

This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary

### EU Threats

#### West Nile virus - Multistate (Europe) - Monitoring season 2016

Opening date: 30 May 2016

Latest update: 15 July 2016

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 of West Nile fever (WNF)-affected areas and identify significant changes in the epidemiology of the disease.

→ Update of the week

As of 14 July 2016, no human cases of West Nile fever have been reported in the EU Member States. Seven cases were reported in neighbouring countries since the beginning of the 2016 transmission season.

On 11 July, the [National Reference Centre for the Study of Exotic Diseases \(CESME\)](#) in Italy confirmed a horse positive for West Nile disease in the province of Rome, Lazio region.

### Non EU Threats

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

Opening date: 8 September 2005

Latest update: 15 July 2016

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission of the virus has completely stopped and the world becomes polio-free. Polio was declared a Public Health Emergency of International Concern (PHEIC) by WHO on 5 May 2014 due to concerns regarding the increased circulation and international spread of wild poliovirus during 2014. On 20 May 2016, at the ninth meeting of the emergency committee, the temporary recommendations in relation to the PHEIC were extended for another three months. The World Health Organization recently declared wild poliovirus type 2 eradicated worldwide.

→ Update of the week

Neither new wild poliovirus cases nor any of circulating vaccine-derived poliovirus or positive environmental samples were reported in the past week.

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

Opening date: 16 November 2015

Latest update: 15 July 2016

Since 1 February 2016, Zika virus infection and the related clusters of microcephaly cases and other neurological disorders constitute a public health emergency of international concern (PHEIC). Since 1015, and as of 7 July 2016, WHO has reported 62 countries and territories with mosquito-borne transmission. There is now a scientific consensus that Zika virus is a cause of microcephaly and Guillain-Barré syndrome.

→Update of the week

No new country or territory has reported mosquito-borne Zika virus transmission during the last week (as of 13 July 2016). Eleven countries have reported evidence of person-to-person transmission of Zika virus, probably via a sexual route: Argentina, Canada, Chile, Peru, the United States of America, France, Germany, Italy, Portugal, Spain and New Zealand.

In Guinea-Bissau, on 29 June 2016, the Institute Pasteur Dakar confirmed that three of 12 samples tested positive for Zika by PCR. All 12 samples tested negative against IgM Zika. Four additional samples were sent to IPD on 1 July for gene sequencing, and the results are still pending. WHO will conduct an assessment mission to Guinea-Bissau to help identify the priority activities and to strengthen the national response capacity.

A Zika virus infection atlas is now available on the ECDC [website](#). It is updated every Friday.

### Publications:

[The Lancet Infectious Diseases](#): Zika virus in the female genital tract

[MMWR](#): Projected Zika Virus Importation and Subsequent Ongoing Transmission after Travel to the 2016 Olympic and Paralympic Games — Country-Specific Assessment, July 2016

## Yellow fever outbreak- Multistate (world) - Monitoring global outbreaks

Opening date: 17 March 2016

Latest update: 15 July 2016

An outbreak of yellow fever in Angola started in December 2015 in the municipality of Viana, Luanda province, and has spread to all 18 provinces of Angola. On 23 April 2016, the neighbouring Democratic Republic of Congo (DRC) officially declared a yellow fever outbreak linked to the one in Angola. Other countries (Brazil, Chad, Colombia, Ghana, Peru, Republic of Congo, and Uganda) are all currently reporting yellow fever outbreaks or sporadic cases not linked to the Angolan outbreak.

→Update of the week

This week, Democratic Republic of Congo reported two additional confirmed autochthonous cases, bringing the total to nine confirmed autochthonous cases.

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

Opening date: 24 September 2012

Latest update: 15 July 2016

Since April 2012 and as of 14 July 2016, 1 808 cases of MERS, including 694 deaths, have been reported by health authorities worldwide. The source of the virus remains unknown, but the pattern of transmission and virological studies point towards dromedary camels in the Middle East as being a reservoir from which humans sporadically become infected through zoonotic transmission. Human-to-human transmission is amplified among household contacts and in healthcare settings.

→Update of the week

Since 8 June 2016 and as of 14 July 2016 there have been 55 cases and 14 deaths of MERS-CoV reported from the Middle East.

Of the 55 cases, 53 were reported by Saudi Arabia, while Qatar and United Arab Emirates each reported one case.

