

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Anthrax - Multistate - Outbreak among people who inject drugs

Opening date: 18 December 2009

Latest update: 8 March 2013

Since July 2012, 15 confirmed cases of anthrax, including seven fatalities, were reported in the EU among injecting drug users (IDUs). These cases have been linked to the 2009-2010 outbreak of anthrax among IDUs with 130 confirmed cases.

→Update of the week

On 14 March 2013, Health Protection Scotland in the United Kingdom reported a new fatal case of anthrax in Glasgow in a drug-injecting heroin user.

Dengue - Portugal - Madeira outbreak

Opening date: 10 October 2012

Latest update: 8 February 2013

There is an on-going outbreak of dengue fever since October 2012 in the Autonomous Region of Madeira. This is the first recorded outbreak of dengue in Madeira with 2 168 officially reported cases as of 3 March 2013. In addition, 13 European countries have reported 82 dengue cases among travellers returning from Madeira. 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

The Portuguese Directorate General of Health posted their monthly update on 3 March 2013 reporting 2 168 dengue cases from the Autonomous Region of Madeira.

There was also one new imported case reported by Sweden during the past week.

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

Opening date: 2 December 2011

Latest update: 8 March 2013

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.

Weekly reporting on influenza surveillance in Europe for the 2012-2013 season started in week 40/2012 but active influenza transmission began around week 49/2012, approximately six weeks earlier than in the 2011/2012 season.

→Update of the week

For week 10/2013, the geographic pattern of influenza activity was reported as widespread by 18 countries of which 16 also reported high/medium intensity

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 14 March 2013

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. The 29 participating EU and EEA countries reported 8 230 cases to the European Surveillance System for 2012. France, Italy, Romania, Spain and the United Kingdom accounted for 94% of all reported cases.

→Update of the week

No new outbreaks were detected during the week leading up to 15 March 2013.

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 15 March 2013, no new outbreaks were detected in EU Member States.

Non EU Threats

Novel Coronavirus - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012

Latest update: 14 March 2013

From April 2012 to 14 March 2013, the World Health Organization has been notified of 15 laboratory-confirmed cases including nine deaths from an acute respiratory disease caused by a previously unknown coronavirus. Cases have occurred in Saudi Arabia, Qatar, Jordan and the United Kingdom. There have been three clusters of cases with evidence of human-to-human transmission, one in Jordan, one in Saudi Arabia and one in the United Kingdom, where the index case is believed to have been infected during a visit to Saudi Arabia. The reservoir of the novel coronavirus has not been established nor is it clear how transmission is sustained from one sporadic case to another.

→Update of the week

On 12 March 2013, the World Health Organization (WHO) reported a 15th confirmed case of novel coronavirus infection in a resident of Saudi Arabia.

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

Opening date: 15 June 2005

Latest update: 14 March 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

A WHO monthly update posted on 12 March 2013 acknowledges two fatal human cases with influenza A(H5N1) virus infection from Cambodia already reported in last week's CDTR, in addition to two cases in China, who have died since first reported.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 14 March 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.

II. Detailed reports

Anthrax - Multistate - Outbreak among people who inject drugs

Opening date: 18 December 2009

Latest update: 8 March 2013

Epidemiological summary

Since July 2012, there have been 15 cases of anthrax reported in intravenous drug users due to contaminated heroin including seven fatalities in: Germany (four cases, one fatal), Denmark (two cases, one fatal), France (one case), and UK (eight cases, five fatal).

The latest case was reported on 14 March by Health Protection Scotland in a middle aged drug user.

The 2012 outbreak has been linked to the 2009-2010 outbreak of anthrax among IDUs with 127 cases in the UK (England - five, Scotland - 119) and three cases in Germany. Of seven *B. anthracis* isolates tested so far, two isolates from the United Kingdom were indistinguishable from the 2009-2010 strain and three isolates from Germany and two from Denmark were identical and almost identical to the 2009-2010 strain.

Public Sources: [RKI statement on German cases 2012](#) | [Eurosurveillance article on 1st case in 2012](#) | [SSI statement on Danish case](#) | [SSI statement on second Danish case](#) | [Statement on French case](#) | [HPS report on Scottish case 2012](#) | [Last HPA report](#) | [RKI report](#) | [Last NHS report](#) | [NHS publication](#) | [RKI serological investigation](#) | [HPA statement on English case 2013](#) | [NHS Glasgow](#)

ECDC assessment

This additional case is not unexpected and does not change the conclusions of the rapid risk assessment published by ECDC and EMCDDA on 16 July 2012. The reporting on cases of anthrax in IDUs in several countries over a long period of time suggests that contaminated heroin is still circulating in Europe. People who inject heroin in Europe are still at risk of exposure to anthrax.

