



This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary

### EU Threats

#### 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 numbers of outbreaks and reported cases in Member States so far in 2012 are significantly lower than during 2010 and 2011. As of 31 October, 7 016 cases of measles were reported to the European Surveillance System (TESSy) for 2012. France, Italy, Romania, Spain and the United Kingdom accounted for 94% of the reported cases.

→Update of the week

During the week leading to 20 December 2012, no new relevant outbreaks were detected.

#### 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

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

#### Dengue - Portugal - Madeira outbreak

Opening date: 10 October 2012

Latest update: 13 December 2012

On 3 October 2012, the public health authorities of Portugal reported two 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 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 16 December 2012, 2 103 cases of dengue fever have been reported from Madeira. Between 10 and 16 December, 53 new cases were reported, representing a 7% decrease on the previous week. As of 20 December, 72 cases of dengue have been reported among European travellers returning from Madeira since the start of the outbreak.

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

Opening date: 2 December 2011

Latest update: 24 May 2012

Following the 2009 pandemic, influenza transmission in Europe has returned to its seasonal epidemic pattern, with peak activity seen during winter months. ECDC monitors influenza activity in Europe during the winter seasons and publishes the results on its website in the Weekly Influenza Surveillance Overview.

→Update of the week

During week 50/2012, all 23 countries reporting experienced low-intensity of influenza-like-illness or acute respiratory infection activities. However, sporadic geographic spread was reported by fourteen countries and the UK (Northern Ireland), and increasing trends were reported by nine countries.

## Anthrax - Multistate - Outbreak among people who inject drugs

Opening date: 18 December 2009

Latest update: 21 December 2012

Between June and 18 December 2012, 13 confirmed cases including five fatalities of anthrax were reported in the EU among people who inject drugs (PWID): Germany (four cases, one fatal), Denmark (two cases, one fatal), France (one case), UK (six cases, three fatal). The 2012 outbreak has been linked to the 2009-2010 outbreak of anthrax among injecting drug users with 124 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.

→Update of the week

On 19 December 2012, UK authorities notified that a further person who injected heroin was diagnosed with anthrax infection and has died in Medway, England.

## Non EU Threats

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

Opening date: 20 April 2006

Latest update: 20 December 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 further 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 other European countries so far this year.

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

Opening date: 8 September 2005

Latest update: 20 December 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, 214 cases have been reported worldwide compared with 585 cases during the same period last year.

→Update of the week

Two new polio cases were reported to WHO during the week leading up to 19 December, both in Nigeria. One case was WPV1 and the other WPV3.

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

Opening date: 15 June 2005

Latest update: 12 December 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

Since the last update on 5 November 2012, two new laboratory-confirmed human cases with influenza A(H5N1) virus infection have been reported to WHO, one from Egypt and the other a fatal case from Indonesia. Since January 2012, 32 human cases (including 20 deaths) from influenza A(H5N1) virus infection have been reported to WHO.

## Cholera - Cuba - Monitoring outbreak

Opening date: 4 July 2012

Latest update: 16 July 2012

On 3 July 2012, the Ministry of Public Health in Cuba reported an increase during recent weeks in the number of acute diarrhoeal diseases mainly in Manzanillo, the province of Granma. As of 12 July 2012, 85 cases of *Vibrio cholerae* were officially confirmed, including three fatalities. This is the first time in almost 150 years that Cuba has reported an outbreak of cholera. On 27 August 2012 the Cuban Ministry of Public Health declared the outbreak to be over.

→Update of the week

Since 17 December 2012, media has been reporting rumours of 'dozens' of new cases in the old town of the capital Habana. These cases have not been officially reported or confirmed by national public health authorities in Cuba.

## II. Detailed reports

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

Opening date: 9 February 2011

Latest update: 22 October 2012

#### Epidemiological summary

##### EU Member States

No new outbreaks were 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 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 were identified since the last update.

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

Web sources: [ECDC measles and rubella monitoring](#) | [WHO epidemiological brief summary tables](#) | [ECDC rubella factsheet](#)

#### ECDC assessment

As rubella is typically a mild and self-limiting disease with few complications, the rationale for eliminating rubella would be weak if it were not for the virus' teratogenic effect. When a woman is infected with the rubella virus within the first 20 weeks of pregnancy, the foetus has a 90% risk of being born with congenital rubella syndrome (CRS), which entails a range of serious incurable illnesses. CRS surveillance plays an important role but 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 with 2011 and the potential for an increase in the number of babies born with CRS are of concern.