In Saudi Arabia the majority of cases were reported in Riyadh (32), Najran (6), Jeddah (4), Taif (2) and Dawadmy (2) while Alafraj, Alkharj, Baha, Dammam, Hufoof, Madinah and Tabuk each reported a single case.

Of the 55 cases, 23 were classified as primary, eight due to household contact to a known MERS-CoV case and 24 due to nosocomial transmission. Of the 24 nosocomial transmission cases, 17 were classified as healthcare workers, and all 17 were from Riyadh. Of the 17, 14 were asymptomatic. Of the 23 primary cases, eight had direct or indirect contact to camels and two drank camel milk.

## II. Detailed reports

### West Nile virus - Multistate (Europe) - Monitoring season 2016

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Opening date: 30 May 2016

Latest update: 15 July 2016

#### Epidemiological summary

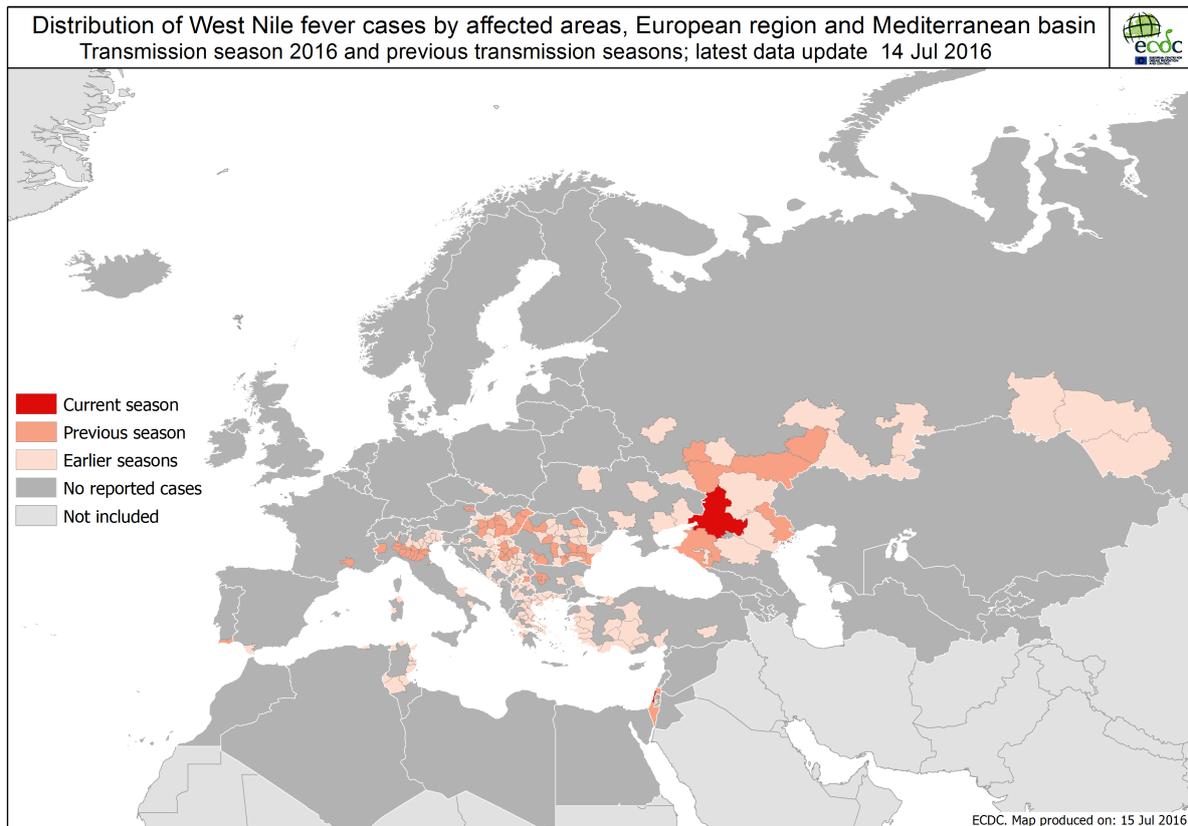
As of 14 July, no human cases of West Nile fever have been reported in the EU Member States. Seven cases were reported in neighbouring countries since the beginning of the 2016 transmission season.

