

I. Executive summary

EU Threats

Monitoring environmental suitability of *Vibrio* growth in the Baltic Sea – Summer 2019

Opening date: 3 June 2019

Latest update: 6 September 2019

Elevated sea surface temperatures (SST) in marine environments with low salt content offer optimal environmental growth conditions for certain *Vibrio* species. These conditions can be found during the summer months in estuaries and enclosed water bodies with moderate salinity. ECDC has developed a model to map the environmental suitability for *Vibrio* growth in the Baltic Sea ([ECDC Vibrio Map Viewer](#)).

→Update of the week

As of 5 September 2019, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified as medium to high in Szczecin Lagoon (Germany and Poland), in Koszalin, Kolobrzeg, Gdansk and Ustka (Poland), on the coast bordering Kaliningrad (Russia) and across the Lithuanian coast. Additionally, the environmental suitability for *Vibrio* growth was identified as high to very high in certain areas in Szczecin Lagoon (Germany and Poland) and Kaliningrad (Russia).

For the next five days, the environmental suitability for *Vibrio* growth is foreseen to be low across the Lithuanian coast, in Szczecin Lagoon (Germany and Poland), Gdansk (Poland), Liepaja (Latvia) and Kaliningrad (Russia). The environmental suitability for *Vibrio* growth is expected to be very low for the rest of the region during the same period.

West Nile virus - Multistate (Europe) - Monitoring season 2019

Opening date: 3 June 2019

Latest update: 6 September 2019

During the transmission season, expected to be from June–November 2019, ECDC monitors the occurrence of infections in EU/EEA Member States and EU neighbouring countries and publishes weekly epidemiological updates to inform blood safety authorities of areas at NUTS 3 (Nomenclature of Territorial Units for Statistics 3) or GAUL 1 (Global Administrative Unit Layers 1) level where at least one locally acquired human infection meeting the EU case definition (Commission Implementing Decision (EU) 2018/945) has been reported.

During the 2018 transmission season, 2 083 human cases were reported by EU Member States and EU neighbouring countries. In the same period, EU Member States reported 285 outbreaks among equids.

→Update of the week

Between 30 August and 5 September 2019, EU Member States reported a total of 56 human cases: Greece (30), Italy (11), Romania (6), Hungary (4), Cyprus (3) and Bulgaria (2). EU neighbouring countries reported one case in the North Macedonia. In one area in North Macedonia, Jugozapaden, a human case was reported for this first time. All other human cases were reported from areas that have been affected during previous transmission seasons. This week, three deaths were reported by Greece (1), Italy (1) and Romania (1).

In the same week, three outbreaks among equids were reported to the Animal Disease Notification System by Germany (1), Greece (1) and Italy (1).

Tularaemia – Sweden - 2019

Opening date: 14 August 2019

Latest update: 6 September 2019

In 2019 and as of 2 September 2019, Swedish authorities have reported a significant increase of tularaemia cases compared with 2018, 2017 and 2016.

Non EU Threats

Ebola virus disease - tenth outbreak - Democratic Republic of the Congo - 2018-2019

Opening date: 1 August 2018

Latest update: 6 September 2019

On 1 August 2018, the Ministry of Health of the Democratic Republic of the Congo declared the 10th outbreak of Ebola virus disease in the country. The outbreak affects North Kivu, South Kivu and Ituri Provinces in the northeast of the country, close to the border with Uganda. In 2019, several imported cases from the Democratic Republic of the Congo were detected in Uganda. However, no autochthonous case have been reported in Uganda as of 4 September 2019. On 17 July 2019, the [International Health Regulations \(IHR\) Emergency Committee](#) convened, and afterwards the WHO Director-General declared that the outbreak meets all the criteria for a public health emergency of international concern (PHEIC) under the IHR.

→Update of the week

DRC: Since the previous CDTR and as of 4 September 2019, [WHO and the Ministry of Health of the Democratic Republic of the Congo](#) (DRC) have reported 50 additional confirmed cases and four probable cases. During the same period, 42 deaths among confirmed cases were reported.