#### Actions

ECDC closely monitors rubella transmission in Europe by analysing the cases reported to the European Surveillance System (TESSy) and through its epidemic intelligence activities. Twenty-four EU and two EEA countries contribute to the enhanced rubella surveillance. The purpose of the enhanced rubella monitoring is to provide regular and timely updates on the rubella situation in Europe in support of effective disease control, increased public awareness and for the achievement of the 2015 rubella and congenital rubella elimination target.

## Dengue - Portugal - Madeira outbreak

Opening date: 10 October 2012

Latest update: 13 December 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 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 16 December, 2 103 cases of dengue infection have been reported from the public health sector in Madeira. Since the beginning of the outbreak, 122 patients have been hospitalised and on 16 December one remained in hospital. 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. The island of Madeira has an established mosquito population of *Aedes aegypti*, the main vector of dengue in tropical and subtropical countries.

As of 20 December, 72 patients have been diagnosed with dengue after returning from Madeira: in Portugal (ten); the UK (22); Germany (18); France (three); Sweden (5); Finland (four); Denmark (two); Austria (two) and Norway (two). Croatia, Slovenia, Spain and Switzerland have all reported one case each.

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 updated figures indicate that the outbreak has peaked, with a decrease in the number of cases being reported for the last three consecutive weeks. Despite this, the outbreak is still ongoing and therefore more cases among the island's population as well as returning tourists should be expected, particularly given that visitors to the region peak over the Christmas period. The cases of dengue among returning travellers from the island highlight 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 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 introduction of dengue. The epidemiological situation does not imply the need for any trade or travel restriction beyond the disinfection policies currently implemented.

### Actions

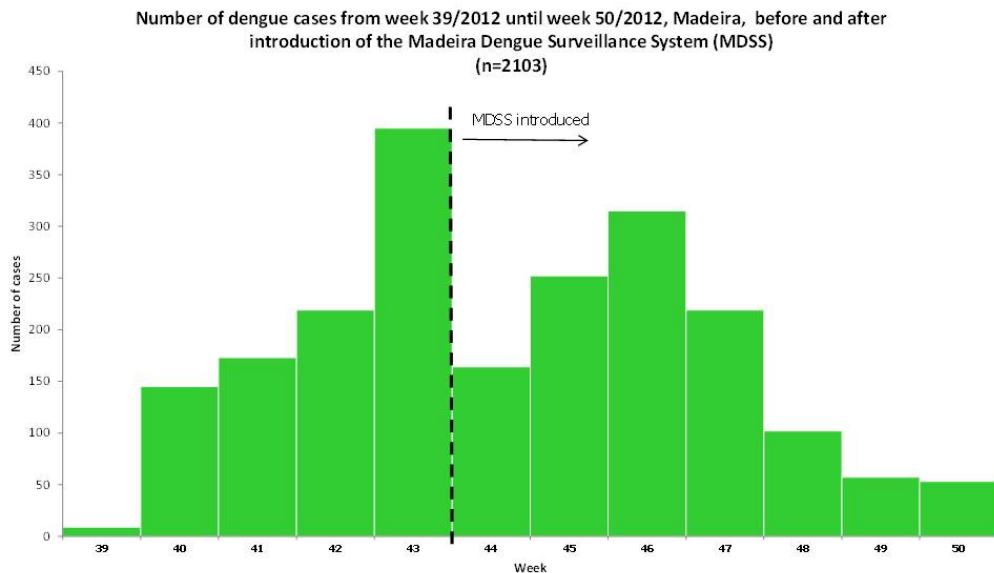
ECDC published an updated [rapid risk assessment](#) concerning the autochthonous dengue cases in Madeira. An epidemiological update was published on the ECDC website on 13 December.

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.

## Dengue cases by week, Madeira 2012

DGS Portugal and ECDC



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

Opening date: 2 December 2011

Latest update: 24 May 2012

### Epidemiological summary

Weekly reporting on influenza surveillance for the 2012–13 season started in week 40/2012 in Europe. In week 50, all 23 countries reporting experienced low-intensity influenza-like illness or acute respiratory infections. Of 648 sentinel specimens tested across 23 countries, 17.3% were positive for influenza virus. It is the third successive increase in the proportion of positive sentinel specimens but without substantial increase of the circulation of the virus in the community.

Among 112 influenza viruses detected in sentinel settings, 57 were B viruses and 55 were A viruses. Detected viruses match well with the vaccine strains ([last CNRL report](#))

No hospitalised severe influenza cases were reported in week 50/2012.