#### ECDC assessment

West Nile fever in humans is a notifiable disease in the EU. National health authorities consider the implementation of control measures important for ensuring blood safety when human cases of West Nile fever occur. In accordance with the [EU blood directive](#), blood donors should be deferred from donation for 28 days after leaving a risk area of locally-acquired West Nile Virus unless an individual Nucleic Acid Test (NAT) is negative.

#### Actions

From week 22 onwards, ECDC produces weekly West Nile fever (WNF) maps during the transmission season (i.e. June to November) to inform blood safety authorities about WNF-affected areas.



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

Opening date: 8 September 2005

Latest update: 15 July 2016

### Epidemiological summary

In 2016, 19 cases of wild poliovirus type 1 (WPV1) have been reported so far, compared with 32 for the same period in 2015. The cases were detected in Pakistan (13) and Afghanistan (6). As of 12 July 2016, three cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO in 2016, all from Laos. There were nine cVDPV cases during the same period in 2015.

**Web sources:** [Polio eradication: weekly update](#) | [MedISys Poliomyelitis](#) | [ECDC Poliomyelitis factsheet](#) | [Temporary Recommendations to Reduce International Spread of Poliovirus](#) | [WHO Statement on the Seventh Meeting of the International Health Regulations Emergency Committee on Polio](#)

### ECDC assessment

The last locally acquired wild polio cases within the current EU borders were reported from Bulgaria in 2001. The most recent wild polio outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

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?](#) | [RRA Outbreak of circulating vaccine-derived poliovirus type 1](#)

4/12

[\(cVDPV1\) in Ukraine](#)

## Actions

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

Following the detection of the cases of circulating vaccine-derived poliovirus type 1 in Ukraine, ECDC published a rapid risk assessment on its [website](#).

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

Opening date: 16 November 2015

Latest update: 15 July 2016

### Epidemiological summary

#### EU/EEA imported cases:

Since week 45/2015, 18 countries (Austria, Belgium, the Czech Republic, Denmark, Finland, France, Italy, Luxembourg, Malta, the Netherlands, Norway, Romania, Slovenia, Spain, Sweden and the UK) have reported 940 travel-associated Zika virus infections through The European Surveillance System (TESSy).

As of 14 July 2016, ECDC has detected 1 039 imported cases through epidemic intelligence activities. This information is aggregated from official EU/EEA public health authorities websites but is not based on a systematic reporting surveillance system and hence cannot be considered exhaustive.

#### EU's Outermost Regions and Territories

As of 7 July 2016:

*Guadeloupe*: 20 070 suspected cases have been detected, an increase of 2 650 suspected cases since last week. The weekly number of cases is not decreasing yet.

*French Guiana*: 8 715 suspected cases have been detected, an increase of 260 since last week. The weekly number of cases has been increasing compared to the previous three weeks.

*Martinique*: 32 400 suspected cases have been reported, an increase of 640 since last week. The weekly number of cases has been stable over the last four weeks.

*St Barthélemy*: 185 suspected cases have been detected, an increase of 55 suspected cases since last week. The weekly number of cases is still increasing.

*St Martin*: 1 260 suspected cases have been detected, an increase of 165 suspected cases since last week. The weekly number of cases has decreased compared to the previous week.

#### Update on microcephaly and/or central nervous system (CNS) malformations potentially associated with Zika virus infection

As of 13 July 2016, microcephaly and other central nervous system (CNS) malformations associated with Zika virus infection or suggestive of congenital infection have been reported by 13 countries or territories. Brazil has reported the highest number of cases. Between October 2015 and 13 July 2016, Brazil reported 8 451 suspected cases of microcephaly and other nervous system disorders suggestive of congenital infection. This represents an increase of 150 cases since the last update; 1 687 are confirmed cases of microcephaly, 266 of which are laboratory-confirmed for Zika virus infection, according to the [Ministry of Health](#). In the EU, Spain (2) and Slovenia (1) reported congenital malformations associated with Zika virus infection after travel in the affected areas. Cases have also been detected in the EU's Outermost Regions and Territories in Martinique, French Guiana and French Polynesia.

Fifteen countries and territories worldwide reported an increased incidence of Guillain-Barré syndrome (GBS) and/or laboratory confirmation of a Zika virus infection among GBS cases.