Uganda: The case reported on 29 August 2019 in Kasese District in Uganda died on 30 August. This case was infected in North-Kivu (DRC).

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

Opening date: 24 September 2012

Latest update: 6 September 2019

Since the disease was first identified in Saudi Arabia in April 2012, more than 2 400 Middle East respiratory syndrome coronavirus (MERS-CoV) cases have been detected in 27 countries. In Europe, eight countries have reported confirmed cases, all with direct or indirect connections to the Middle East. The majority of MERS-CoV cases continue to be reported from the Middle East. The source of the virus remains unknown, but the pattern of transmission and virological studies point toward dromedary camels in the Middle East as 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 the previous CDTR published on 2 August 2019, Saudi Arabia is the only country that has notified new cases. As of 2 September 2019, [Saudi Arabia](#) has reported an increase of six cases and two deaths.

So far, 11 of 13 regions in Saudi Arabia have reported 169 cases in 2019, of which one, Najran, has reported cases in the last seven days.

Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 6 September 2019

Global public health efforts are continuing to eradicate polio by immunising every child until transmission of the virus has stopped and the world becomes polio-free. Polio was declared a public health emergency of international concern by WHO on 5 May 2014 due to concerns over the increased circulation and international spread of wild poliovirus in 2014. In June 2002, the WHO European Region was officially declared polio-free.

→Update of the week

Wild poliovirus:

Since the last polio update on 24 July 2019 and as of 28 August, 15 new cases of wild poliovirus type 1 have been reported in Pakistan (13) and Afghanistan (2).

Circulating vaccine-derived poliovirus (cVDPV):

No new cases of cVDPV1 have been reported during this period.

No new cases of cVDPV2 have been reported during this period.

No new cases of cVDPV3 have been reported during this period.

II. Detailed reports

Monitoring environmental suitability of *Vibrio* growth in the Baltic Sea – Summer 2019

Opening date: 3 June 2019

Latest update: 6 September 2019

Epidemiological summary

As of 5 September 2019, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified as medium to high in Szczecin Lagoon (Germany and Poland), in Koszalin, Kolobrzeg, Gdansk and Ustka (Poland), on the coast bordering Kaliningrad (Russia) and across the Lithuanian coast. Additionally, the environmental suitability for *Vibrio* growth was identified as high to very high in certain areas in Szczecin Lagoon (Germany and Poland) and Kaliningrad (Russia).

For the next five days, the environmental suitability for *Vibrio* growth is foreseen to be low across the Lithuanian coast, in Szczecin Lagoon (Germany and Poland), Gdansk (Poland), Liepaja (Latvia) and Kaliningrad (Russia). The environmental suitability for *Vibrio* growth is expected to be very low for the rest of the region during the same period.

Sources: [ECDC Vibrio Map Viewer](#) | [National Environmental Satellite, Data and Information Service](#)

The model has been calibrated to the Baltic region in northern Europe and may not apply to other settings prior to validation. For the Baltic Sea, the model parameters to be used in the map are the following values: number colour bands (20) scale method linear, legend range minimum value: 0 and maximum value: 28.

ECDC assessment

Elevated SSTs in marine environments with low salt content offer ideal environmental growth conditions for certain *Vibrio* species. These conditions can be found during the summer months in estuaries and enclosed water bodies with moderate salinity. Open ocean environments do not offer appropriate growth conditions for these bacteria due to high salt content, low temperatures and limited nutrient content. These *Vibrio* species can cause vibriosis infections, particularly *V. parahaemolyticus*, *V. vulnificus* and non-toxicogenic *V. cholera*.

Vibriosis in humans caused by these species in the Baltic region has occurred in the past during hot summer months, particularly when SSTs are elevated (above 20 degrees Celsius). The most common clinical manifestations are gastroenteritis with nausea, vomiting and diarrhoea, wound infections when a cut has been exposed, infected wounds or abrasions due to contaminated seawater, primary septicaemia and otitis externa. Risk factors for illness apart from contact with natural bodies of waters, especially marine or estuarine waters, also include the consumption of shellfish, particularly raw oysters.

