**COMMUNICABLE DISEASE THREATS** REPORT

# CDTR
# Week 32, 3-9 August 2014

**All users**

This weekly bulletin provides updates on threats monitored by ECDC.

# I. Executive summary

## EU Threats

### Mass gathering monitoring - Commonwealth Games- Scotland 2014

Opening date: 11 June 2014 Latest update: 24 July 2014

In collaboration with Health Protection Scotland, ECDC has enhanced its monitoring activities during the Commonwealth Games: an international, multi-sport event involving athletes from the Commonwealth nations. The Games took place from 23 July to 3 August 2014 in Glasgow, Edinburgh and the surrounding areas, and near Carnoustie on Scotland's east coast. Around one million spectators and 6 500 athletes and officials attended this event.

➔Update of the week

During the past week, ECDC has not detected any events of public health significance to the Games.

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

Opening date: 3 June 2014 Latest update: 31 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 new human cases of West Nile fever have been reported in the EU or in neighbouring countries.



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# Non EU Threats

## Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014 Latest update: 7 August 2014

An ongoing outbreak of Ebola virus disease (EVD) in West Africa since December 2013 has been affecting Guinea, Liberia, Sierra Leone and, more recently, Nigeria. Since April 2014, there has been a new wave of transmission in all three affected countries, and the outbreak continues to evolve at an alarming pace. This is the largest ever documented outbreak of EVD, unprecedented in both the number of cases and deaths. It is also the largest outbreak in terms of geographical spread.

➔Update of the week

Since the last CDTR on 31 July 2014, the four affected countries have reported 388 additional cases (35 in Guinea, 187 in Liberia, 158 in Sierra Leone and eight in Nigeria) including 203 new fatalities.

On 8 August 2014, the outbreak was declared a public health emergency of international concern (PHEIC) by the World Health Organization.

## Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 7 August 2014

An outbreak of chikungunya virus infection has been ongoing in the Caribbean since December 2013. The outbreak has spread to North, Central and South America. There have been more than 510 000 probable and confirmed cases in the region, including 32 fatalities so far. Several EU countries are reporting imported cases from the affected areas.

➔Update of the week

Compared to last week, the number of reported cases of chikungunya infections has risen by 8% in the affected areas. The Dominican Republic accounted for the highest increase, with more then 26 000 new cases reported. The overall death toll rose to 32, the six new deaths were all reported from Martinique where the number of deaths is now 19.

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

Opening date: 24 September 2012 Latest update: 7 August 2014

Since April 2012, 853 cases of MERS-CoV infection have been reported by local health authorities worldwide, including 331 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, no new cases have been reported.

## Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 7 August 2014

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, 451 cases have been reported, including 146 deaths. No autochthonous cases have been reported from outside of China. Most cases have been unlinked, and sporadic zoonotic transmission from poultry to humans is the most likely explanation for the outbreak. Sustained person-to-person transmission has not been documented and transmission peaked during the winter of 2013-2014. The reason for this pattern is not obvious. Since October 2013, 316 cases have been reported, the majority from previously affected provinces or in patients who visited these provinces prior to onset of illness.

➔Update of the week

Since the last monthly update on 4 July 2014, one new case of A(H7N9) has been reported in Hunan province. The patient is a 55-year-old male with onset of symptoms on 21 June. He was admitted to a hospital on 28 June in a severe condition. The case has a history of exposure to live poultry.

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

Opening date: 8 September 2005 Latest update: 7 August 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 worldwide. Polio was declared a public health emergency of international concern (PHEIC) on 5 May 2014.

➔Update of the week



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During the past week, four new infections with wild poliovirus 1 (WPV1) have been reported, two in Pakistan and two in Cameroon.

**Update on WHO Emergency Committee**
The unanimous view of the Emergency Committee, whose second meeting was held by teleconference on Thursday 31 July 2014, was that the conditions for a Public Health Emergency of International Concern (PHEIC) continue to be met.

The Committee provided the following advice to the Director-General for her consideration (which she accepted):
States currently exporting wild poliovirus - Pakistan, Cameroon, Equatorial Guinea and the Syrian Arab Republic - continue to meet the criteria for such states and pose the highest risk for further wild poliovirus exportations in 2014. The temporary recommendations issued by the Director-General on 5 May 2014 for such states should continue to be implemented.

