

## I. Executive summary

### EU Threats

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#### Influenza - Multistate (Europe) - Monitoring 2013-2014 season

Opening date: 4 October 2013

Latest update: 8 May 2014

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

→Update of the week

Overall, influenza activity and the circulation of influenza viruses in reporting countries is declining.

### Non EU Threats

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

Opening date: 31 March 2013

Latest update: 8 May 2014

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, 430 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. Transmission has peaked in two distinct waves; during the winter months in 2013 and during the winter of 2013-2014. The reason for this pattern is not obvious. Since October 2013, 295 cases have been reported and the majority of these cases were reported from previously affected provinces or in patients who visited these provinces prior to onset of illness.

→Update of the week

During the month of April twenty-six cases have been reported (Guangdong (8), Jiangsu (8), Anhui (4), Hong Kong (3), Hunan (2) and Jiangxi (1)).

## Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013

Latest update: 2 May 2014

On 6 December 2013, France reported two laboratory-confirmed autochthonous cases of chikungunya in the French part of the Caribbean island of Saint Martin. Since then, local transmission has been confirmed in the Dutch part of Saint Martin, on Martinique, Saint Barthélemy, Guadeloupe, British Virgin Islands, Dominica, Anguilla, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, the Dominican Republic, Haiti, and French Guiana. Aruba only reported imported cases, and Antigua and Barbuda are investigating local cases. This is the first documented outbreak of chikungunya with autochthonous transmission in the Americas. As of 25 April 2014, there have been around 35 000 probable and confirmed cases in the region. Six fatalities have been reported so far.

### →Update of the week

During the past week, new cases have been reported in most of the affected areas. In the French Antilles, the number of new cases is generally decreasing or constant. In French Guiana, the number of autochthonous cases is increasing, but the virus circulation is moderate. Increased transmission is reported by the Dominican Republic and Dominica. The first 14 confirmed cases have been reported from Haiti. Antigua and Barbuda have reported the first confirmed case; at the moment it is not confirmed that the case is due to autochthonous transmission ([WHO](#)).

To date, islands with confirmed cases are Saint Martin/Sint Maarten, Martinique, Saint Barthélemy, Guadeloupe, British Virgin Islands, Anguilla, Dominica, Aruba, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Dominican Republic, Haiti, Antigua and Barbuda, and French Guiana in mainland South America. 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.

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

Opening date: 24 September 2012

Latest update: 8 May 2014

Since April 2012, 537 laboratory-confirmed cases, including 148 deaths, of acute respiratory disease caused by Middle East respiratory syndrome coronavirus (MERS-CoV) have been reported by national health authorities. 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. Human-to-human transmission to close contacts and in hospital settings has occurred, but there is no evidence of sustained transmission among humans. MERS-CoV is genetically distinct from the coronavirus that caused the SARS outbreak.

### →Update of the week

Since the previous CDTR, 87 new cases have been reported. Seventy-eight cases were reported by Saudi Arabia. Four cases were reported by the United Arab Emirates. Three cases were reported by Jordan. The USA has reported the first case of MERS-CoV with travel history to Saudi Arabia. Yemen has reported first case of MERS-CoV which had no recent travel history or contact to a confirmed case.

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

Opening date: 8 September 2005

Latest update: 8 May 2014

Polio, a crippling and potentially fatal vaccine-preventable disease that mainly affects children, is close to being eradicated as a result of global public health efforts. Polio remains endemic in Afghanistan, Pakistan and Nigeria.

### →Update of the week

Polio was declared public health emergency of international concern (PHEIC) on 5 May 2014 by the World Health Organization (WHO) Director-General. As a result of the PHEIC, WHO issued [temporary recommendations](#) for controlling the spread of polioviruses.

## Outbreak of Ebola virus disease - West Africa - 2014

Opening date: 22 March 2014

Latest update: 2 May 2014

An outbreak of Ebola virus disease (EVD) is currently evolving in West Africa, affecting Guinea (235 cases) and Liberia (35 cases). The first cases were reported from Guéckédou prefecture in Guinea, near the border with Liberia and Sierra Leone. Results from sequencing showed 97% identity to *ebolavirus* strains from the Democratic Republic of Congo and Gabon. This is the first such outbreak in this region.

### →Update of the week

During the past week, 10 new clinical cases have been reported from Guinea. There have been no new clinical cases in Liberia since 6 April 2014.

## Influenza - Multistate (Europe) - Monitoring 2013-2014 season

Opening date: 4 October 2013

Latest update: 8 May 2014

### Epidemiological summary

For week 18/2014:

- Low intensity of influenza activity with sporadic cases or no geographic spread was reported by 24 reporting countries
- Of 114 sentinel specimens tested across 17 countries, six (5%) were positive for influenza A virus.
- Fifteen hospitalised laboratory-confirmed influenza cases were reported, nine of which were admitted to intensive care units.

