

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

West Nile virus - Multistate (Europe) - Monitoring season 2014

Opening date: 3 June 2014

Latest update: 10 July 2014

West Nile fever (WNF) is a mosquito-borne disease which causes severe neurological symptoms in a small proportion of infected people. During the June to November transmission season, ECDC monitors the situation in EU Member States and neighbouring countries in order to inform blood safety authorities regarding WNF-affected areas and identify significant changes in the epidemiology of the disease.

→Update of the week

During the past week, no human cases of West Nile fever have been reported in the EU or neighbouring countries. A seropositive horse for West Nile virus has been detected in Serres, Greece.

Non EU Threats

Middle East respiratory syndrome- coronavirus (MERS CoV) - Multistate

Opening date: 24 September 2012

Latest update: 11 July 2014

Since April 2012, 851 cases of MERS-CoV infection have been reported by local health authorities worldwide, including 324 deaths. To date, all cases have either occurred in the Middle East, have direct links to a primary case infected in the Middle East, or have returned from this area. The source of the virus remains unknown but the pattern of transmission points towards an animal reservoir in the Middle East from which humans sporadically become infected through zoonotic transmission.

→Update of the week

Since the last CDTR, six additional cases have been reported by Saudi Arabia. Two cases have been reported by the United Arab Emirates.

Mass gathering monitoring- Brazil- FIFA World Football Cup 2014

Opening date: 9 June 2014

Latest update: 11 July 2014

ECDC is enhancing its epidemiological intelligence surveillance during the FIFA World Cup 12 June–13 July 2014 in Brazil to detect threats to public health that could represent a threat to the EU or to EU visitors. Routine epidemic intelligence activities will be enhanced by expanding the information sources monitored, using a targeted and systematic screening approach and tailored tools (i.e. MediSys).

→Update of the week

During the past week, no new major public health threats posing a risk for EU travellers have been identified.

Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013

Latest update: 26 June 2014

An outbreak of chikungunya virus infection has been ongoing in the Caribbean since December 2013. The outbreak expanded also in Central and South America. There have been almost 300 000 probable and confirmed cases in the region. At least 22 fatalities have been reported so far.

→Update of the week

Most of the areas previously involved continue to report increasing case numbers, and the situation is particularly severe in the island of Hispaniola (Haiti and the Dominican Republic). El Salvador is also severely affected. Several other countries have recently reported imported chikungunya infection in patients with travel history to the affected areas: Bahamas, Barbados, Bonaire, Brazil, Canada, Cayman islands, Chile, Cuba, Greece, France (including Tahiti), Grenada, Italy, Japan, Mexico, the Netherlands, Nicaragua, Panama, Paraguay, Peru, Spain, Switzerland, Trinidad and Tobago, Turks and Caicos Islands. Additionally, the USA reports 141 imported cases spread among 29 states. Costa Rica reported a confirmed case, but it is not clear if it is imported or autochthonous. Honduras is reporting suspected cases. Venezuela is reporting 28 cases, but it is not known if all are imported.

Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014

Latest update: 26 June 2014

An ongoing outbreak of Ebola virus disease (EVD) in West Africa has been affecting Guinea, Liberia and Sierra Leone since December 2013. Since week 22 of 2014, a new wave of transmission is unfolding in all three affected countries, and the outbreak continues to evolve at an alarming pace.

→Update of the week

In the past week, the affected countries have continued to report cases and fatalities. The largest increase in cases since the previous update was in Sierra Leone, followed by Liberia and Guinea. The current active foci of the EVD outbreak have been identified as Kailahun and Kenema in Sierra Leone and Lofa and Montserrado in Liberia.

Standardisation of laboratory diagnostics is emerging as an important issue in the control of the outbreak. Laboratories in the affected areas use different diagnostic methods with different predictive values.

As of 8 July 2014, the cumulative number of cases attributed to EVD in the three countries stands at 888, including 539 deaths.

WHO is in the process of setting up a sub-regional outbreak control centre to consolidate and harmonise the technical support to West African countries and to assist in resource mobilisation.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 11 July 2014

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission stops and the world is polio-free. According to the World Health Organization (WHO), polio transmission currently occurs in ten countries of the world. Polio was declared a public health emergency of international concern (PHEIC) on 5 May 2014.