One important new development in the UK, which has a centralised scheme for authorising the use of antivirals when influenza is circulating, is that authorities in England have announced that transmission levels have reached a point where neuraminidase inhibitors should be used in clinical care.

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

### ECDC assessment

The influenza season has started in EU/EEA countries, based on the increasing proportion of positive specimens and sporadic spread seen over the last three weeks, but the circulation of influenza viruses is not generalised in the community yet.

### Actions

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

## Anthrax - Multistate - Outbreak among people who inject drugs

Opening date: 18 December 2009

Latest update: 21 December 2012

### Epidemiological summary

In June 2012, Germany reported two cases of anthrax among people who inject drugs (PWID) in Regensburg. One of these cases 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, a cutaneous anthrax affecting a PWID, was reported in July in Berlin. 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. A third case was reported from Berlin by the RKI on 14 September 2012 in a person who injected heroin.

In July 2012, Denmark reported two confirmed cases (one fatal) and one possible case of cutaneous anthrax in PWIDs in Copenhagen. The strains isolated from both of the confirmed cases were identical to the 2009 and 2010 outbreak strain.

France informed ECDC of a case of anthrax in a PWID in June 2012. The strain will be genotyped and compared with those isolated from German patients. Investigations revealed that the heroin used by this case was purchased in France in the Rhône-Alpes region and the patient had no recent history of travel.

In July, UK reported one case in Lanarkshire, Scotland; a second, fatal case in Blackpool, England on 17 August and a third case in Wales on 6 September 2012.

On 1 November 2012, UK authorities notified the fourth human anthrax case (PCR confirmed) in a PWID in Oxford, England. This case had injected heroin on 24 October and developed symptoms on 25 October. The patient is on treatment and in a stable condition.

On 19 December 2012, UK authorities reported that a fifth person who injected heroin and had been diagnosed with anthrax infection had died in Medway, England.

As of 20 December there were 13 cases of anthrax among IDUs in the EU in 2012, including five fatalities.

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](#)

### ECDC assessment

The conclusions of the rapid risk assessment published by ECDC and EMCDDA in February 2010 and updated on 13 July 2012 remain valid. The risk of exposure to contaminated heroin for IDU remains present, and accidental contamination is the most plausible explanation. The reports of cases of anthrax in IDUs in several countries over a long time period suggest that contaminated heroin is still circulating 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 previous outbreaks. The possibility of additional cases among IDUs in the near future cannot be excluded.

### Actions

ECDC and EMCDDA updated their joint [rapid risk assessment](#) (RRA) on 13 July, and ECDC published a further [epidemiological update](#) on 31 July. The two organisations will work together to produce joint guidance on the prevention of anthrax among IDUs.

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

Opening date: 20 April 2006

Latest update: 20 December 2012

### Epidemiological summary

**Europe:** There are no reports of other confirmed autochthonous dengue infections in Europe so far in 2012 besides the on-going dengue outbreak in Madeira.

**Asia:** There is no new update this week from WHO Western Pacific region. In the Middle East, Saudi Arabia is reporting increased

dengue activity. In other parts of Asia, India has reported high activity across most states so far this year. Of note, New Delhi is experiencing a high circulation of dengue virus serotype 2 and recent studies from the NCDC (National Centre for Disease Control) has found the emergence of a new genotype in the capital, genotype 4, which could help explain the presence of a more virulent form of the virus with more severe manifestations.

**Latin America:** High activity is reported across Central America. In South America, Paraguay's Health Ministry are introducing unusual measures such as sending out SMS messages as part of its awareness campaign. As of 14 December 2012, there have been 30 000 confirmed dengue cases in Paraguay so far this year and the majority of cases are concentrated in the capital, Asuncion, and the adjoining central county. Uruguay remains almost dengue free with only a few imported cases this year, but a fumigation campaign has now started following high rainfall in November and December.

**The Caribbean:** Puerto Rico has reported 484 suspected dengue cases in week 47. So far in 2012, there have been 9 941 suspected cases. In other regions, the Cayman Islands have reported a total of 86 suspected dengue cases so far this year. Up to week 49, the dengue epidemic in the Dominican Republic had caused more than 8 700 suspected cases and 53 deaths, according to public health authorities.

#### Web sources:

[HealthMap](#) | [MedISys](#) | [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 to the outbreak in Madeira: see separate section.

### Actions

ECDC has published a technical [report](#) on the climatic suitability for dengue transmission in continental Europe and [guidance for invasive mosquitoes' surveillance](#).

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

Opening date: 8 September 2005

Latest update: 20 December 2012

### Epidemiological summary

During the past week, two new polio cases were reported to WHO, both in Nigeria. One case was WPV1 and the other was WPV3.