Overall, the influenza activity is low and declining in reporting countries.

### ECDC assessment

The influenza season started in EU/EEA countries in week 2/2014.

### Actions

ECDC will continue to produce weekly influenza surveillance overviews during the northern hemisphere influenza season.

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

Opening date: 31 March 2013

Latest update: 8 May 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 08 May 2014, there have been 430 laboratory-confirmed cases: Zhejiang (138), Guangdong (103), Jiangsu (52), Shanghai (42), Fujian (22), Hunan (22), Anhui (15), Jiangxi (6), Henan (4), Beijing (4), Guangxi (4), Shandong (2), Hebei (1), Guizhou (1), Jilin (1), Hong Kong (10), Taiwan (2) and one case reported in Malaysia, which was imported from China.

Most cases have developed severe respiratory disease. One hundred and forty-six patients have died (case-fatality ratio=33.9%).

Since October 2013, 295 cases have been reported from Guangdong (102), Zhejiang (92), Jiangsu (25), Hunan (19), Fujian (17), Anhui (11), Shanghai (8), Guangxi (4), Beijing (2), Guizhou (1), Jilin (1), Jiangxi (1) Taiwan (1) and Hong Kong (10). One exported case from China was diagnosed in Malaysia.

**Web sources:** [Chinese CDC](#) | [WHO](#) | [WHO FAQ page](#) | [ECDC](#) |

### ECDC assessment

The continued transmission of a novel reassortant avian influenza virus, in one of the most densely populated areas in the world, capable of causing severe disease in humans, is a cause for concern due to the pandemic potential of the virus. 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.

A fatal case of influenza A(H5N1) imported from China to Canada and a recent imported case of influenza A(H7N9) in Malaysia support the scenario that 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.

The risk of increased transmission of H7N9 viruses between humans is not negligible. European countries should continue to prepare for the eventuality of future pandemics, including one caused by A(H7N9). Preparedness activities should include the precautionary development of early human vaccine candidates and increased monitoring of animal influenzas at the animal-human interface.

### 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.

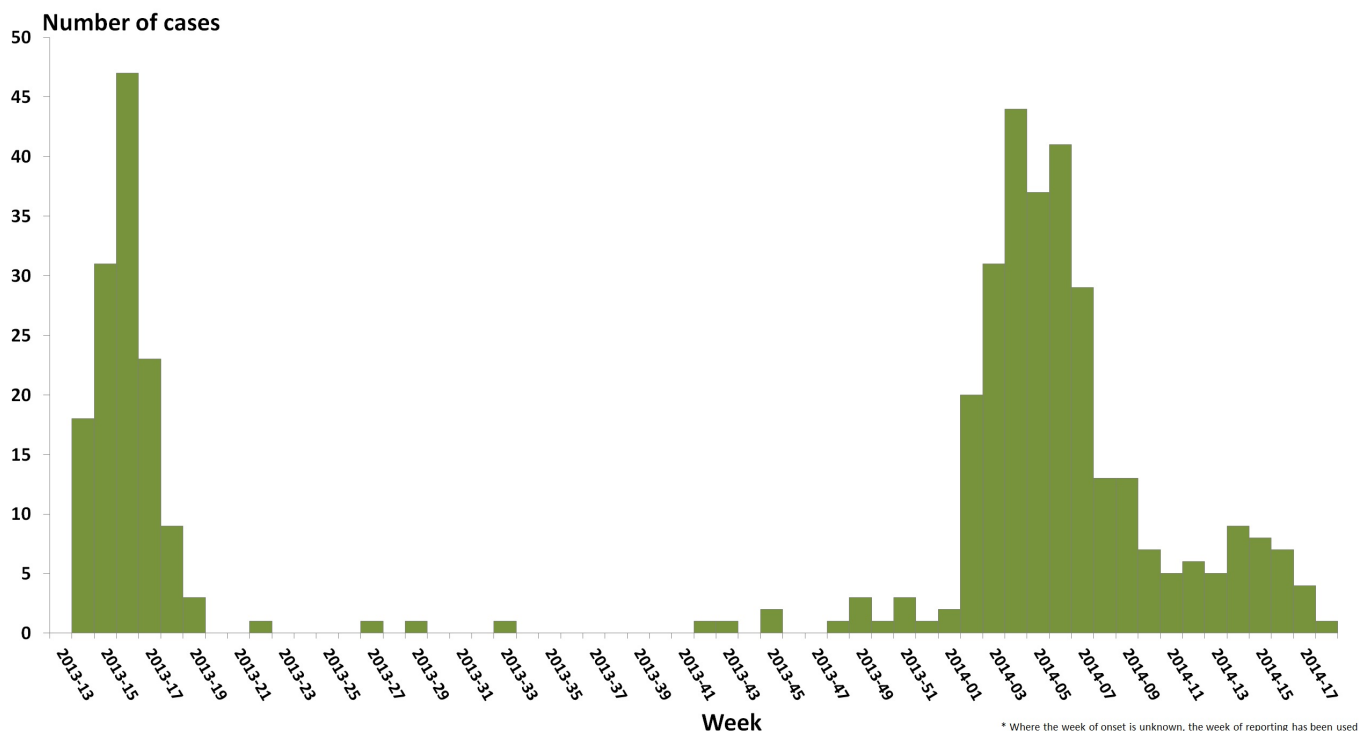
ECDC published an [epidemiological update](#) on 7 February 2014.