→Update of the week

During the past week, three new infections with wild poliovirus 1 (WPV1) were reported, two in Pakistan and one in Nigeria.

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

Opening date: 15 June 2005

Latest update: 10 July 2014

The influenza A(H5N1) virus, commonly known as bird flu, is fatal in about 60% of human infections. 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 monthly update on 5 May 2014, WHO has acknowledged two new human cases of influenza A(H5N1) infection: Indonesia (1) and Egypt (1).

II. Detailed reports

West Nile virus - Multistate (Europe) - Monitoring season 2014

Opening date: 3 June 2014

Latest update: 10 July 2014

Epidemiological summary

As of 10 July 2014, no human cases of West Nile fever have been reported in the EU; six cases have been reported in neighbouring countries since the beginning of the 2014 transmission season. All six cases have been reported by Bosnia and Herzegovina in Republika Srpska. The affected municipalities are Banja Luka, Trebinje, Bosanski Novi, Kljuc, Mrkonjic Grad and Teslic.

In Greece, West Nile virus has been detected in a horse in Serres, according to [OIE](#).

Web sources: [ECDC West Nile fever](#) | [ECDC West Nile fever risk assessment tool](#) | [West Nile fever maps](#) |

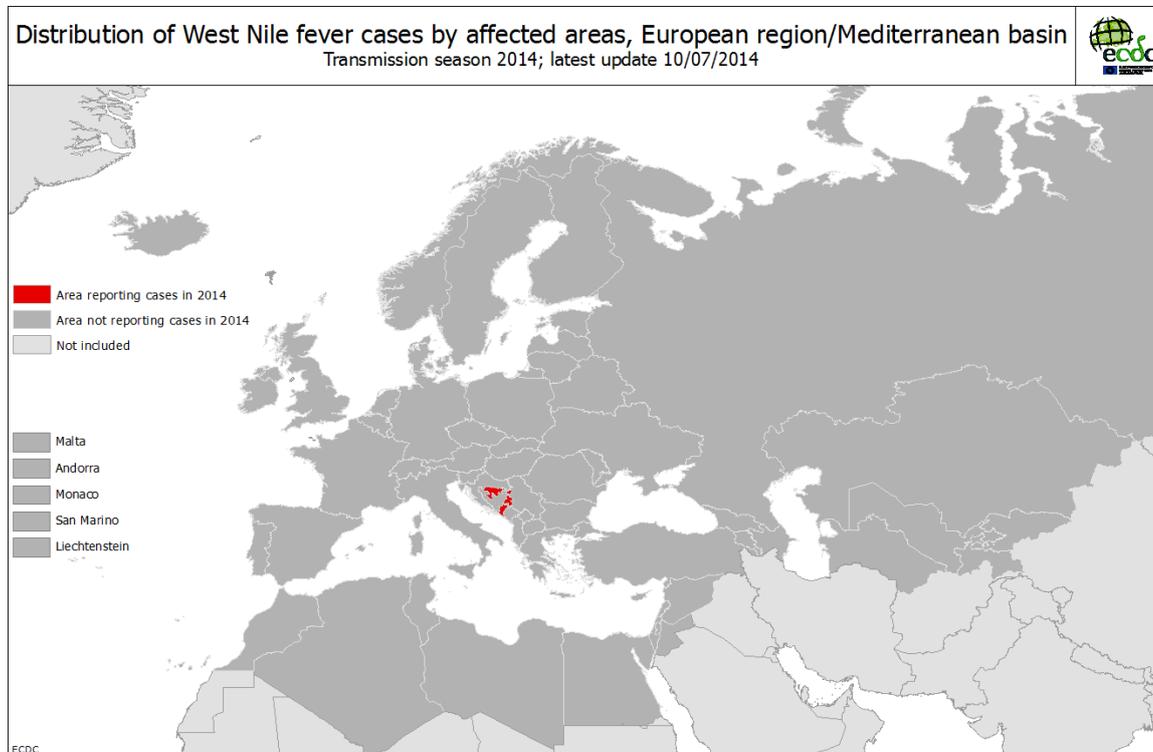
ECDC assessment

West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures are considered important for ensuring blood safety by the national health authorities when human cases of West Nile fever occur. According to the [EU blood directive](#), efforts should be made to defer blood donations from affected areas with ongoing virus transmission.