Actions

ECDC and EMCDDA updated their joint [rapid risk assessment](#) (RRA) on 13 July 2012. The two organisations are working together to produce a joint guidance document on the prevention of anthrax among IDUs.

Dengue - Portugal - Madeira outbreak

Opening date: 10 October 2012

Latest update: 8 February 2013

Epidemiological summary

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

As of 3 March 2013, 2 168 cases of dengue infection have been reported by the Portuguese health authorities. The weekly monitoring of dengue cases indicates that since the middle of November there has been a sharp decrease in the number of dengue cases. There have been no laboratory confirmed cases since 4 February 2013.

The vast majority of confirmed cases are from the city of Funchal, which is the main port on Madeira island. The island of Madeira has an established mosquito population of *Aedes aegypti*, the main vector of dengue in tropical and subtropical countries.

Eighty-two patients have been diagnosed in European countries with dengue infection after returning from Madeira: 23 in the UK, 19 in Germany, 11 in Portugal, seven in Finland, six in Sweden, three in France, three in Belgium, two in Denmark, two in Austria, and two in Norway. Croatia, Slovenia, Spain and Switzerland have all reported one case each. An additional imported case was reported on 8 March 2013 from Sweden with onset of disease 20 November 2012.

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 *Aedes aegypti*, a competent vector for dengue.

The latest figures from the Portuguese Ministry of Health indicate an important decrease in the number of notified cases. However, disease transmission is still on-going with 28 cases reported in 2013. This is indicative of an uninterrupted transmission since the start of the outbreak and a continuous vector activity.

The cases of dengue among returning travellers from the island highlight the need for travellers to Madeira to take measures in order to reduce mosquito bites. Travellers experiencing febrile symptoms with severe headache, retro-orbital pain, myalgia, arthralgia and maculo-papular rash within 21 days of 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 of establishment of *Aedes* mosquito populations and the introduction of dengue. The epidemiological situation does not imply the need for any trade or travel restriction beyond the disinfestation policies currently implemented.

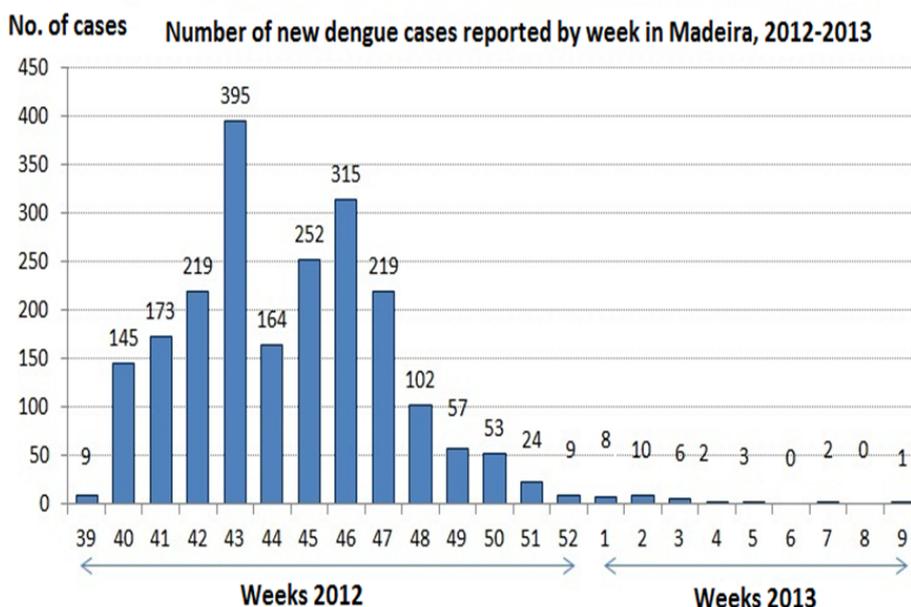
Actions

ECDC published an updated [rapid risk assessment](#) concerning the autochthonous dengue cases in Madeira.

Portuguese authorities published recommendations regarding [personal protective measures](#), and [measures for the safety](#) of blood, cells, tissues and organ donations within the region.

Blood donor deferral for 28 days from day of departure for travellers returning from the Autonomous region of Madeira is now recommended in other EU countries.

Source: The Portuguese Directorate General of Health (DGS)



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

Opening date: 2 December 2011

Latest update: 8 March 2013

Epidemiological summary

For week 10/2013, although the proportion of influenza virus-positive sentinel specimens has continued to decrease since the peak observed in week 5/2013 (61%), it remained high at 54% indicating substantial influenza activity.