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

The CDTR may contain confidential or sensitive information (i.e. EWRS) and therefore, its distribution is restricted to authorized users only.

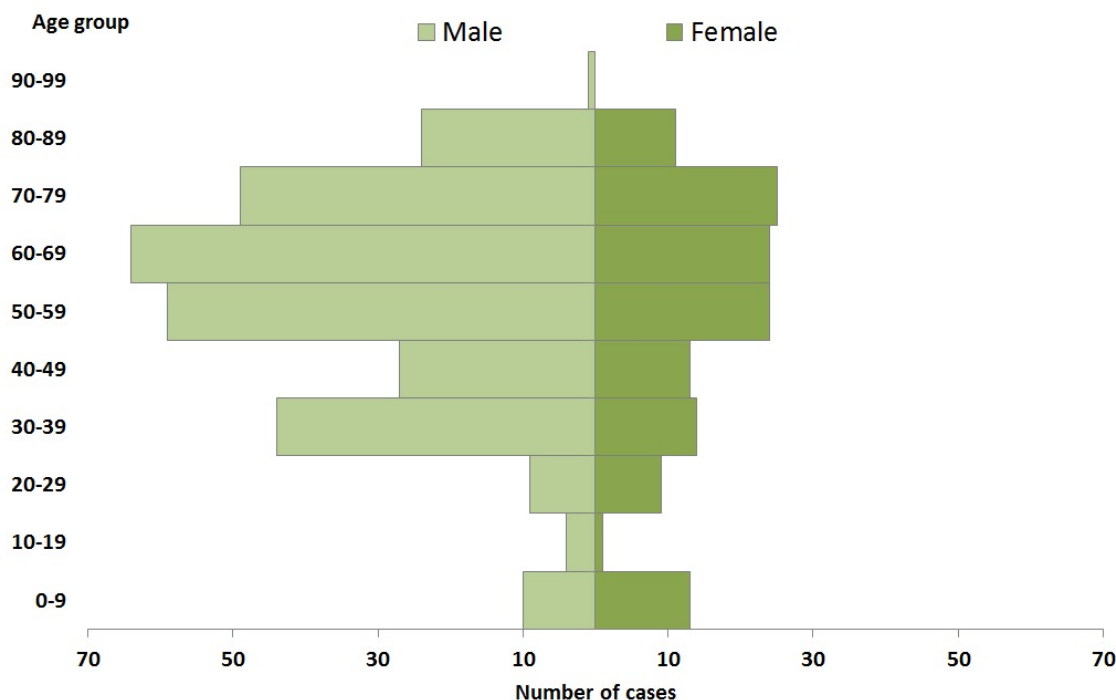
### Distribution of confirmed A(H7N9) cases by week of onset\*, week 14/2013 to week 18/2014, China (n=430)