States infected with wild poliovirus but not currently exporting - Afghanistan, Ethiopia, Iraq, Israel, Nigeria, and Somalia - continue to meet the criteria for such States and pose an ongoing risk for new wild poliovirus exportations in 2014. The temporary recommendations issued by the Director-General on 5 May 2014 for such states should continue to be implemented.

The DG accepted the Committee's recommendation to review the situation again in three months.



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# II. Detailed reports

## Mass gathering monitoring - Commonwealth Games- Scotland 2014

Opening date: 11 June 2014 Latest update: 24 July 2014

### Epidemiological summary

### Actions

As of Friday 8 August 2014, ECDC will stop monitoring this event and close this threat.

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

Opening date: 3 June 2014 Latest update: 31 July 2014

### Epidemiological summary

As of 07 August 2014, no human cases of West Nile fever have been reported in the EU. Twenty-five cases have been reported from neighbouring countries since the beginning of the 2014 transmission season. Thirteen cases have been reported by Bosnia and Herzegovina in Republika Srpska in the following municipalities: Banja Luka (4), Trebinje (1), Novi Grad (1), Kljuc (1), Krupa na Uni (1), Mrkonjic Grad (1), Gornji Ribnik (1), Teslic (1), Laktasi (1) and Prijedor (1). In addition, one case, reported in Prijedor in a patient from Austria, is still under investigation as the place of infection is still unknown. Serbia has reported five cases of West Nile fever in the following regions: City of Belgrade (2), Juzno-backi district (2) and Nisavski district (1). Russia has reported seven cases in the following oblasts: Samarskaya (6) and Belgorodskaya (1).

In Croatia, West Nile virus has been detected in a horse on a farm near Osijek, 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 is 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

Since week 23, ECDC has been producing weekly West Nile fever (WNF) risk maps during the transmission season to inform blood safety authorities regarding WNF affected areas.



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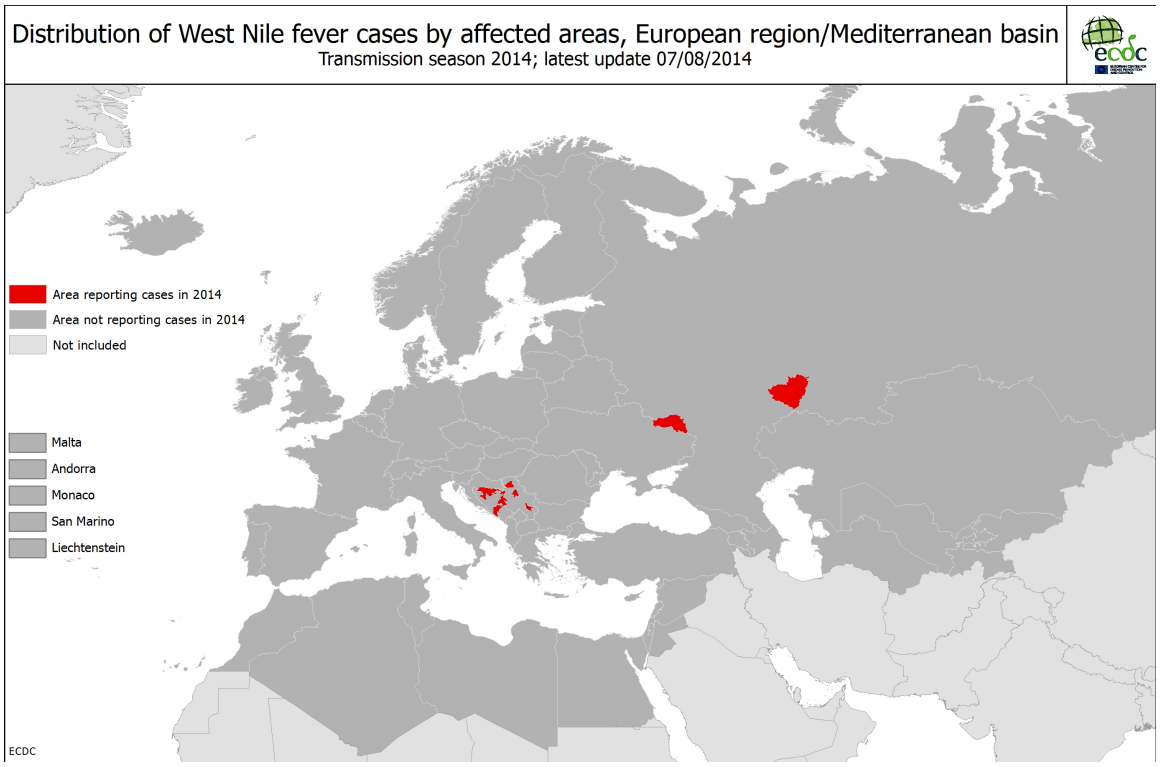


# Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014 Latest update: 7 August 2014

## Epidemiological summary

The following distribution and classification of cases (as of 4 August 2014) is based on the best available information reported by ministries of health through the World Health Organization's Regional Office for Africa:

The distribution and classification of the cases are as follows*:
- **Guinea**, 495 cases (351 confirmed, 133 probable, and 11 suspected), including 363 deaths;
- **Liberia**, 516 cases (143 confirmed, 252 probable, and 121 suspected), including 282 deaths;
- **Nigeria**, 9 cases (0 confirmed, 2 probable, and 7 suspected), including 1 death; and
- **Sierra Leone**, 691 cases (576 confirmed, 49 probable, and 66 suspected), including 286 deaths.

* The number of cases is based on WHO reporting and is subject to change.

Last week, two American citizens with EVD were medically evacuated to the United States to receive care at Emory University Hospital in Atlanta.

Two Spanish citizens working in a Catholic Hospital in Monrovia (Liberia) were evacuated to Spain on 6 August. One of them is a priest who tested positive for Ebola. The other one has tested negative. They are now both in isolation in a hospital in Madrid.

Worldwide, nineteen countries (including USA, Canada, France, Germany, Austria, Spain and Greece) have issued guidance to avoid unnecessary travel to the affected countries.

**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 | EID "Undiagnosed Acute Viral Febrile Illnesses, Sierra Leone"|

## ECDC assessment

This is the largest outbreak of EVD reported so far and also the first documented 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. 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.

Transmission requires direct contact with blood, secretions, organs or other bodily fluids of dead or living infected persons or



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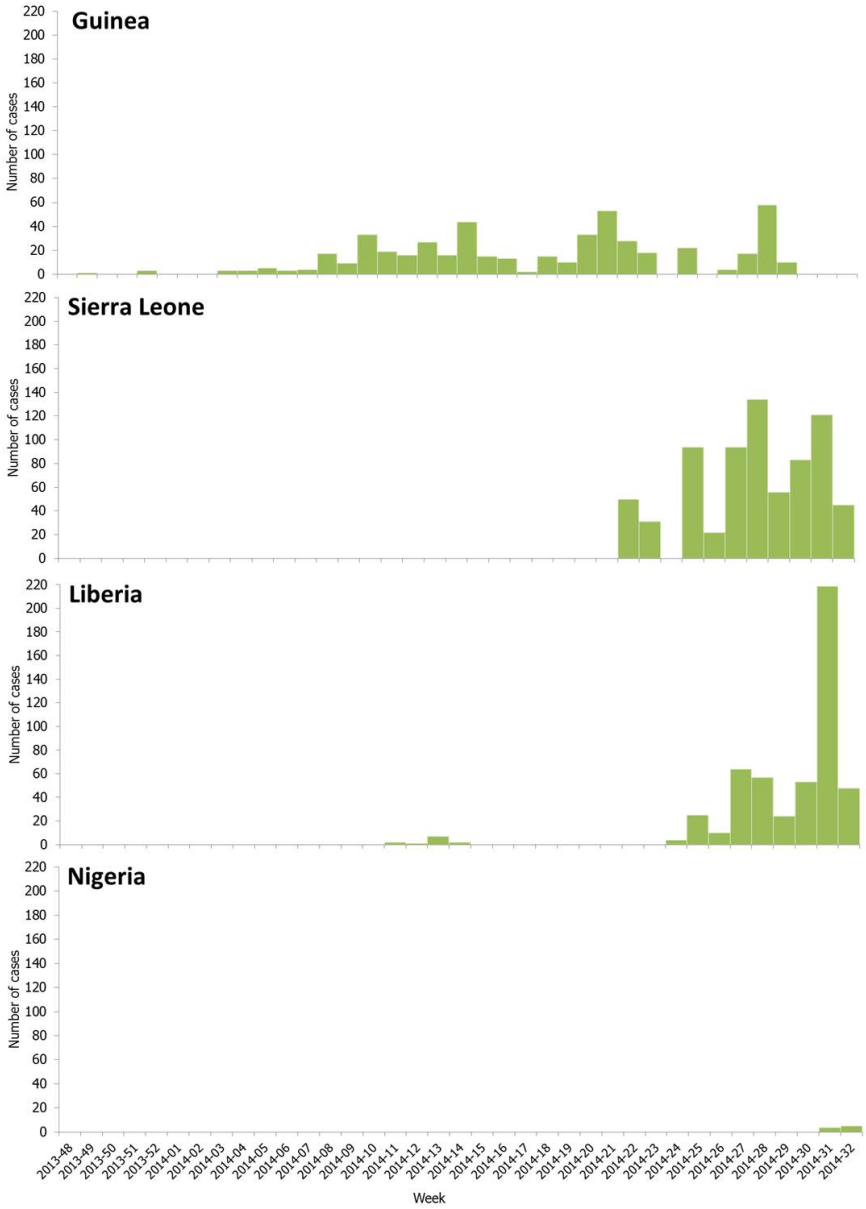
animals. Therefore the risk of infection is still considered very low if precautions are strictly followed. However, the increase in the number of new EVD cases in recent weeks, the urban transmission, and the fact that not all chains of transmission are known, is increasing the likelihood of visitors and travellers coming into contact with infected/ill persons. The risk of exposure in healthcare facilities for EU residents and visitors to the affected areas is related to the implementation of effective infection transmission control measures in these settings and the nature of the care required. Recent reports of transmission to healthcare workers in different healthcare settings indicate that effective infection control measures are not being thoroughly implemented across healthcare facilities in the region.