Actions

From week 23 onwards, ECDC produces weekly West Nile fever (WNF) risk maps during the transmission season to inform blood safety authorities regarding WNF affected areas.

ECDC



Middle East respiratory syndrome- coronavirus (MERS CoV) - Multistate

Opening date: 24 September 2012

Latest update: 11 July 2014

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Epidemiological summary

Since April 2012, and as of 10 July 2014, 851 cases of MERS-CoV have been reported by local health authorities worldwide, including 324 deaths.

Confirmed cases and deaths by region

Middle East

Saudi Arabia: 720 cases/294 deaths
United Arab Emirates: 73 cases/9 deaths
Qatar: 7 cases/4 deaths
Jordan: 18 cases/5 deaths
Oman: 2 cases/2 deaths
Kuwait: 3 cases/1 death
Egypt: 1 case/0 deaths
Yemen: 1 case/1 death
Lebanon: 1 case/0 deaths
Iran: 4 cases/1 death

Europe

UK: 4 cases/3 deaths
Germany: 2 cases/1 death
France: 2 cases/1 death
Italy: 1 case/0 deaths
Greece: 1 case/0 death
Netherlands: 2 cases/0 deaths

Africa

Tunisia: 3 cases/1 death
Algeria: 2 cases/1 death

Asia

Malaysia: 1 case/1 death
Philippines: 1 case/0 deaths

Americas

United States of America: 2 cases/0 deaths

Web sources: [ECDC's latest rapid risk assessment](#) | [ECDC novel coronavirus webpage](#) | [WHO](#) | [WHO MERS updates](#) | [WHO travel health update](#) | [WHO Euro MERS updates](#) | [CDC MERS](#) | [Saudi Arabia MoH](#)

ECDC assessment

The source of MERS-CoV infection and the mode of transmission have not been identified, but the continued detection of cases in the Middle East indicates that there is a persistent source of infection in the region. Dromedary camels are a host species for the virus, and many of the primary cases in clusters have reported direct or indirect camel exposure. Almost all of the recently reported secondary cases, many of whom are asymptomatic or have only mild symptoms, have been acquired in healthcare settings. There is therefore a continued risk of cases presenting in Europe following exposure in the Middle East, and international surveillance for MERS-CoV cases is essential. An international case-control study has been designed and proposed by WHO. Results of this or similar epidemiological studies in order to determine the initial exposures and risk behaviours among the primary cases are urgently needed.

The risk of secondary transmission in the EU remains low and can be reduced further through screening for exposure among patients presenting with respiratory symptoms (and their contacts) and strict implementation of infection prevention and control measures for patients under investigation.