Source: ECDC SRS



### Distribution of confirmed A(H7N9) cases by age and gender, week 14/2013 to week 18/2014, China (n=425\*)

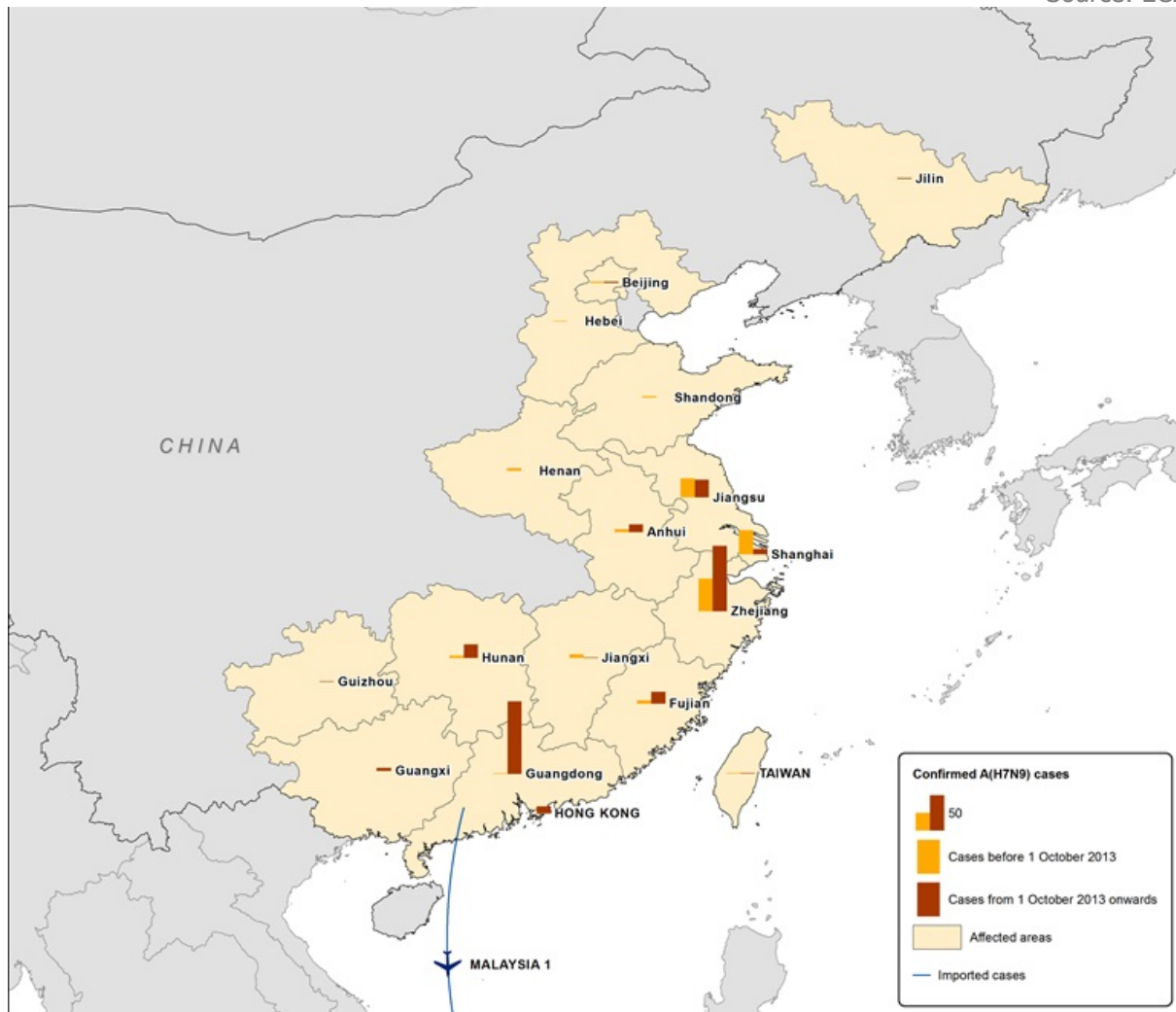
Source: ECDC SRS



\*5 cases where age or gender is missing have been excluded

## Distribution of confirmed A(H7N9) cases by place of reporting, week 15/2013 to 18/2014 (n=430)

Source: ECDC SRS



## Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013

Latest update: 2 May 2014

### Epidemiological summary

Cases reported as of 2 May 2014:

- Virgin Islands (UK), 9 confirmed cases
- Saint Martin (FR), 3 160 suspected and 793 confirmed or probable cases, 3 deaths
- Sint Maarten (NL), 301 confirmed autochthonous cases
- Martinique, 19 700 suspected and 1 515 confirmed or probable cases, 2 deaths
- Saint Barthélemy, 485 suspected and 135 confirmed or probable cases

- Guadeloupe, 8 000 suspected and 1 328 confirmed or probable cases, one death
- Dominica, 1 252 suspected cases and 105 confirmed cases
- French Guiana, 43 autochthonous cases and 22 imported cases
- Anguilla, 33 confirmed cases on the island with one case probably originating from Saint Martin
- Aruba, 1 imported case originating from Sint Maarten
- Saint Lucia, one confirmed case
- St. Kitts and Nevis, one confirmed case
- Dominican Republic, 7520 suspected and 17 confirmed cases
- Saint Vincent and the Grenadines, 24 suspected cases and 3 confirmed cases
- Haiti, 14 confirmed cases
- Antigua and Barbuda, 1 case