## Actions

ECDC published an update of its rapid risk assessment on 1 August 2014.

## Distribution of the EVD cases by week of reporting in Guinea, Sierra Leone, Liberia and Nigeria from week 48/2013 to week 32/2014 (as of 4 August 2014)

Source: adapted from WHO figures




## Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 7 August 2014



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## Epidemiological summary

As of 1 August 2014, 512 858 suspected and confirmed cases of chikungunya virus infection have been reported from the affected countries and territories in the Caribbean and the rest of the Americas, including 32 fatalities. For the breakdown of figures please see the latest WHO PAHO update.

Several EU/EFTA countries have reported imported cases of chikungunya infection in patients with travel history to the affected areas: France, Greece, Italy, the Netherlands, Spain and Switzerland.

**Web sources**: PAHO update| ECDC Chikungunya | CDC Factsheet | Medisys page | CARPHA interactive chikungunya map

## 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. Further spread of the outbreak is to be expected.

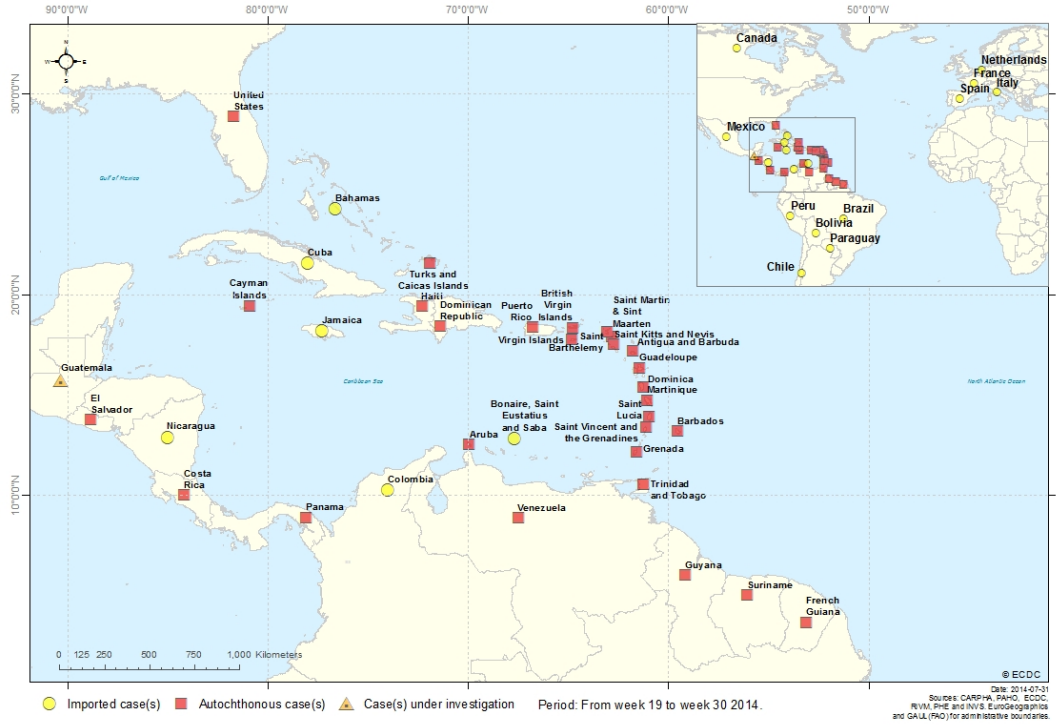
Vigilance is recommended for the occurrence of imported cases of chikungunya in tourists returning to the EU from the Caribbean, including awareness among clinicians, travel clinics and blood safety authorities.