**Web sources:** [ECDC Zika Factsheet](#) | [PAHO](#) | [Colombian MoH](#) | [Brazilian MoH](#) | [Brazilian microcephaly case definition](#) | [SAGE MOH Brazil](#)

## ECDC assessment

The spread of the Zika virus epidemic in the Americas is likely to continue as the vectors (*Aedes aegypti* and *Aedes albopictus* mosquitoes) are widely distributed there. The likelihood of travel-related cases in the EU is increasing. A detailed risk assessment is available [here](#). As neither treatment nor vaccines are available, prevention is based on personal protection measures. Pregnant women should consider postponing non-essential travel to Zika-affected areas.

## Actions

ECDC publishes an [epidemiological update](#) every Friday and [maps](#) with information on countries or territories which have reported confirmed autochthonous cases of Zika virus infection.

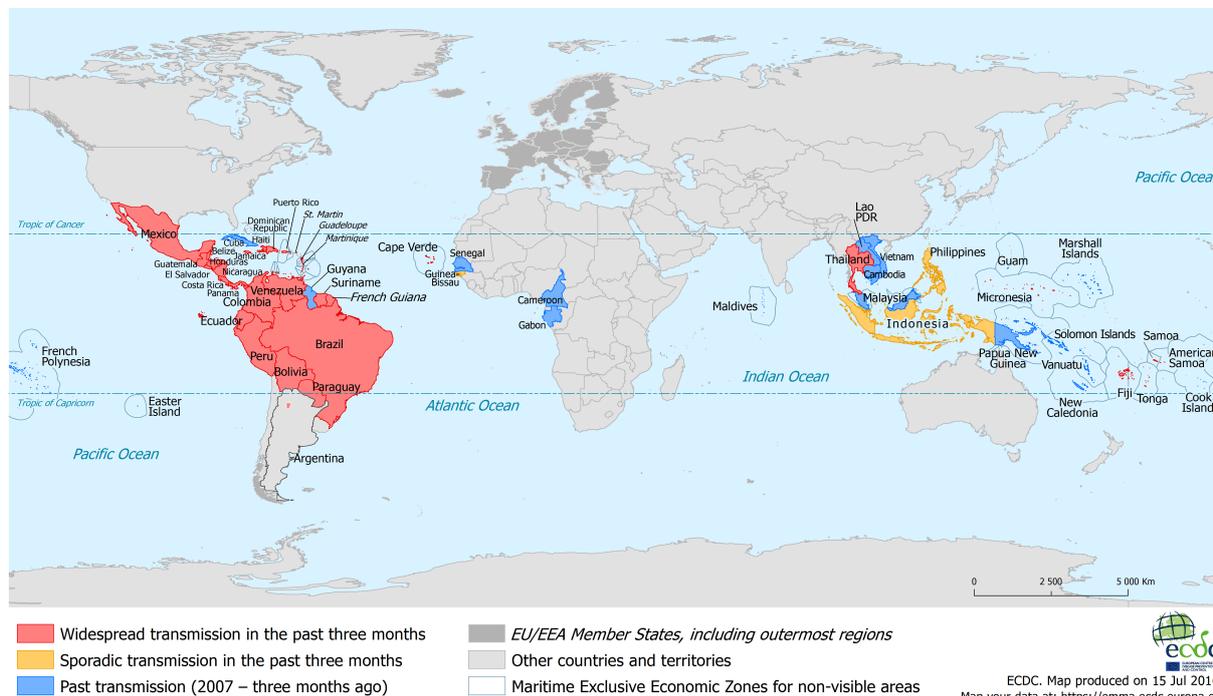
## Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past nine months and past three months, as of 14 July 2016