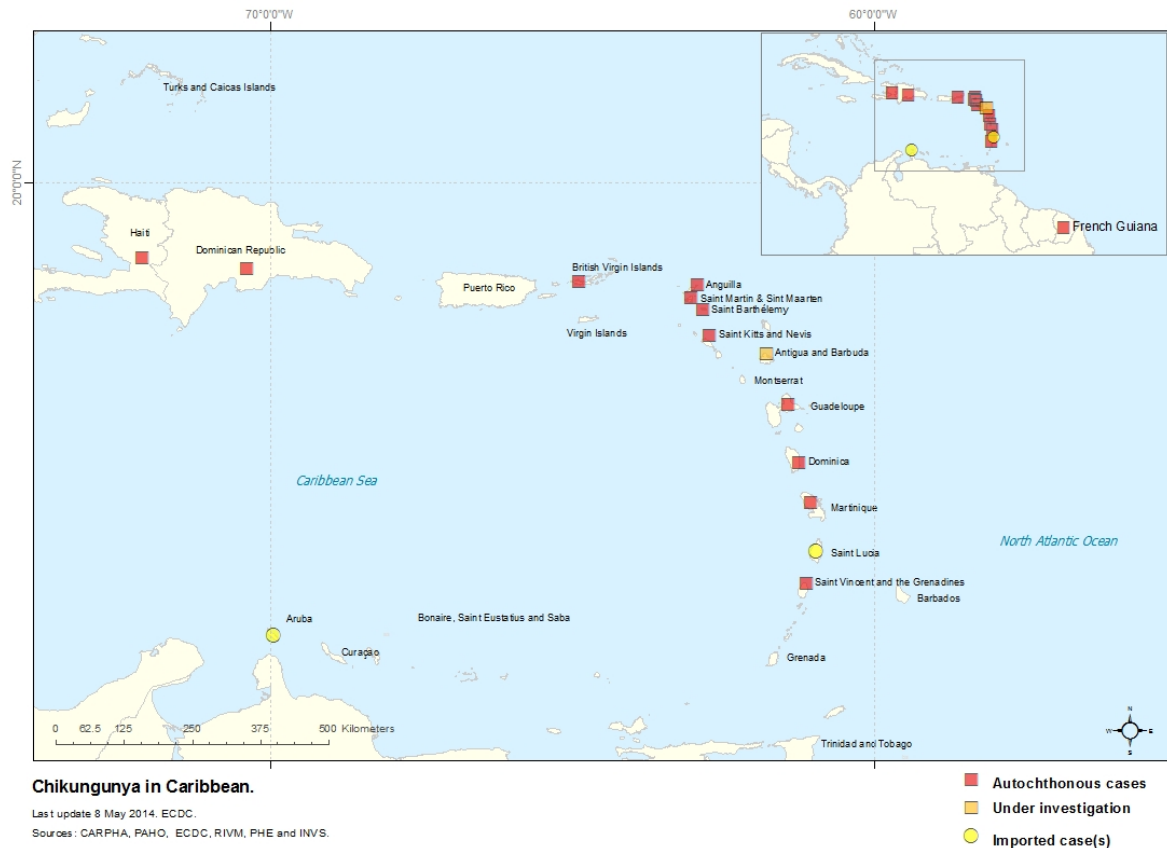
### ECDC assessment

Epidemiological data indicate that the outbreak, which started in Saint Martin (FR), is expanding. An increasing number of cases 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. The autochthonous cases in French Guiana are the first autochthonous chikungunya cases in mainland South America.

### Actions

ECDC published a [rapid risk assessment](#) on 12 December 2013 and [epidemiological updates](#) on 10 January and [7 February](#) 2014.

## Chikungunya outbreak as of 8 May 2014



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

Opening date: 24 September 2012

Latest update: 8 May 2014

### Epidemiological summary

Summary: Since April 2012 and as of 8 May 2014, 537 laboratory-confirmed cases of MERS-CoV have been reported by local health authorities worldwide, including 148 deaths. Of the 536 cases, 96 (18%) were healthcare workers.

The following countries have reported MERS-CoV cases:

Middle East:

Saudi Arabia: 446 cases / 120 deaths

United Arab Emirates: 53 cases / 9 deaths

Qatar: 7 cases / 4 deaths

Jordan: 8 cases / 4 deaths

Oman: 2 cases / 2 deaths

Kuwait: 3 cases / 1 death

Egypt: 1 case / 0 deaths



Yemen: 1 case / 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 deaths

Africa:

Tunisia: 3 cases / 1 death

**Asia:**

Malaysia: 1 case / 1 death

Philippines: 1 case / 0 deaths

**Americas:**

United States of America: 1 case / 0 deaths

Sixteen cases have been reported from outside the Middle East: the UK (4), France (2), Tunisia (3), Germany (2), Italy (1), Malaysia (1), Philippines (1), Greece (1) and USA (1). In France, Tunisia and the UK, there has been local transmission among patients who had not been to the Middle East, but had been in close contact with laboratory-confirmed or probable cases. Person-to-person transmission has occurred both among close contacts and in healthcare facilities.