This week multiple attacks in Pakistan have killed nine polio vaccination campaign workers. The attacks took place in several locations in Pakistan - Gadap, Landi, Baldia and Orangi towns of Karachi city, Sindh Province and Peshawar, Khyber Pakhtunkhwa Province. The Government of Pakistan and the affected provinces have temporarily suspended the vaccination campaign due to concerns over the safety of health workers.

Web sources: [Polio Eradication: weekly update](#) | [MedISys Poliomyelitis](#) | [ECDC Poliomyelitis factsheet](#) | [WHO EMRO](#) |

### ECDC assessment

The WHO European Region remains 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.

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

Opening date: 15 June 2005

Latest update: 12 December 2012

### Epidemiological summary

Since the last update on 5 November 2012, two new laboratory-confirmed human cases of influenza A(H5N1) virus infection were reported to WHO, one from Egypt and the other a fatal case from Indonesia.

From 2003 through to 17 December 2012, 610 laboratory-confirmed human cases with avian influenza A(H5N1) virus infection have been officially reported to WHO from 15 countries, of which 360 died. Since January 2012, 32 human cases of influenza A(H5N1) virus infection have been reported to WHO.

Cases of human infection with H5N1 will only be reported on Disease Outbreak News for events that are unusual or associated with potential increased risks. WHO Member States will continue to be required to report information on every sporadic case of H5N1 human infection or novel influenza virus infection to WHO as per Article 6 of the International Health Regulations (2005).

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

### ECDC assessment

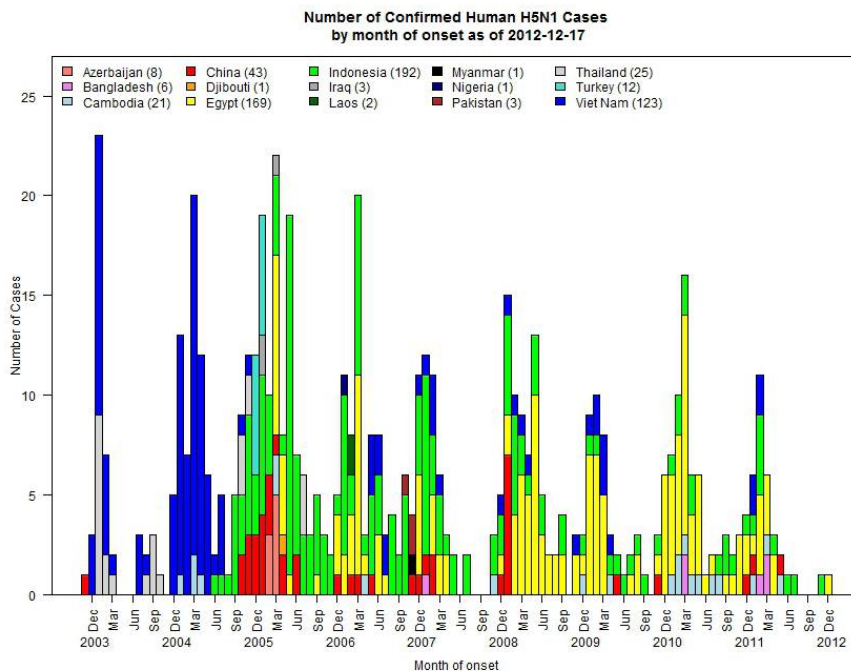
Hong Kong reported the world's first recorded major outbreak of bird flu among humans in 1997, when six people died. Most human infections are the result of direct contact with infected birds, and countries with large poultry populations in close contact with humans are considered to be most at risk 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 human H5N1 cases by country and month of onset

WHO



## Cholera - Cuba - Monitoring outbreak

Opening date: 4 July 2012

Latest update: 16 July 2012

## Epidemiological summary

In June and July 2012, the communicable diseases surveillance system in Cuba recorded an increasing trend in diarrhoeal diseases, which were probably influenced by the high temperatures and heavy rains. In Granma province, around 1 000 patients were reported to have been treated for gastrointestinal infections and among them 85 were confirmed to be infected with *Vibrio cholerae*: 63 cases in Manzanillo, 13 cases in Yara, five cases in Niquero, two cases in Bayamo and two cases in Campechuela. Three of the confirmed cholera cases have died: 66, 70 and 95 year-old patients with chronic illnesses.

Control measures include the closure of the contaminated wells, sampling of water in private dwellings, increased chlorination of the municipal water supply, the removal of water leaks, pit cleaning and sanitation and a health education programme in the local population.