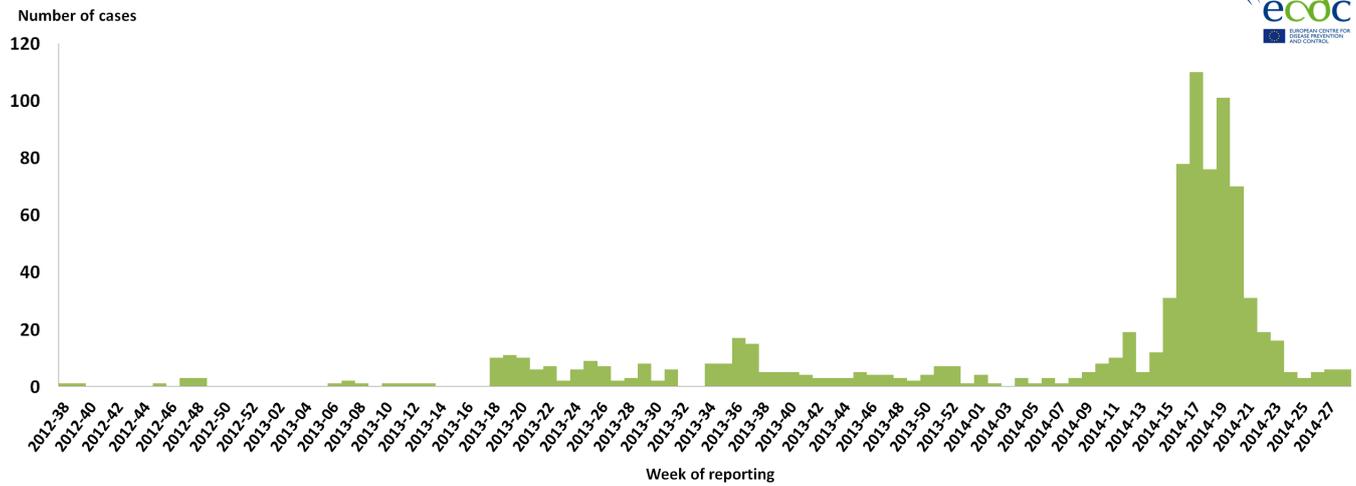
Actions

ECDC published an [epidemiological update](#) on 2 July 2014.

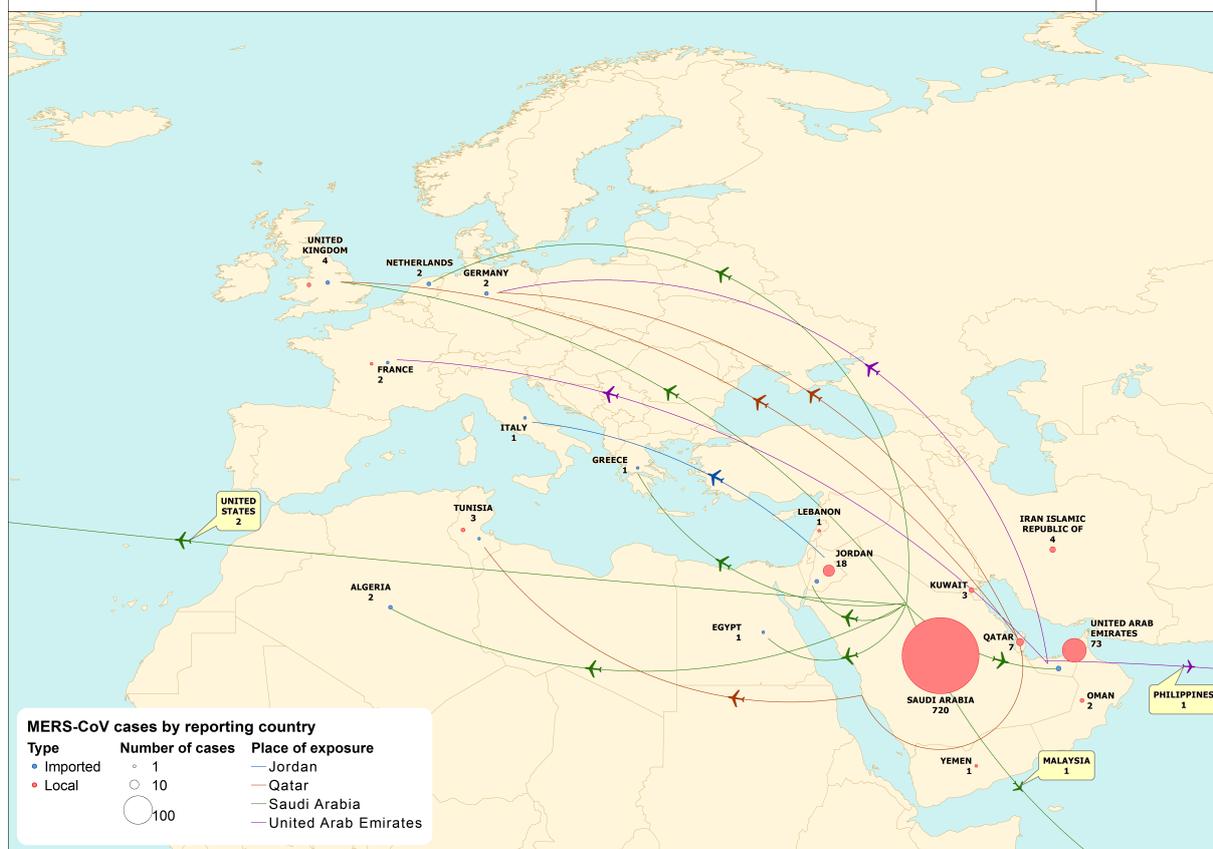
The last [rapid risk assessment](#) was published on 2 June 2014.

ECDC is closely monitoring the situation in collaboration with WHO and EU Member States.