WHO reported yesterday a case in Yemen who died on 31 March 2014. This is the first case of MERS-CoV reported in Yemen. The patient was a 44 year-old male residing in Shibam (Yemen) who worked as an aircraft maintenance engineer and had hepatitis B. He had no history of travel during the last one month of his illness and no contact to a known confirmed case but had contact with passengers at the airport. In addition, he is reported to have visited a camel farm on a weekly basis and drank fresh camel milk.

On 2 May 2014, the US IHR National Focal Point reported the first laboratory confirmed Middle East respiratory syndrome coronavirus (MERS-CoV) infection in US citizen. The man in his 60s lives and works in Riyadh, Saudi Arabia. He traveled to the US from Riyadh to Chicago on 24 April 2014 via London Heathrow with travel from Chicago to Indiana by bus. The onset of symptoms with a low-grade fever without any respiratory symptoms began on 14 April 2014. On 27 April 2014, he developed shortness of breath, cough, increasing fever, and mild runny nose. On 28 April 2014, he was seen in an emergency room. The patient was placed in private room.

**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](#) | [Eurosurveillance article 26 September](#) |

## 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 an ongoing source of infection in the region. Dromedary camels are likely an important host species for the virus, and many of the primary cases in clusters have reported direct or indirect camel exposures. 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. The case detected in Malaysia had participated in the muslim pilgrimage Umrah. However, more details are needed on possible and suspected exposure events, and it is possible that these cases were infected when visiting healthcare facilities in the region.

## Actions

ECDC published an [epidemiological update](#) on 30 April 2014.

The last update of a [rapid risk assessment](#) was published on 25 April 2014.

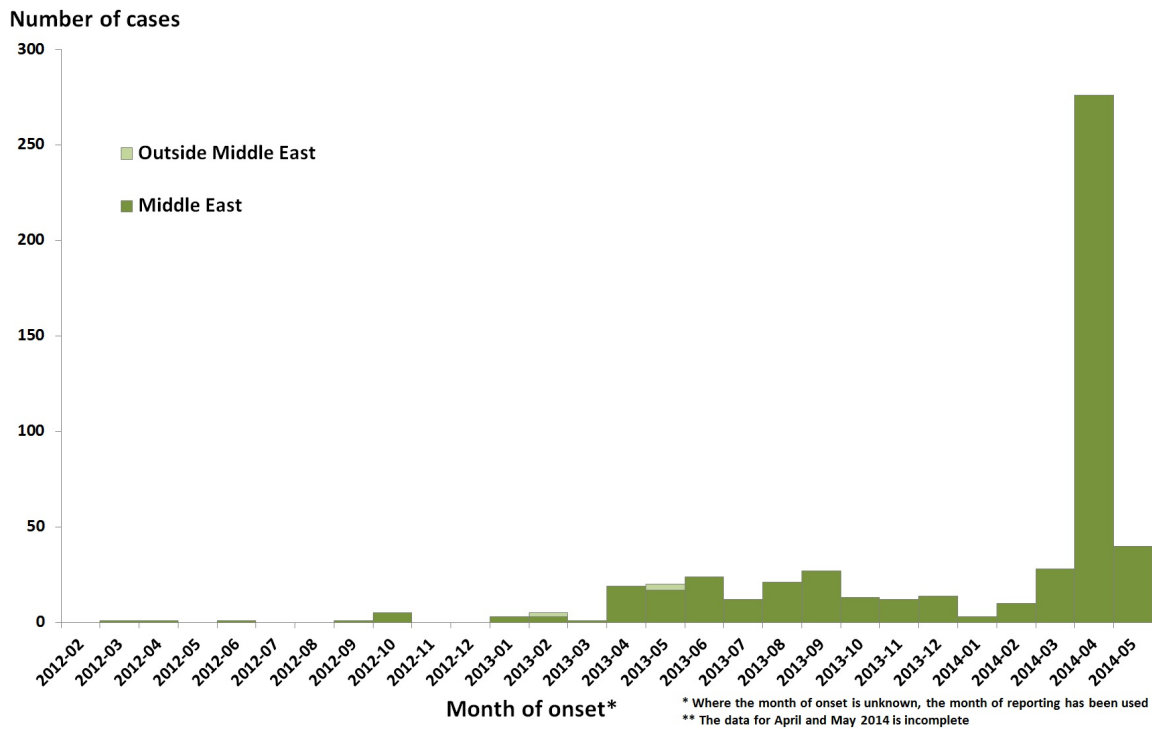
The CDTR may contain confidential or sensitive information (i.e. EWRS) and therefore, its distribution is restricted to authorized users only.

The first 133 cases are described in [Eurosurveillance](#), published on 26 September 2013.