Since week 40/2012, 48% of sentinel specimens positive for influenza virus were of type A and 52% were of type B. The proportion of A(H1)pdm09 has remained similar since week 7/2013 at around 60% of subtyped type A viruses.

For week 10/2013, 78 hospitalised laboratory-confirmed influenza cases were reported by Belgium, France, Ireland, Romania, Slovakia and Spain. Since week 40/2012, 2 311 hospitalised laboratory-confirmed influenza cases were reported by eight countries

In February 2013, ECDC published its [annual risk assessment](#) for seasonal influenza 2012-2013 based on data up to week 3/2013.

Web source: [ECDC Weekly Influenza Surveillance Overview](#) |

ECDC assessment

In week 10/2013, influenza activity remained substantial across Europe but an increasing number of countries reported indications of declining transmission.

Actions

ECDC updated its influenza website for the start of the season and published its annual risk assessment for seasonal influenza 2012-2013 in early February based on data up to week 3/2013.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 14 March 2013

Epidemiological summary

Sweden – update

Two outbreaks were reported last week by the [Swedish Institute for Infectious Disease Control](#) (SMI) in the neighbouring Uppsala and Stockholm counties. Both outbreaks started in January 2013. Three additional measles cases were reported this week from Uppsala with the latest onset of disease on 3 March 2013. There are now 17 confirmed measles cases (12 in Uppsala and five in Stockholm) of which nine are children aged 1-14 years and eight are adults aged 31-64 years.

In addition to the Uppsala and Stockholm outbreaks, three sporadic cases were reported among travellers to Germany, Thailand and Qatar.

Web sources: [ECDC measles and rubella monitoring](#) | [ECDC/Euronews documentary](#) | [WHO Epidemiological Brief](#) | [MedISys Measles page](#) | [EU-VAC-net ECDC](#) | [ECDC measles factsheet](#)

ECDC assessment

So far in 2013, only the UK and Sweden have reported outbreaks. In 2012, considerably fewer measles cases were 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. There have been no measles-related deaths during the last 12 months, but seven cases were complicated by acute measles encephalitis. 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.

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.

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.

There were 27 267 cases of rubella reported during 2012 by the 26 EU and EEA countries which contribute to the enhanced surveillance for rubella. Poland and Romania accounted for 99% of all reported rubella cases in the 12-month period.

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 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.

Novel Coronavirus - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012

Latest update: 14 March 2013

Epidemiological summary

The first described case of novel coronavirus infection was a 60-year-old male resident of Saudi Arabia who died from severe pneumonia complicated by renal failure in Jeddah on 24 June 2012. The previously unknown coronavirus isolated from this case was sequenced and the genome was placed in the public domain. In September 2012, a second case was reported, a man living in Qatar who was transferred for care in Europe. In November 2012, additional cases with similar symptomatology were diagnosed in Qatar and Saudi Arabia. These included a family cluster of three confirmed and one probable case. Subsequently, two fatal cases were confirmed retrospectively by testing stored samples from a cluster of 11 cases of lower respiratory linked to a hospital in Jordan in April 2012.

In February 2013, a cluster of novel coronavirus cases were reported from the United Kingdom where the index case had travelled to Pakistan and Saudi Arabia ten days before symptom onset. Contact tracing identified two secondary cases among family members without recent travel, one fatal, the other a self-limiting influenza-like illness which did not require hospitalisation. No other nCoV infections were detected in respiratory samples from 135 contacts followed for ten days.

Three additional sporadic cases have been reported since February, all from Saudi Arabia and all of them fatal. The latest case was notified on 12 March 2013. The patient was a 39-year-old male who developed symptoms on 24 February, was hospitalised on 28 February and died on 2 March 2013 in Saudi Arabia. The case did not have contact with any of the previously confirmed cases.

This brings the number of cases to 15 globally, including nine deaths.

Web sources: [WHO](#) | [HPA press release 11 February](#) | [HPA press release 15 February](#) | [HPA update 19 February](#) | [ECDC updated RRA 19 February](#) | [WHO revised interim case definition 19 February](#) | [ECDC novel coronavirus website](#) | [WHO update 21 February 2013](#) | [WHO update 6 March 2013](#) | [WHO update 12 March 2013](#)

ECDC assessment

Research on the complete genome sequence of the novel coronavirus (HCoV-EMC/2012) has characterised the virus as a new genotype that is closely related to bat coronaviruses. It is genetically distinct from SARS-CoV. The routes of transmission to humans and the virus reservoir have not been determined. This is a common problem with emerging zoonoses where there is often simultaneous possibilities including environmental, animal and human exposures.