ECDC

Countries	Last case since 9 months	Last case since 3 months
American Samoa	Widespread transmission	Yes
Argentina	Widespread transmission	Yes
Aruba	Widespread transmission	Yes
Bahamas	Widespread transmission	Yes
Belize	Widespread transmission	Yes
Bolivia	Widespread transmission	Yes
Bonaire	Widespread transmission	Yes
Brazil	Widespread transmission	Yes
Cape Verde	Widespread transmission	Yes
Colombia	Widespread transmission	Yes
Costa Rica	Widespread transmission	Yes
Curaçao	Widespread transmission	Yes
Dominica	Widespread transmission	Yes
Dominican Republic	Widespread transmission	Yes
Guadalupe	Widespread transmission	Yes
El Salvador	Widespread transmission	Yes
Fiji	Widespread transmission	Yes
French Guiana	Widespread transmission	Yes
Guadeloupe	Widespread transmission	Yes
Guatemala	Widespread transmission	Yes
Haiti	Widespread transmission	Yes
Honduras	Widespread transmission	Yes
Jamaica	Widespread transmission	Yes
Martinique	Widespread transmission	Yes
Mexico	Widespread transmission	Yes
Micronesia, Federated States of	Widespread transmission	Yes
Nicaragua	Widespread transmission	Yes
Panama	Widespread transmission	Yes
Paraguay	Widespread transmission	Yes
Peru	Widespread transmission	Yes
Puerto Rico	Widespread transmission	Yes
Saint Lucia	Widespread transmission	Yes
Saint Martin	Widespread transmission	Yes
Saint Vincent and the Grenadines	Widespread transmission	Yes
Saint-Barthélemy	Widespread transmission	Yes
Samoa	Widespread transmission	Yes
Sint Maarten	Widespread transmission	Yes
Suriname	Widespread transmission	Yes
Thailand	Widespread transmission	Yes
Tonga	Widespread transmission	Yes
Trinidad and Tobago	Widespread transmission	Yes
US Virgin Islands	Widespread transmission	Yes
Venezuela	Widespread transmission	Yes
Anguilla	Sporeadic transmission	Yes
Grenada	Sporeadic transmission	Yes
Guinea-Bissau	Sporeadic transmission	Yes
Indonesia	Sporeadic transmission	Yes
Philippines	Sporeadic transmission	Yes
Sri Lanka	Sporeadic transmission	Yes
Cuba	No	Yes
Guyana	No	Yes
Marshall Islands	No	Yes
New Caledonia	No	Yes
Papua New Guinea	No	Yes
Vietnam	No	Yes

## Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past three months, as of 15 July 2016

ECDC



## Yellow fever outbreak- Multistate (world) - Monitoring global outbreaks

Opening date: 17 March 2016

Latest update: 15 July 2016

### Epidemiological summary

In **Angola**, between 21 January and 1 July 2016, the Angolan Ministry of Health notified 3 552 yellow fever cases, 875 of which were confirmed and a total of 355 cases was fatal (case fatality ratio: 10%). Of the 875 confirmed cases, 117 were fatal (CFR: 13.4%). All provinces have reported cases. There is no available report for the last week.

Between the beginning of the year and 1 July 2016, the **Democratic Republic of Congo** has reported 1 582 cases of yellow fever, including 68 confirmed cases, 59 of which had a recent travel history to Angola. Of the 1 582 cases, 75 have died since the beginning of the outbreak. Among the cases without recent travel history to Angola, autochthonous cases are reported in Kinshasa province (6), Kongo-Central (1) and Kwango (2). In addition, since the beginning of year, two independent sylvatic cases have been notified, one in Bas-Uele province and one in Tshuapa province. These two cases are not related to the current outbreak in Angola and other provinces in DRC

7/12

As of 7 July 2016, 88 suspected cases have been reported in the **Republic of Congo**. Two of them were vaccinated in December 2015 and identified as IGM positive.

In **Uganda**, health authorities reported 68 yellow fever cases between 26 March and 4 June 2016, seven of which were laboratory-confirmed; another seven were fatal.

**Ghana** has reported four suspected cases from two regions: three in Brong-Ahafo region and one from Volta region. Investigations are ongoing to determine the vaccination status of the cases and to rule out a link with Angola or the DRC. These are most likely sylvatic cases because these areas are known to be endemo-epidemic for yellow fever.

**Guinea** has reported 136 suspected cases since January 2016.

**Chad** reported a sylvatic case of yellow fever that had symptom onset on 15 January 2016.

According to the WHO weekly report, as of 30 June, two suspected cases have been reported in the **Republic of Congo** (Bouenza department). This department is bordering the DRC. The laboratory results are pending.

**Colombia** has reported a sylvatic case of yellow fever with symptom onset on 19 May 2016.

In **Brazil**, one sporadic fatal yellow fever case was reported in São Paulo state in March 2016. The case did not have a history of yellow fever vaccination.

As of 14 July 2016, authorities in **Peru** have reported 72 cases including 19 deaths. The majority of cases have been reported from Junin department (56 cases). This outbreak is not related to the current African outbreaks.