Figure 1. Distribution of MERS CoV infections by week of reporting, September 2012- 10 July 2014 (n=851)



Distribution of confirmed cases of MERS-CoV by reporting country and place of probable infection, March 2012 - 10 July 2014 (n=851)



Mass gathering monitoring- Brazil- FIFA World Football Cup 2014

Opening date: 9 June 2014

Latest update: 11 July 2014

Epidemiological summary

Imported cases of chikungunya in Brazil

Source: [media](#)

The Brazilian health minister reported that as of 7 July, the number of confirmed imported cases of chikungunya in 2014 was 20. The Minister reassured the public that there was no evidence of local transmission and that all the cases had a history of travel to endemic countries. Eleven of the cases were diagnosed in Sao Paulo (nine military staff), three in Rio de Janeiro (all missionaries), two in Paraná, one in Amazonas (a military staff) and one in Rio Grande do Sul (a military staff).

Hantavirus – Argentina

Source: [media](#)

A 27-year-old woman from La Mendieta (Jujuy Province), Argentina, was reported to be infected with hantavirus in June 2014. She was admitted to hospital in the third week of June and passed away on 30 June. As of 6 July, 98 cases of hantavirus have been confirmed in Jujuy.

Update on health services in Manaus

Source: [media](#)

During the past 28 days (10 June–7 July) the Integrated Centre for Health Operations in Manaus reported 1 394 people attending. Of these, 916 required medical attention and 461 were due to injuries. The most common reasons were falls, assaults and traffic accidents.

Update on health services in Salvador

Source: [media](#)

The Health Secretariat of Salvador reported 318 people attending health services (48 among foreigners) in the area of the Fonte Nova stadium and in the region of Barra, where the FIFA events have been taking place from 1 to 6 July. Most of the cases were due to alcohol intoxication.

Imported cases of chikungunya – Maringá and Rio de Janeiro

Source: [media](#)

The Health Department in Paraná has confirmed two cases of chikungunya virus infection in Maringá, in the north of the state. Both cases were reported to have been infected in Haiti in May and developed symptoms in June. Both are currently well. Additionally, two cases of imported chikungunya virus infection have been reported in Rio de Janeiro.

Dengue in visitors in Belo Horizonte

Source: [media](#)

Three cases of dengue in visitors were reported by health authorities in Belo Horizonte. One was a Japanese visitor who was hospitalised with fever and headache. The man has been in Brazil since June 21 and had previously visited São Paulo, Natal and Recife. A couple living in the United States was also diagnosed with dengue. The wife, a 29-year-old American, was admitted to ICU with fever, muscle pain, weakness, diarrhoea and skin rash. Her husband, a 20-year-old Brazilian, was treated at the Emergency Unit Centre. He had muscle pain, headache and pain around the eyes.

Report on medical care provided in Belo Horizonte

Source: [media](#)

The State Department of Health in Belo Horizonte reported that, as of 30 June, 863 cases needed medical care related to the events of the World Cup. Almost half, 333 cases, occurred within the Mineirão Stadium. Of the patients, 106 were foreigners. According to the SES, most cases were related to alcohol intoxication and minor injuries.

Hepatitis A cases – suburb of Rio de Janeiro, Brazil

Source: [media](#)

Twelve cases of hepatitis A have been reported since January 2014 in residents in the localised area of Camarista Méier in Rio de Janeiro.

Imported case of chikungunya – Goiânia, Brazil

Source: [media](#)

According to media, an imported case of chikungunya from the Dominican Republic was identified in a 34-year-old resident from Goiânia. The case self-reported with suspected illness on the flight arriving to Guarulhos International Airport. Assessment: Identification of imported cases may be expected due to the large outbreak ongoing in the Dominican Republic and other areas of the Caribbean. No autochthonous cases of chikungunya have been identified in Brazil to date.

Chickenpox case in World Cup photographer – Belo Horizonte, Brazil

Source: [media](#)

A case of chickenpox was diagnosed in a photographer from India who was media-accredited to follow the FIFA World Cup. The case was apparently banned to visit the stadium during a match on 28 June in Belo Horizonte.