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

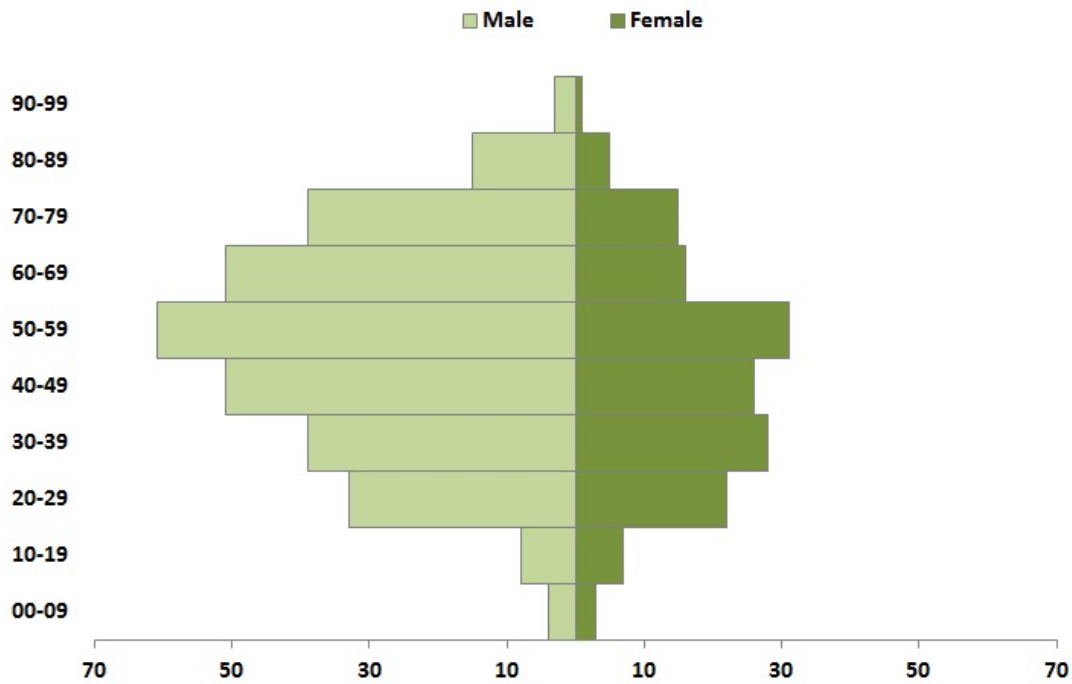
### Distribution of confirmed cases of MERS-CoV by month of onset and place of probable infection, March 2012 - 08 May 2014 (n=537\*)

Source: ECDC SRS



Distribution of confirmed cases of MERS-CoV by gender and age group, March 2012 - 08 May 2014 (n=458\*)