Web sources: [ECDC factsheet / WHO yellow fever page](#) | [WHO AFRO](#) | [WHO-DRC](#) | [PAHO](#) | [MoH Peru](#) | [ECDC updated risk assessment](#) | [WHO Situation report 30 June 2016](#) | [Cameroon monthly bulletin](#) |

## ECDC assessment

Yellow fever in an urban setting is a public health emergency that may result in a large number of cases. Despite the beginning of a downward trend in the number of newly reported cases, the outbreak of yellow fever in Angola remains a major concern, mainly in relation to:

- continuous transmission in some provinces (Huila, Benguela)
- the need to reinforce surveillance systems in some of the affected areas.

In the DRC, the main challenges are currently:

- serious shortage of reagents, both IGM and PCR, for the laboratory confirmation of cases
- vaccine disposal and implementation of vaccination campaigns.

The risk of continuous spread in affected and non-affected countries in West-Central and East Africa is one of the main concerns with regard to the control of this epidemic.

In Europe, the *Aedes aegypti* mosquito is present on the island of Madeira, Portugal. In week 26, vector activity was still considered low in Madeira according to the latest entomological situation report published by [local health authorities](#).

Outbreaks of yellow fever have never been reported in Asia, but local conditions with a large distribution of *Aedes aegypti*, the main vector of urban yellow fever in Africa and in South America, are suitable for urban yellow fever outbreaks. In the DRC, the confirmation of autochthonous circulation in the capital is a major concern as Kinshasa is highly populated, as is Brazzaville, the capital of the Republic of the Congo, which is located across the Congo River.

## Actions

More than eleven million people in Angola have been vaccinated through a large-scale vaccination campaign since the beginning of February, using vaccines mobilised through the yellow fever vaccine emergency stockpile made available through the International Coordinating Group for Vaccine Provision (ICG), with support from both Gavi, the UN Central Emergency Response Fund and a vaccine donation from Brazil. Vaccination campaigns have been completed in 11 health zones in Kinshasa and Kongo Central.

ECDC published a [rapid risk assessment](#) on 25 March 2016 and an updated [risk assessment](#) on 30 May 2016.

ECDC published the [report of the assessment of yellow fever in Angola](#) on 5 July 2016

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

Opening date: 24 September 2012

Latest update: 15 July 2016

### Epidemiological summary

As of 14 July 2016, 1 808 cases of MERS, including 694 deaths, have been reported by health authorities worldwide.

**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](#) | [Saudi Arabia statement](#) | [ECDC factsheet for professionals](#)

### ECDC assessment

The MERS outbreak in the Middle East poses a low risk to the EU. Efforts to contain the nosocomial clusters in the affected countries are vital to prevent wider transmission. Although it is likely that zoonotic transmission is the starting point of most clusters, human-to-human transmission is the most common mode of transmission for MERS-CoV. Human-to-human transmission occurs mostly in healthcare settings and, to a much more limited extent, within communities, mainly within households. So far, the majority of cases have been reported from hospital outbreaks in Saudi Arabia, the United Arab Emirates and South Korea.

Most nosocomial transmissions occur when infection prevention and control precautions are suboptimally applied and before a specific case is suspected or confirmed. The successful prevention of amplification of MERS-CoV infections associated with healthcare facilities depends on the effective implementation of infection prevention and control programmes.

## Actions

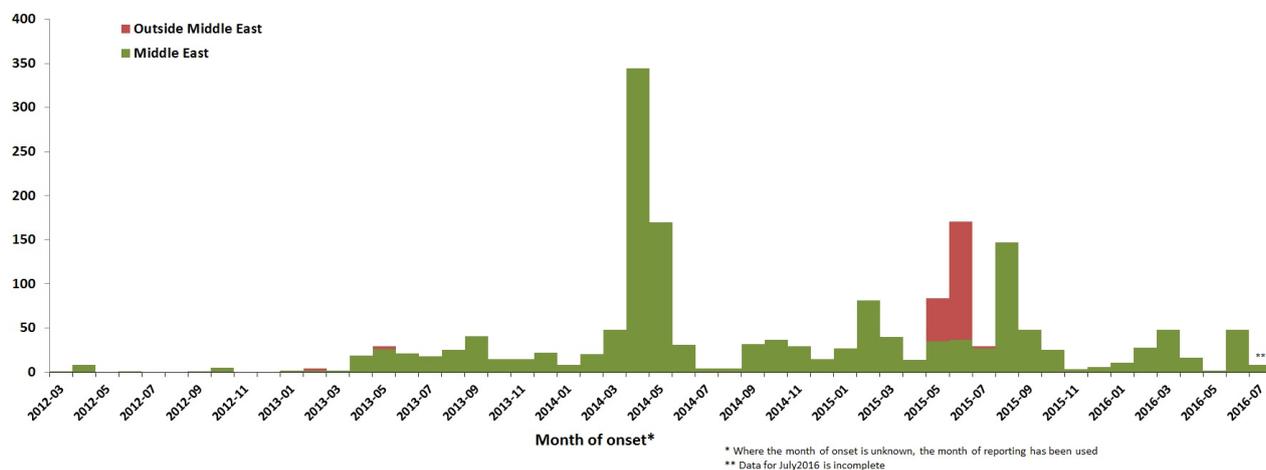
ECDC published the 21st update of its MERS CoV [rapid risk assessment](#) on 21 October 2015.