The cluster of three cases in the UK is evidence of limited human-to-human transmission. However, several hundred contacts of the UK cluster and the case treated in Germany have now been actively followed up without evidence of novel coronavirus infection indicating that the risk of transmission remains low.

The two latest cases reported by Saudi Arabia in March 2013 do not change the updated ECDC rapid risk assessment.

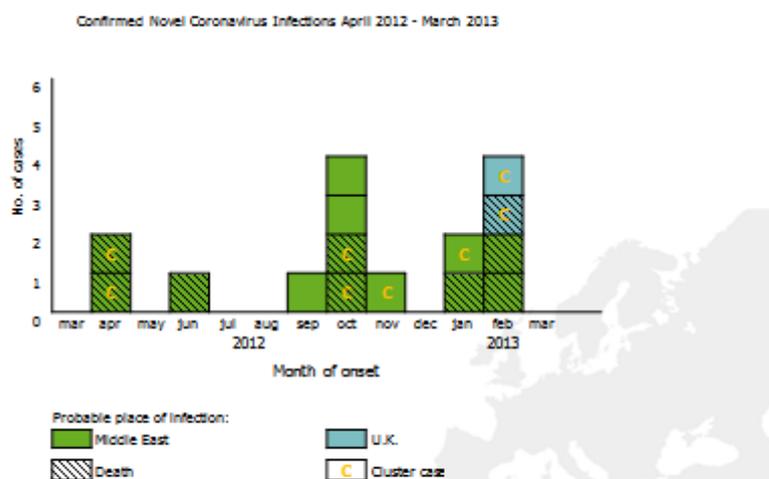
Actions

ECDC updated its [rapid risk assessment](#), first published on 7 December 2012. The results of an ECDC coordinated survey on laboratory capacity for testing for the novel coronavirus in Europe were published in [EuroSurveillance](#). On 7 March 2013, the US Centers for Disease Control and Prevention (CDC) updated its [guidance](#) on detecting novel coronavirus (NCoV) infections.

ECDC is closely monitoring the situation in collaboration with WHO and the European Member States. If new sporadic cases of confirmed NCoV infection are reported, ECDC will communicate them through this report.

Confirmed novel coronavirus infections April 2012- March 2013

ECDC



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

Opening date: 15 June 2005

Latest update: 14 March 2013

Epidemiological summary

7/11

The latest WHO update on 12 March 2013 acknowledges the two fatal human cases with influenza A(H5N1) virus infection, in Cambodia, reported in last week's CDTR. Since the beginning of 2013, Cambodia has reported nine human cases with influenza A(H5N1) virus infection, including eight fatal cases, from five provinces in southern Cambodia. According to WHO there does not seem to be an epidemiological link between the cases and most had contact with sick poultry. The clade 1.1 viruses that have been isolated from these cases are very similar to those isolated from poultry in the region. Contact investigations did not detect any additional cases. This suggests that these cases are sporadic infections from exposure to infected poultry or contaminated environments, rather than human-to-human transmission.

The two fatal Chinese cases, also previously included in the CDTR, came from the same province but they do not seem to be epidemiologically linked. Neither case had documented contact with sick or dead poultry.

Globally since 2003, 622 laboratory-confirmed human cases with avian influenza A(H5N1) virus infection have been officially reported to WHO, of which 371 have died.

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

ECDC assessment

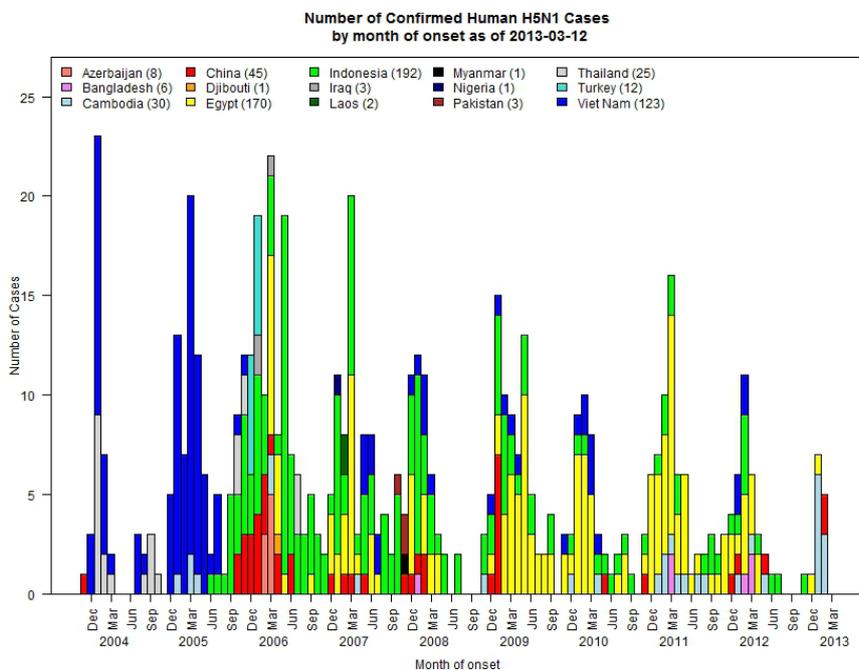
Hong Kong reported the world's first recorded major outbreak of bird flu among humans in 1997, when six people died. Most human infections are the result of direct contact with infected birds, and countries with large poultry populations in close contact with humans are considered to be most at risk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