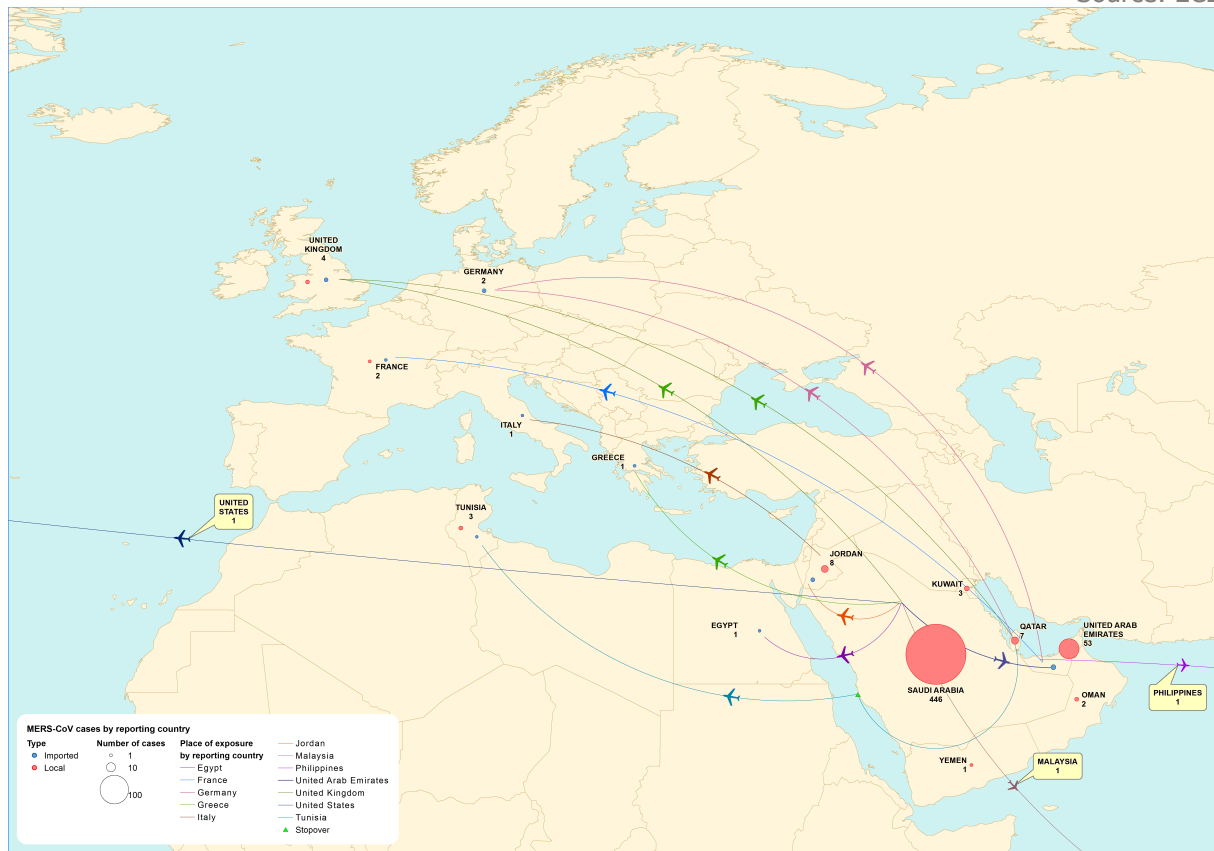
Source: ECDC SRS



\*79 cases for which age or sex data is missing have been excluded

## Distribution of confirmed MERS-CoV cases by place of reporting, March 2012 - 08 May 2014 (n=537)

Source: ECDC SRS



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

Opening date: 8 September 2005

Latest update: 8 May 2014

### Epidemiological summary

During the past week six new infections with Wild poliovirus 1 (WPV1) were reported: five from Pakistan and one from Afghanistan.

Worldwide, 74 cases have been reported to WHO in 2014, compared with 26 for the same time period in 2013. The most affected country is Pakistan (59 cases this year).

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. This was an

12/15

imported outbreak, and it was demonstrated that the WPV originated from India. An outbreak in the Netherlands, in a religious community opposed to vaccination, caused two deaths and 71 cases of paralysis in 1992.

The last indigenous WPV case in the WHO European Region was in Turkey in 1998. 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 detection of WPV in environmental samples in Israel, and the confirmed and ongoing outbreaks in Syria and Somalia, highlight the risk of re-importation into Europe. Recommendations are provided in the recent ECDC risk assessments:

- [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?](#)

Due to continued poliovirus circulation in Cameroon, gaps in surveillance quality, and the influx of vulnerable populations from the Central African Republic, WHO elevated its risk assessment on the international spread of polio from Cameroon to 'very high' in March of 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.

Due to the current polio situation, the threat is being followed weekly.

ECDC is preparing an updated RRA due to the declaration of polio as a PHEIC.

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

Opening date: 22 March 2014

Latest update: 2 May 2014

### Epidemiological summary

There is an ongoing outbreak of Ebola virus disease (EVD) in West Africa affecting Guinea and Liberia, with onset in early February 2014.

In **Guinea** as of 5 May 2014, there are 235 clinical cases of Ebola virus disease (EVD), including 157 deaths. Of these, 127 are PCR confirmed. As of 7 May, there was one patient in isolation in Conakry and one in Guekedou. The date of isolation of the most recent confirmed cases is 26 April in Conakry and 1 May in Guekedou. There have been no new cases of EVD in Kissidougou since 1 April, Macenta since 9 April, and Conakry since 22 April. In Djingaraye and Dabola, no new cases have been reported since the end of March 2014.

In **Liberia**, as of 2 May 2014, the number of clinical EVD cases is 13 (6 confirmed, 2 probable and 5 suspected cases), including 11 deaths. There have been no new clinical cases in Liberia since 6 April.

In **Sierra Leone** as of 7 May no cases of EVD have been confirmed.

Control activities supported by WHO, UNICEF, Médecins Sans Frontières and other stakeholders have been implemented in Guinea, including contact tracing, enhanced surveillance and strengthening of infection control practices. Information and education materials have been developed and distributed, and communication campaigns are underway. A team of EU scientists have set up a field laboratory to test suspected cases near the borders with Sierra Leone and Liberia.

**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 first time an EVD outbreak has been reported in Guinea. The origin of this outbreak is currently unknown. The outbreak seems to be slowing down. The risk of infection for 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

ECDC has published an updated [rapid risk assessment](#) and provided guidance to Member States for the safe handling of bush meat, as well as for travellers from and to the affected countries. ECDC has published information for [EU travellers](#) and an [epidemiological update](#) on its website.

ECDC is closely monitoring this event.

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