## Distribution of confirmed cases of MERS-CoV by country of reporting, March 2012 – 14 July 2016 (n=1 808)

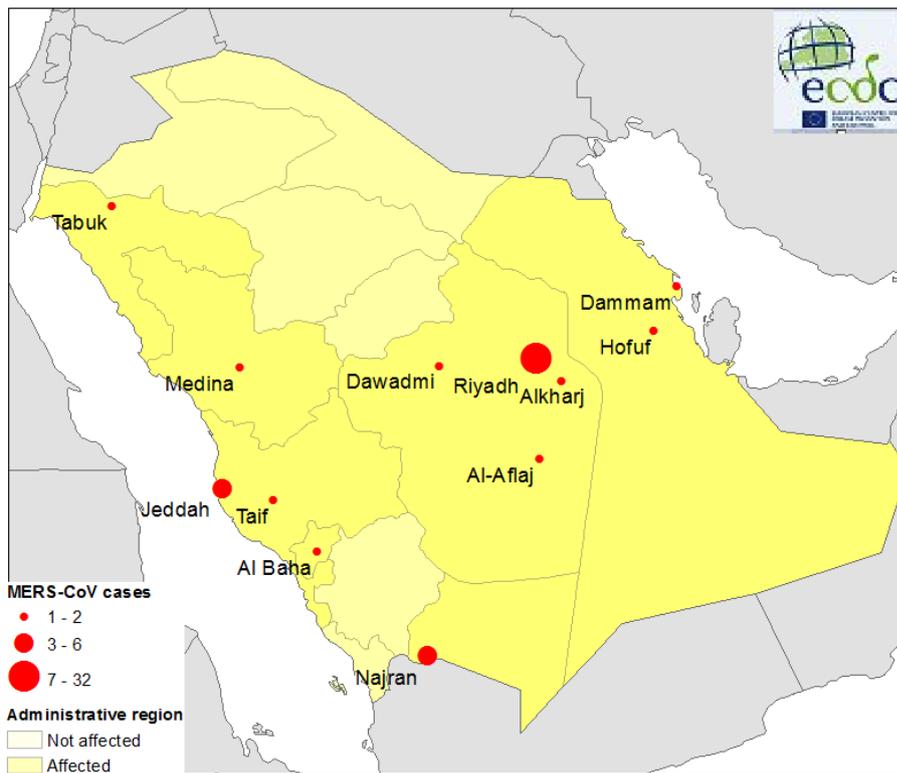
Region	Country	Number of cases	Number of deaths
Middle East	Saudi Arabia	1438	606
	United Arab Emirates	84	12
	Qatar	16	5
	Jordan	35	14
	Oman	7	3
	Kuwait	4	2
	Egypt	1	0
	Yemen	1	1
	Lebanon	1	0
	Bahrain	1	0
Iran	6	2	
Europe	Turkey	1	1
	UK	4	3
	Germany	3	2
	France	2	1
	Italy	1	0
	Greece	1	1
	Netherlands	2	0
Austria	1	0	
Africa	Tunisia	3	1
	Algeria	2	1
Asia	Malaysia	1	1
	Philippines	3	0
	South Korea	185	38
	China	1	0
	Thailand	2	0
Americas	United States of America	2	0
	<b>Global</b>	<b>1808</b>	<b>694</b>

## Distribution of confirmed cases of MERS-CoV by first available date, and probable place of infection, March 2012 – 14 July 2016 (n=1 808)

Number of cases



## Number of MER-CoV cases in Saudi Arabia with known city of infection 8 June -14 July 2016



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