Actions

ECDC monitors this threat on a weekly basis during the summer of 2019 and reports on increased environmental suitability for the growth of *Vibrio* species.

West Nile virus - Multistate (Europe) - Monitoring season 2019

Opening date: 3 June 2019

Latest update: 6 September 2019

Epidemiological summary

Between 30 August and 5 September 2019, EU Member States reported 56 human cases in Greece (30), Italy (11), Romania (6), Hungary (4), Cyprus (3) and Bulgaria (2). EU neighbouring countries reported one case in the North Macedonia. In one area in North Macedonia, Jugozapaden, a human case was reported for this first time. All other human cases were reported from areas that have been affected during previous transmission seasons. This week, three deaths were reported by Greece (1), Italy (1) and Romania (1).

In the same week, three outbreaks among equids were reported to the Animal Disease Notification System by Germany (1), Greece (1) and Italy (1).

Since the beginning of the 2019 transmission season and as of 5 September 2019, EU Member States and EU neighbouring countries reported 241 human infections. EU Member States reported 226 cases in Greece (156), Romania (25), Cyprus (14), Italy

4/12

(14), Hungary (11), Bulgaria (4), Austria (1) and France (1). EU neighbouring countries reported 15 human cases in Serbia (7), Turkey (7) and North Macedonia (1).

To date, 20 deaths due to West Nile virus infection have been reported by Greece (14), Romania (3), Cyprus (1), Italy (1) and Serbia (1).

During the current transmission season, 17 outbreaks among equids have been reported by Greece (12), Italy (3), Germany (1) and Hungary (1).

ECDC link: [West Nile virus infection atlas](#)

Sources: [TESSy](#) | [Animal Disease Notification System](#)

ECDC assessment

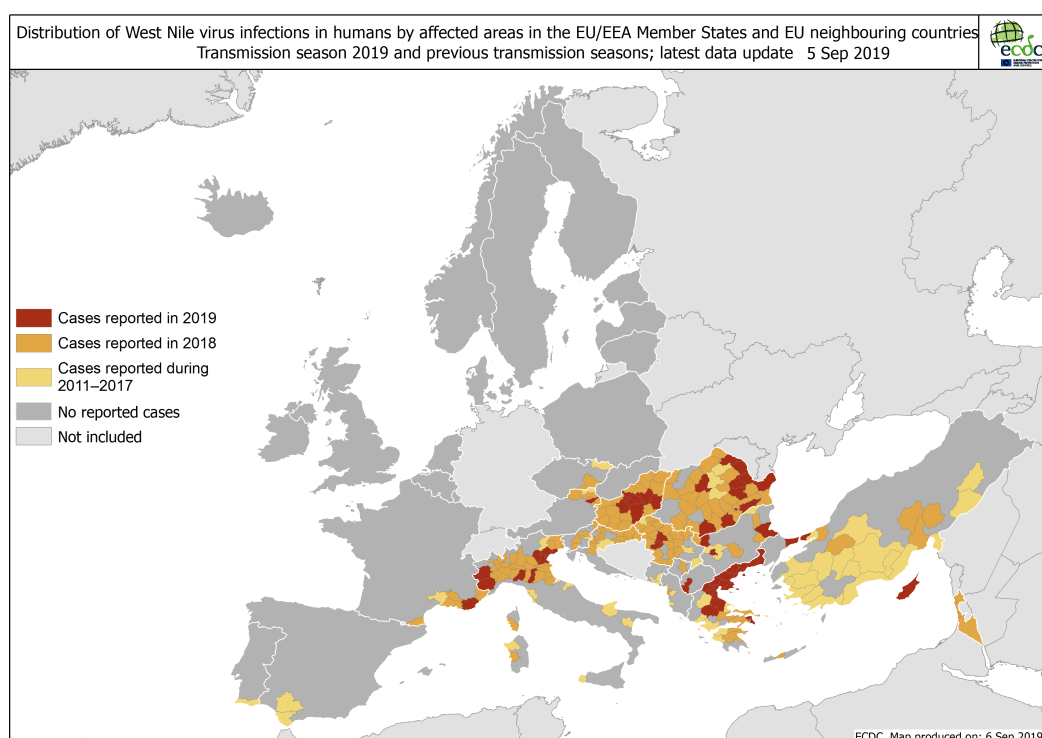
Human infections have been reported in EU Member States with known persistent transmission of West Nile virus in previous years. All human cases reported during the current transmission season have been reported in previously affected countries. In accordance with [European Commission Directive 2014/110/EU](#), prospective donors should be deferred for 28 days after leaving a risk area for locally acquired infections unless the results of an individual nucleic acid test are negative.