Epidemiological curve of avian influenza A(H5N1) cases in humans by country and month of onset

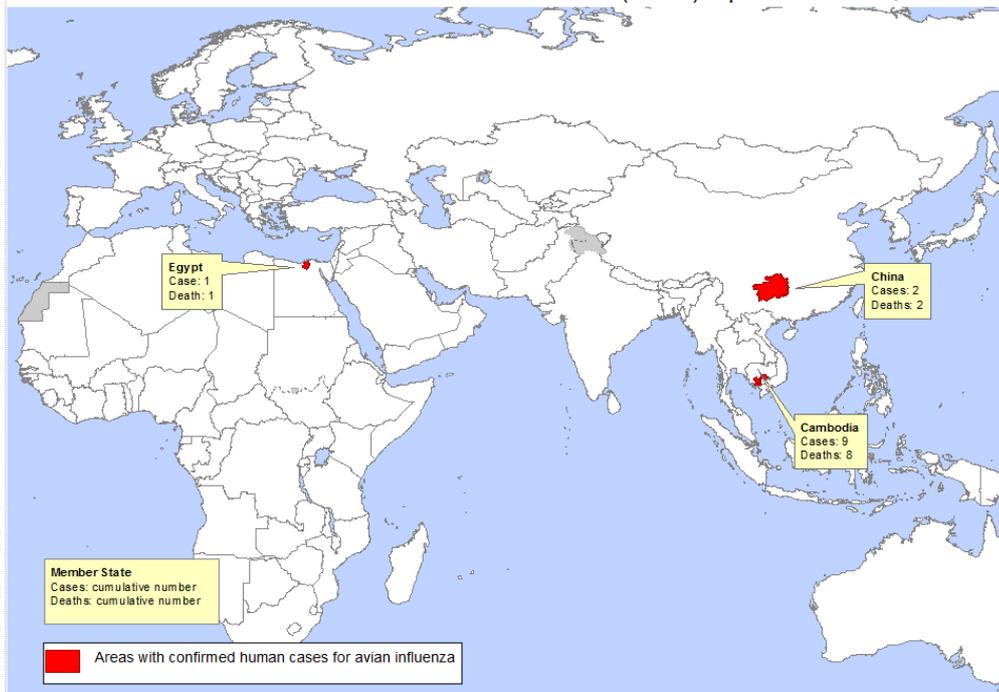
Source: WHO



Map of avian influenza A(H5N1) cases in humans in 2013

Source: WHO

Areas with confirmed human cases for avian influenza A(H5N1) reported to WHO, 2013- to-



Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 14 March 2013

Epidemiological summary

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

Asia: Regional dengue activity is variable. Cambodia, Lao PDR and Singapore have all reported more cases in 2013 than 2012 for the same time period. Recent trends are declining in Australia, Cambodia and Philippines.

The Caribbean: The US Virgin Islands has reported two confirmed cases of dengue fever this week. In the Cayman Islands, the Public Health Department has declared the dengue season over as there have been no suspected dengue cases reported since 2 March 2013.

Central and South-America: High dengue activity is reported across eastern parts of Mexico. Honduras and Costa Rica are seeing a recent spike in the number of cases. In South America, increased dengue activity is reported in Argentina, Colombia, Paraguay and Venezuela. There are media reports of a new fatality in Cayenne, French Guyana, which, if confirmed, would be the second death since the outbreak started in Kourou last year.

Pacific: New Caledonia continues to see sustained dengue activity and 150 new dengue cases are being reported every day, according to the Ministry of Health. Since 6 February 2013, French Polynesia has reported 15 confirmed cases of dengue fever, according to the Department of Health. The predominant serotypes are DENV-1 (9 cases) and DENV-3 (3 cases). A dengue outbreak with over 300 clinical dengue cases is still on-going in the Solomon Islands.

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](#).

The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.