On 27 August 2012 the Cuban Ministry of Public Health declared the outbreak to be over.

On 18 November 2012 media reported 200 new cases at Boniato prison at the North of Santiago de Cuba. Similarly, the eastern province of Holguín, one of the hardest hit after Hurricane Sandy, reported at least 12 new cases of cholera on 19 November 2012.

Since 17 December 2012, media has been reporting rumours of 'dozens' of new cases in the old town of the capital Habana. These cases have not been officially reported or confirmed by national public health authorities in Cuba.

Websources: [Official press release](#) | [PAHO website](#) | [ECDC Factsheet](#) | [Media 1](#) | [Media 1](#) | [Media3](#) | [Media4](#)

## ECDC assessment

Despite the measures taken in controlling this outbreak, the occurrence of further cases in Manzanillo, and spreading to the surrounding areas and to other provinces cannot be excluded at this stage. Should the outbreak be contained in this area, the risk of infection for European tourists visiting Cuba is negligible.

If the rumours of the outbreak spreading to other provinces are confirmed, ECDC will reassess the risk of infection for European tourists.

10/13

Globally, the risk of cholera infection in travellers visiting Cuba should still be considered low on the basis of the current confirmed information. Visitors to cholera-endemic or epidemic countries should always follow appropriate precautionary measures: only drink safe water (bottled water/water treated with chlorine), wash all fruits and vegetables with bottled or chlorinated water before consumption, regularly wash their hands, and avoid consuming raw sea-food products and only eat them when thoroughly cooked. A cholera vaccine is licensed and available in Europe.

## Actions

ECDC has prepared a [rapid risk assessment](#).

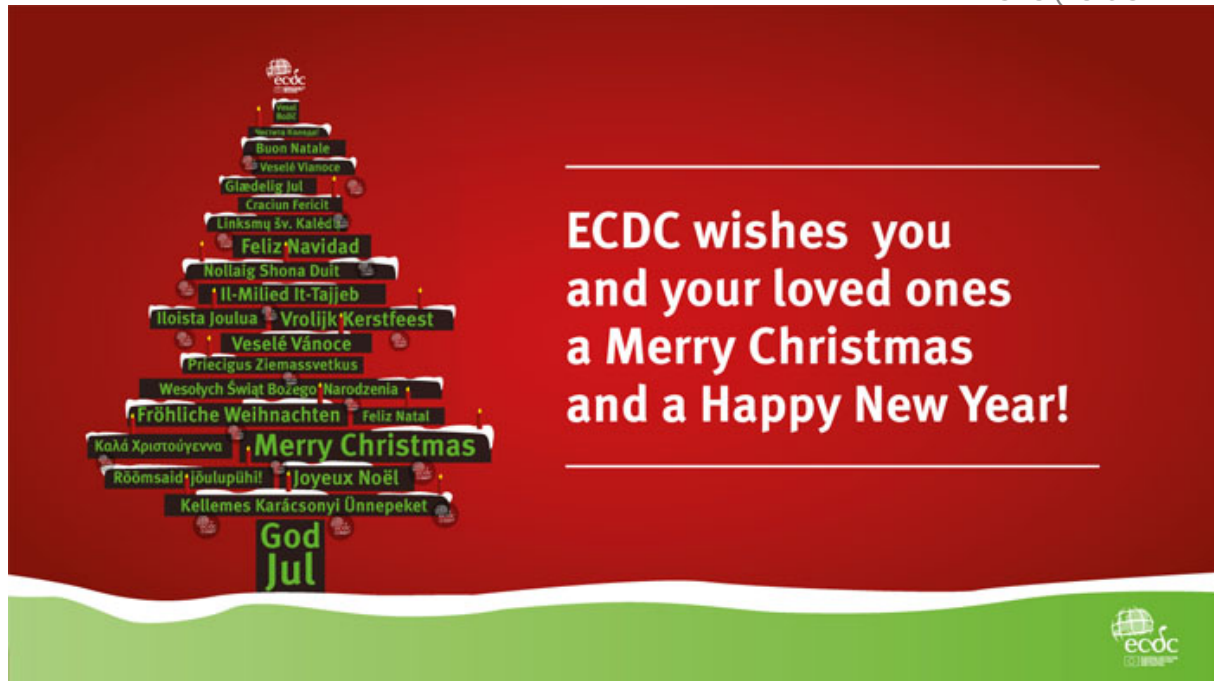
## Cholera affected area in Cuba

ECDC



## Distribution of joy and happiness by language, Solna 2012

ECDC (next CDTR 28 DEC)



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