ECDC assessment

EU citizens visiting the 2014 World Cup in Brazil are most at risk of gastrointestinal illness and vector-borne infections. Therefore, they should pay attention to standard hygienic measures to reduce the risk of gastrointestinal illness and protect themselves against mosquito and other insect bites using insect repellent and/or wearing long-sleeved shirts and trousers in regions where vector-borne diseases are endemic. Visitors to Brazil should consult the advice for vaccinations issued by the [Brazilian health authorities](#) and [WHO Pan American Health Organization \(PAHO\)](#).

Actions

ECDC published [a risk assessment](#) on 5 June 2014. ECDC is sharing information regarding this event with relevant public health partners.

Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013

Latest update: 26 June 2014

Epidemiological summary

As of 11 July 2014, there have been almost 300 000 confirmed and suspected cases in the region, with at least 22 fatalities. The numbers may be underestimated due to the difficulty of testing and reporting in some countries.

Cases officially reported, as of 4 July 2014:

- Anguilla, 33 confirmed cases
- Antigua and Barbuda, 4 cases
- Aruba, 24 suspected cases and 1 imported confirmed case originating from Sint Maarten
- Costa Rica, 1 confirmed case
- Cuba, 6 imported confirmed cases
- Dominica, 3 102 suspected cases and 141 confirmed cases
- Dominican Republic, 135 835 suspected, 18 confirmed cases, and 3 deaths
- El Salvador, 1 300 suspected cases and 8 confirmed cases
- French Guiana, 601 confirmed cases, 64% of which are autochthonous
- Grenada, 5 confirmed cases
- Guadeloupe, 52 000 suspected and 1 328 confirmed or probable cases, 3 deaths
- Guyana, 16 confirmed cases
- Haiti, 39 343 suspected and 14 confirmed cases
- Martinique, 43 550 suspected and 1 515 confirmed or probable cases, 13 deaths
- Puerto Rico, 119 suspected cases and 23 confirmed cases
- Saint Barthélemy, 680 suspected and 142 confirmed or probable cases
- Saint Kitts and Nevis, 31 suspected and 28 confirmed cases
- Saint Lucia, 214 suspected and 30 confirmed cases
- Saint Martin (FR), 3 540 suspected and 793 confirmed or probable cases, 3 deaths
- Saint Vincent and the Grenadines, 329 suspected cases and 67 confirmed cases
- Sint Maarten (NL), 360 suspected and 301 confirmed cases
- Suriname, 17 confirmed cases
- Turks and Caicos Islands, 6 confirmed cases
- Virgin Islands (UK), 20 confirmed cases
- Virgin Islands (US), 3 confirmed autochthonous cases

In most of the territories of the French Antilles, given the caseload, the health authorities decided not to seek laboratory confirmation for all suspected cases.

Web sources: [PAHO update](#) | [ECDC Chikungunya](#) | [CDC Factsheet](#) | [Medisys page](#) |