Actions

During the transmission season, ECDC publishes [West Nile virus infection maps](#) together with an epidemiological summary every Friday.

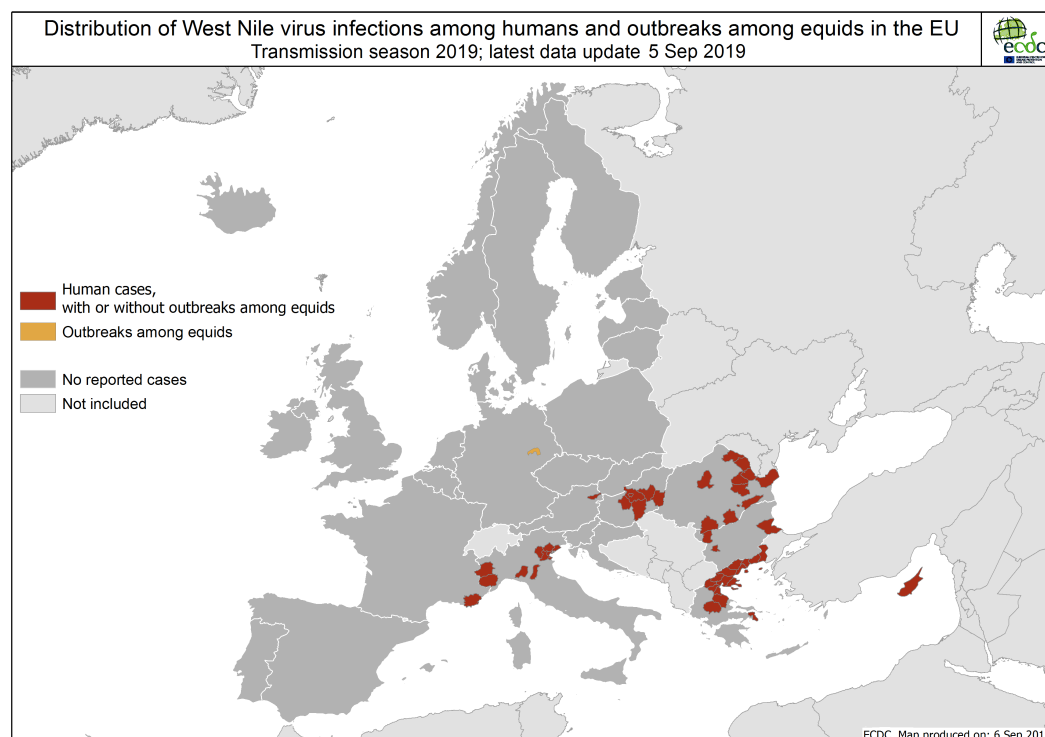
Distribution of human West Nile virus infections by affected areas as of 5 September 2019.

ECDC



Distribution of West Nile virus infections among humans and outbreaks among equids in the EU as of 5 September 2019.

ECDC and ADNS



Tularaemia – Sweden - 2019

Opening date: 14 August 2019

Latest update: 6 September 2019

Epidemiological summary

Since the last update in the CDTR report on 16 August 2019 and as of 2 September, health authorities have reported 480 additional tularaemia cases in Sweden. This brings the number of cases reported in 2019 to 690. Most of these cases were reported in the Dalarna and Gävleborg regions (> 400 cases). This figure represents a significant increase compared with 2018 (107 cases), 2017 (87 cases) and 2016 (134 cases). In 2015, which was the peak year, 859 cases were reported. Most of the cases were reported in Dalarna, Gävleborg and Örebro counties, but recent cases were also reported in Norrbotten and Västerbotten counties. In August 2019, the Swedish National Veterinary Institute reported animal cases (dead hares) from Dalarna, Norrbotten and Västra Götaland.