## Actions

ECDC updated its Rapid Risk Assessment and published it on the website on 27 June 2014.

## Chikungunya in the Caribbean as of 1 August 2014

ECDC




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

Opening date: 24 September 2012 Latest update: 7 August 2014

## Epidemiological summary

Since April 2012, and as of 07 August 2014, 853 cases of MERS-CoV have been reported by local health authorities worldwide, including 331 deaths.



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**Confirmed cases and deaths by region**

**Middle East**
Saudi Arabia: 721 cases/298 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: 5 cases/2 deaths

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

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.



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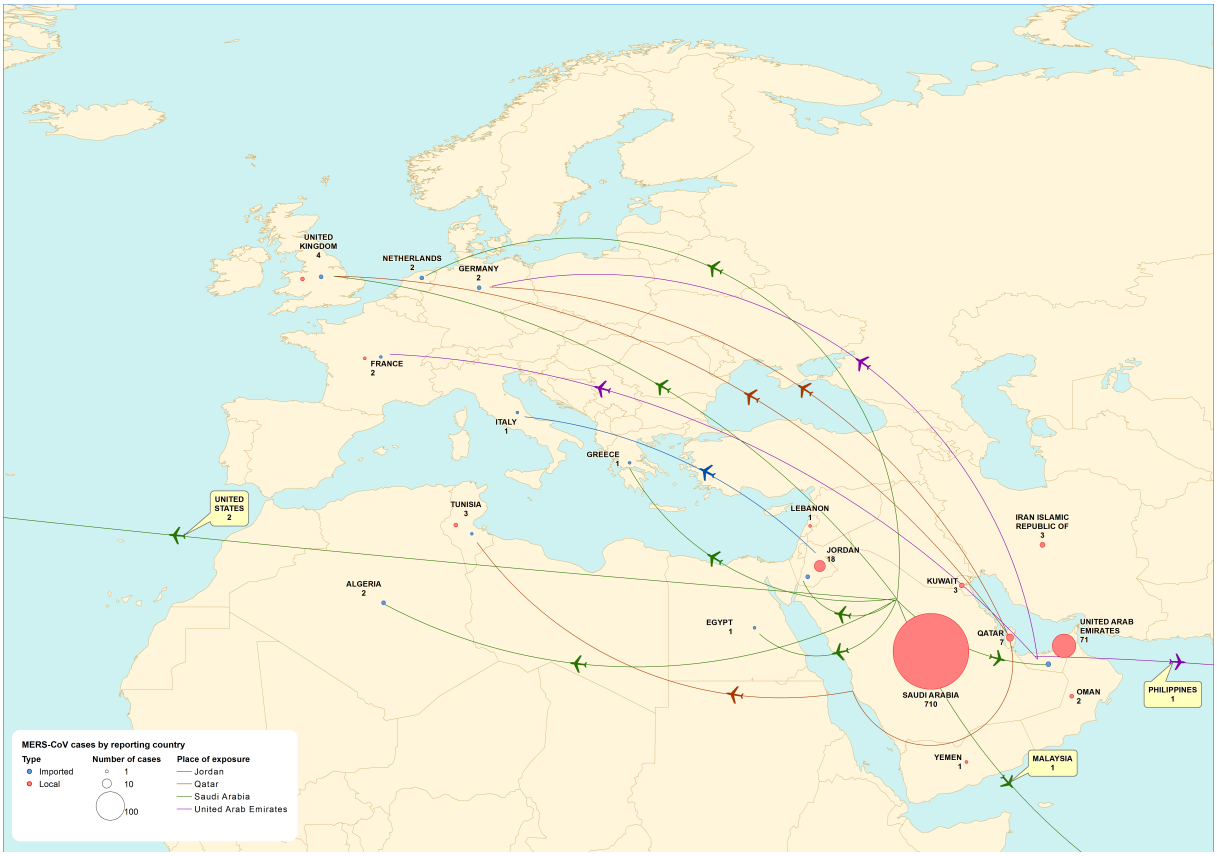
## Distribution of confirmed cases of MERS-CoV by reporting country and place of probable infection, March 2012 - 07 August 2014 (n=853)