ECDC assessment

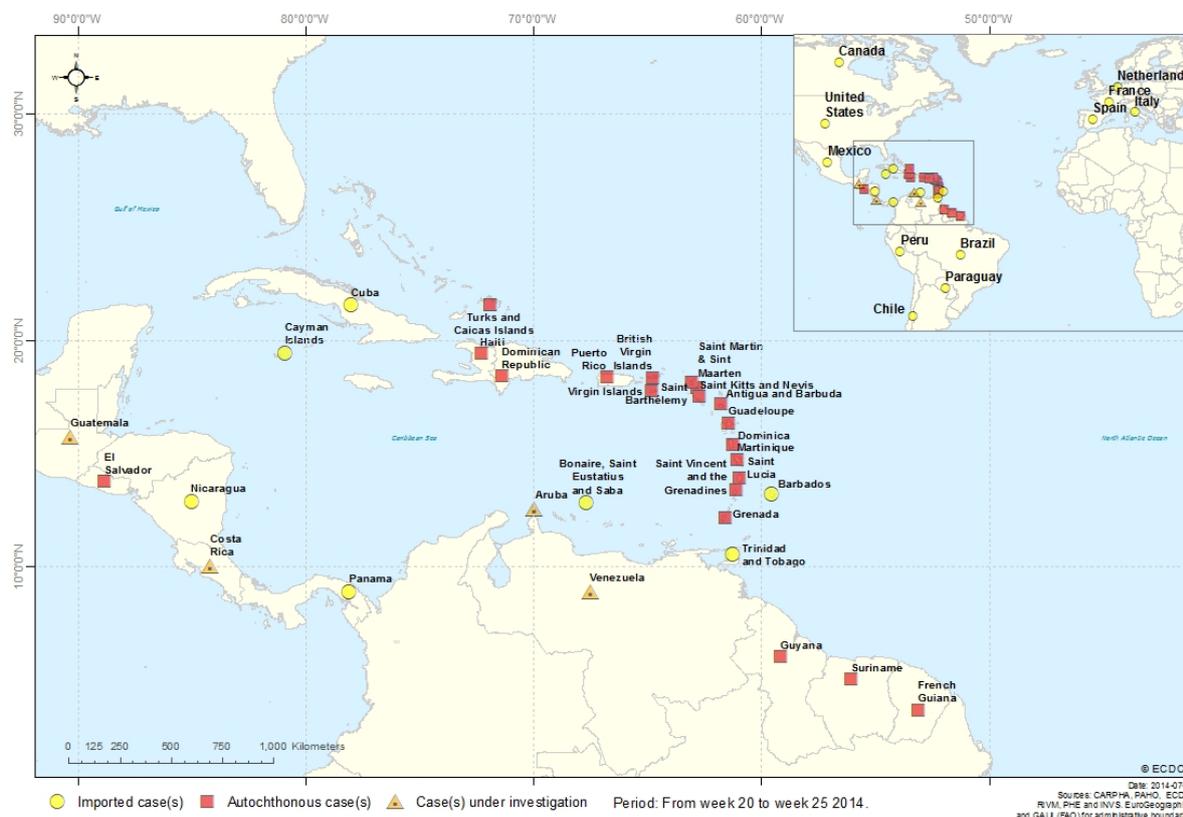
Epidemiological data indicate that the outbreak, which started in Saint Martin (FR), is still expanding and has reached Central and South America. Increasing case numbers have been observed from most of the affected areas. The vector is endemic in the region, where it also transmits dengue virus. Vigilance is recommended for the occurrence of imported cases of chikungunya in tourists returning to the EU from the Caribbean, including awareness among clinicians, travel clinics and blood safety authorities.

Actions

ECDC updated its [Rapid Risk Assessment](#) and published it on the website on 27 June.

Chikungunya in Caribbean as of 10 July 2014

ECDC



Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014

Latest update: 26 June 2014

Epidemiological summary

The distribution and classification of the cases as of 8 June 2014 are as follows:

Guinea: 409 cases (296 confirmed, 96 probable, 17 suspected) and 309 deaths (197 confirmed, 96 probable, 16 suspected);
Liberia: 142 cases (70 confirmed, 32 probable, 40 suspected) and 88 deaths (44 confirmed, 28 probable, 16 suspected);
Sierra Leone: 337 cases (298 confirmed, 34 probable, 5 suspected) and 142 deaths (127 confirmed, 11 probable, 4 suspected).

Médecins Sans Frontières (MSF) reported that 16 of the 21 EVD cases admitted to its treatment centre in Telimele in northern Guinea made a full recovery, compared with only 20–40 per cent of victims in Gueckedou. This outlier event is being investigated. An unusually high false positive rate for the diagnostic test used in Telimele is among the possible explanations. Other explanations include a mutation of the virus and genetic resistance to the disease in the local population. Because the sample size is small, the event could also be explained by random variation in disease outcome.

Web sources: [WHO/AFRO outbreak news](#) | [WHO Ebola Factsheet](#) | [ECDC Ebola health topic page](#) | [ECDC Ebola and Marburg fact sheet](#) | [Risk assessment guidelines for diseases transmitted on aircraft](#) | [NEJM 16 April article](#)

ECDC assessment

This is the largest outbreak of EVD reported and also marks the first outbreak of EVD in West Africa. The origin of the outbreak is unknown. The outbreak, after an apparent slowdown, has intensified again in the last few weeks, with an upsurge of EVD cases in all three countries. Community resistance, inadequate treatment facilities and insufficient human resources in certain affected areas are among the challenges currently faced by the three countries in responding to the EVD outbreak.

The risk of infection for international travellers is considered very low since most human infections result from direct contact with the bodily fluids or secretions of infected patients, particularly in hospitals (nosocomial transmission) and as a result of unsafe procedures, use of contaminated medical devices (including needles and syringes) and unprotected exposure to contaminated bodily fluids.

