implement their integrated preparedness and response mechanisms in order to prevent transmission and prevent dengue caused deaths.

Latin America: High activity is reported across all of Central America. Mexico continues to report an increasing trend of cases

across most states. In South America, Peru is experiencing a large dengue outbreak in the Ucayali region which has led to a reported 825 cases and six deaths. Prevention and control measures are in place. Health experts in Paraguay continue to warn of the possibility of a major dengue epidemic unless stronger action is taken to reduce mosquito breeding sites.

Web sources:

HealthMap | MedISvs | ProMED Asia update | ProMED Americas update | PAHO/AMRO | WPRO | CDC | ECDC | WHO

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.

Assessment in relation with the outbreak in Madeira: see separate section.

Actions

ECDC has published a technical <u>report</u> on the climatic suitability for dengue transmission in continental Europe and <u>guidance for</u> invasive mosquitoes' surveillance.

Novel Coronavirus - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012 Latest update: 5 November 2012

Epidemiological summary

A first case, reported on Thursday 20 September through ProMED, was a 60 year old patient in Jeddah, Kingdom of Saudi Arabia, from whom a novel coronavirus was isolated. He was admitted to hospital on 13 June with severe pneumonia, having had a seven day history of symptoms. He developed acute renal failure, and died on 24 June. Post mortem lung tissue tests were negative for influenza virus A, influenza virus B, parainfluenza virus, enterovirus and adenovirus. Testing with a pancoronavirus RT-PCR was positive for a coronavirus and the virus genome was later sequenced in Erasmus Medical Centre, Rotterdam, and identified as a putative novel beta-corononavirus, closely related to bat coronaviruses.

A second case was reported on Saturday 22 September, by the UK Health Protection Agency (HPA). The case is a 49 year old Qatari with no underlying health conditions and a history of travel to Mecca, Saudi Arabia. He developed respiratory symptoms on 3 September, and on 7 September was admitted to an intensive care unit (ICU) in Doha, Qatar, where he subsequently developed renal failure. He was transferred by air ambulance to an ICU in the UK on 11 September. Laboratory tests were performed between 17 and 20 September on upper and lower respiratory samples and tested negative for respiratory viruses including influenza A (H1/H3/H1N1pdm09), influenza B, hMPV, RSV, and specific tests for the human coronaviruses NL63, 229E, OC43 and SARS-CoV. On 21 September, tests using a pancoronavirus RT-PCR test were positive from two lower respiratory tract samples only. A nucleotide BLAST search in the UK revealed 80% homology to bat coronaviruses. A 250bp PCR fragment was compared by the Erasmus Medical Centre to Case 1's isolate, and a 99.5% sequence homology was identified. On 13 November, HPA published the full genome sequence of the virus isolated from this case. Analysis of the variation in the genomic sequences, coupled with the three month gap between patients infected with this coronavirus, indicate that there are probably independent sources of infection. Genomic analysis also indicates that the closest relative to this coronavirus was a bat virus identified in 2008 in the Netherlands.

A third case due to the novel coronavirus was reported on 4 November by Saudi Arabia. The patient was admitted to hospital in Riyadh due to pneumonia and was subsequently diagnosed with the novel coronavirus by RT-PCR. He is out of intensive care and is currently recovering.

Web sources: <u>Interim case definition -WHO | HPA infection control advice | Partial genetic sequence information | ProMed link to third reported case | whole genome sequence | Partial genetic sequence | Parti</u>

ECDC assessment

A novel coronavirus has been identified in three patients with severe respiratory and, in two of the cases, renal disease. No secondary cases have been detected to date and there is no evidence of person-to-person transmission to close contacts,

including healthcare workers and relatives. There is no indication that this novel coronavirus is closely related to the SARS coronavirus which caused the 2003 outbreak. In addition, to date, the epidemiological behaviour of the infections is very different from that seen in 2003. A causal relationship between the viruses and severe disease has not been proven. As yet, the source and disease reservoir, transmission route, incubation period, and capacity for asymptomatic infection are unknown. Zoonotic infection cannot be ruled out.

Based on the available information, ECDC assesses the current risk as low.

Actions

ECDC has prepared a rapid risk assessment the public version of which was posted on the ECDC website. An epidemiological update was <u>published</u> on 6 November 2012.

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

Opening date: 15 June 2005 Latest update: 27 August 2012

Epidemiological summary

No new cases of human A(H5N1) infection were reported last week.

Worldwide, 30 cases (including 19 deaths) have been 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.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 8 November 2012

Epidemiological summary

Up to 14 November 2012, six new polio cases were reported to WHO, all in Pakistan and all WPV1.

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

ECDC assessment

The WHO European Region is polio-free.

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 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.