Source: ECDC




# Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 7 August 2014

## Epidemiological summary

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, human cases have continued to be reported, and as of 6 August 2014, there were 451 laboratory-confirmed cases: Zhejiang (139), Guangdong (109), Jiangsu (56), Shanghai (42), Fujian (22), Hunan (24), Anhui (18), Jiangxi (6),Henan (4), Beijing (4), Guangxi (4), Shandong (4), Hebei (1), Guizhou (1), Jilin (2), Hong Kong (10), Taiwan (4) and one imported case in Malaysia. In addition, there was one case in Malaysia and one fatal case in Canada, both exported from China. The second wave of the outbreak started in October 2013. Since then 316 cases have occurred. The number of reported cases has been declining since April 2014 and only one case has been reported during the past month.

Most cases have developed severe respiratory disease. One hundred and forty-six patients have died (case-fatality ratio=32%).



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**Web sources**: Chinese CDC | WHO | WHO FAQ page | ECDC |

## ECDC assessment

This outbreak is caused by a novel reassortant avian influenza virus capable of causing severe disease in humans. Currently, the most likely scenario is that this remains a local, although geographically widespread, zoonotic outbreak, in which the virus is transmitted sporadically to humans in close contact with the animal reservoir, similar to the influenza A(H5N1) situation.

Imported cases of influenza A(H7N9) may be detected in Europe. However, the risk of the disease spreading among humans following an importation to Europe is considered to be very low. People in the EU presenting with severe respiratory infection and a history of potential exposure in the outbreak area will require careful investigation in Europe.

## Actions

The Chinese health authorities continue to respond to this public health event with enhanced surveillance, epidemiological and laboratory investigation, including scientific research. ECDC is closely monitoring developments.

ECDC published an updated Rapid Risk Assessment on 26 February 2014.

ECDC published a guidance document Supporting diagnostic preparedness for detection of avian influenza A(H7N9) viruses in Europe for laboratories on 24 April 2013.