Actions

An epidemiological update was posted on 2 July 2014 on the ECDC website.

ECDC published an update of its [rapid risk assessment](#) on 9 June. ECDC provided guidance to Member States for [EU travellers](#) to and from the affected countries.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 11 July 2014

Epidemiological summary

Worldwide, 115 cases have been reported to WHO in 2014, compared with 108 for the same time period in 2013.

In 2014, nine countries have reported cases: Pakistan (90 cases), Afghanistan (7 cases), Equatorial Guinea (5 cases), Cameroon (3 cases), Nigeria (5 cases), Iraq (2 cases), Somalia (1 case), Syria (1 case), and Ethiopia (1 case).

Equatorial Guinea has been added to the list of 'virus-exporting countries' and should implement a set of Temporary Recommendations recently issued by the Director-General of the World Health Organization under the International Health Regulations (2005). Among other things, these recommendations call for the vaccination of all residents and long-term visitors prior to international travel. The addition of Equatorial Guinea to the list follows the detection of wild poliovirus in a sewage sample collected near Sao Paulo, Brazil, genetically linked to the current outbreak in Central Africa.

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

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ECDC assessment

Europe is polio-free. The last polio cases within the current EU borders were reported from Bulgaria in 2001. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

The recent importation event in Brazil from Equatorial Guinea demonstrates that all regions of the world continue to be at risk of exposure to wild poliovirus until polio eradication is completed globally.

The confirmed circulation of WPV in several countries and the documented exportation of WPV to other countries support the fact that there is a potential risk for WPV being re-introduced into the EU/EEA. The highest risk of large outbreaks of poliomyelitis are in areas where unvaccinated populations are geographically clustered or live in poor sanitary conditions, or a combination of the two.

References: [ECDC latest RRA](#) | [Rapid Risk Assessment on suspected polio cases in Syria and the risk to the EU/EEA](#) | [Wild-type poliovirus 1 transmission in Israel - what is the risk to the EU/EEA?](#) | [WHO statement on the meeting of the International Health Regulations Emergency Committee concerning the international spread of wild poliovirus, 5 May 2014](#)

Actions

ECDC follows reports of polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identify events that increase the risk of re-introduction of wild poliovirus into the EU.

Following the declaration of polio as a PHEIC, ECDC has updated its [risk assessment](#). ECDC has also prepared a background document of travel recommendations for the EU.

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

Opening date: 15 June 2005

Latest update: 10 July 2014

Epidemiological summary

Since 5 May 2014, WHO has reported two laboratory-confirmed human cases of influenza A(H5N1) virus infection: Indonesia (1) and Egypt (1). The case from Indonesia is a 33-year-old man from Jakarta. He developed symptoms on 1 June and died on 14 June. He was exposed to a live poultry market.

The case from Egypt is a 34-year-old man from Samallot district in the Menia governorate. He developed symptoms on 15 June in the form of fever, sore throat, cough and breathing difficulty. He was admitted to hospital on 22 June after frequent visits to private physicians with no clinical improvement. The man was referred to Abbaseya Chest Hospital in Cairo on 25 June 2014 in a critical condition and later died on 7 July. Initial field investigations revealed that he had close contact with sick poultry in a poultry market near his house.

From 2003 to 27 June 2014, 667 laboratory-confirmed human cases of avian influenza A(H5N1) virus infection have been officially reported to WHO from 15 countries. Of these cases, 394 have died.

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

ECDC assessment

The risk of secondary cases in Europe is considered to be very low. Europeans travelling to China and south-east Asia should avoid live poultry markets and contact with chickens, ducks, wild birds and their droppings. This reduces the risk of exposure to both A(H5N1) and A(H7N9). Poultry meat and eggs should be well cooked.

Hong Kong reported the world's first 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. There are currently no indications of a significant change in the epidemiology associated with any clade or strain of the A(H5N1) virus from a human health perspective. 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

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remains important.

Actions

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.

ECDC published a [rapid risk assessment](#) covering A(H5N1) and other human infections with avian influenza viruses in China on 26 February 2014.

WHO is now reporting H5N1 cases on a monthly basis. ECDC will continue monthly reporting in the CDTR to coincide with WHO reporting.

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