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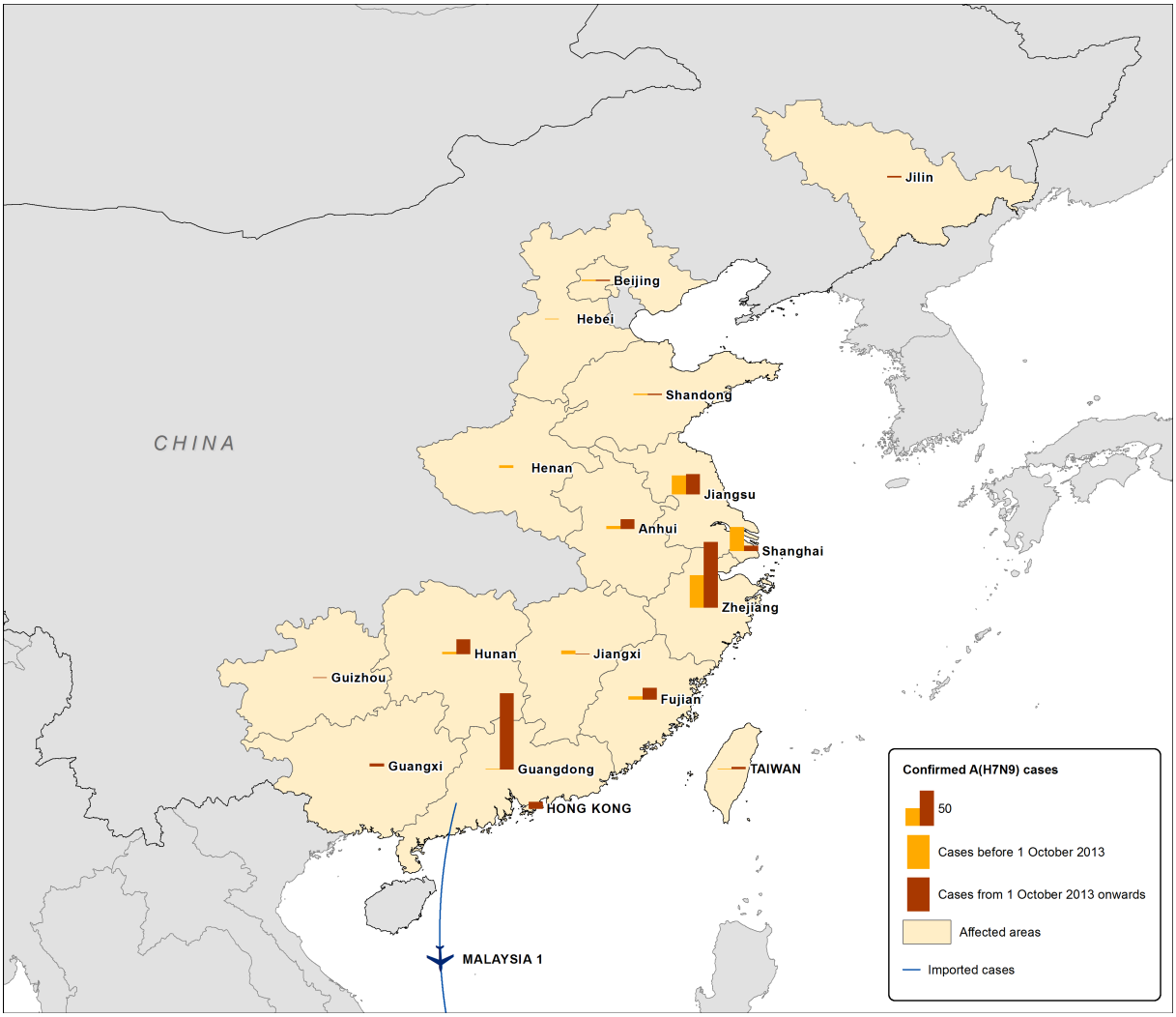
## Distribution of confirmed A(H7N9) cases by place of reporting, weeks 8/2013 to 31/2014 (n=451)

Source: ECDC




# Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 7 August 2014

## Epidemiological summary

During the past week, four new infections with wild poliovirus 1 (WPV1) have been reported, two in Pakistan and two in Cameroon.

Worldwide, 135 cases have been reported to WHO so far in 2014, compared with 177 for the same time period in 2013. In 2014, nine countries have reported cases: Pakistan (104 cases), Afghanistan (8 cases), Equatorial Guinea (5 cases), Nigeria (5 cases), Somalia (4 cases), Cameroon (5 cases), Iraq (2 cases), Syria (1 case), and Ethiopia (1 case).

Equatorial Guinea has been added to the list of 'virus-exporting countries' which should now implement a set of Temporary Recommendations recently issued by the Director-General of the World Health Organization under the International Health Regulations (2005). 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 genetically linked to the current



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outbreak in Cameroon in a sewage sample collected near Sao Paulo, Brazil.

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

## 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.

Genetic sequencing indicated that the five cases reported in 2014 from Equatorial Guinea are linked to the ongoing outbreak in Cameroon. A national emergency action plan to respond to the polio outbreak has been developed by the Ministry of Health in Equatorial Guinea and polio partner agencies and is now being implemented.

The recent importation to 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 poliomyelitis outbreaks occurs in areas with clusters of unvaccinated populations, people living 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 wild poliovirus being re-introduced 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.



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