Source: [Folkhälsomyndigheten](#) | [Folkhälsomyndigheten](#) | [Statens veterinärmedicinska anstalt](#)

ECDC assessment

As the seasonal peak usually occurs in September in Sweden, further cases are expected in the coming weeks. The disease shows a clear seasonality in humans, consistent with greater exposure to contaminated water and mosquito activity during the summer and early autumn months. Preventive measures include avoiding drinking untreated surface water, preventing mosquito and tick bites, avoiding contact with sick or dead animals, using gloves when handling wild animals and cooking game meat thoroughly before eating. Farmers and people involved in hunting, wildlife management, hiking and camping are at higher risk of infection.

Transplant clinicians should be aware of the possibility of tularaemia transmission through organ transplantation when evaluating an infection in patients receiving organ transplants. When assessing potential organ donors with febrile illnesses, clinicians should consider the risk factors for tularaemia mentioned above.

Actions

ECDC continues to monitor this event. Relevant epidemiological updates will be posted online.

Ebola virus disease - tenth outbreak - Democratic Republic of the Congo - 2018-2019

Opening date: 1 August 2018

Latest update: 6 September 2019

Epidemiological summary

Since the beginning of the outbreak a year ago and as of 4 September 2019, there have been 3 054 cases (2 945 confirmed, 109 probable) in the Democratic Republic of the Congo (DRC), including 2 052 deaths (1 943 confirmed, 109 probable), according to WHO and the Ministry of Health of the Democratic Republic of the Congo. Beni and Mandima are currently the most active health zones. In Uganda, one imported case (reported on 29 August) died on 30 August in Kasese district, which borders North-Kivu.

As of 4 September 2019, 156 healthcare workers have been infected (40 died).

In the DRC, 29 health zones in three provinces have reported confirmed/probable Ebola virus disease cases: Mwenga in South Kivu Province, Alimbongo, Beni, Biena, Butembo, Goma, Kalunguta, Katwa, Kayna, Kyondo, Lubero, Mabalako, Manguredjipa, Masereka, Mutwanga, Musienene, Nyiragongo, Oicha, Pinga and Vuhovi Health Zones in North Kivu Province and Ariwara, Bunia, Mambasa, Nyankunde, Komanda, Lolwa, Mandima, Rwampara and Tchomia Health Zones in Ituri Province.

In Uganda, the province of Kasese (which shares a border with North Kivu) reported an imported case. However, as of today, there have been no reports of autochthonous transmission in Uganda.

Public health emergency of international concern (PHEIC): On 17 July 2019, the WHO Director-General [declared](#) the Ebola virus disease outbreak in the Democratic Republic of the Congo a PHEIC. This declaration followed the fourth IHR Emergency Committee for Ebola virus disease in the Democratic Republic of the Congo on 17 July 2019. The declaration was made in response to the geographic spread observed in recent weeks, as well as the need for a more intensified and coordinated response in order to end the outbreak.

Sources: [Ebola dashboard Democratic Republic of the Congo](#) | [CMRE](#) | [Ministry of Health of the Democratic Republic of the Congo](#) | [WHO](#) | [WHO Regional Office for Africa](#)

ECDC assessment

ECDC assessment: The detection of cases that have travelled to a neighbouring province or country such as Uganda is not unexpected. The use of crowded public transportation over long distances and possible nosocomial transmission are of particular in the context of onward transmission.

Implementing response measures remains challenging in affected areas because of the prolonged humanitarian crisis, the unstable security situation and resistance among several sectors of the population. A substantial proportion of cases is detected among individuals not previously identified as contacts, stressing the need to maintain enhanced surveillance and identify the chains of transmission.

The fact that the outbreak is ongoing in areas with cross-border population flow with Rwanda, South Sudan, Burundi and Uganda remains of particular concern. So far, the identification of these imported cases to previously non-affected areas or the PHEIC does not change the overall risk for the EU/EEA, which remains very low.

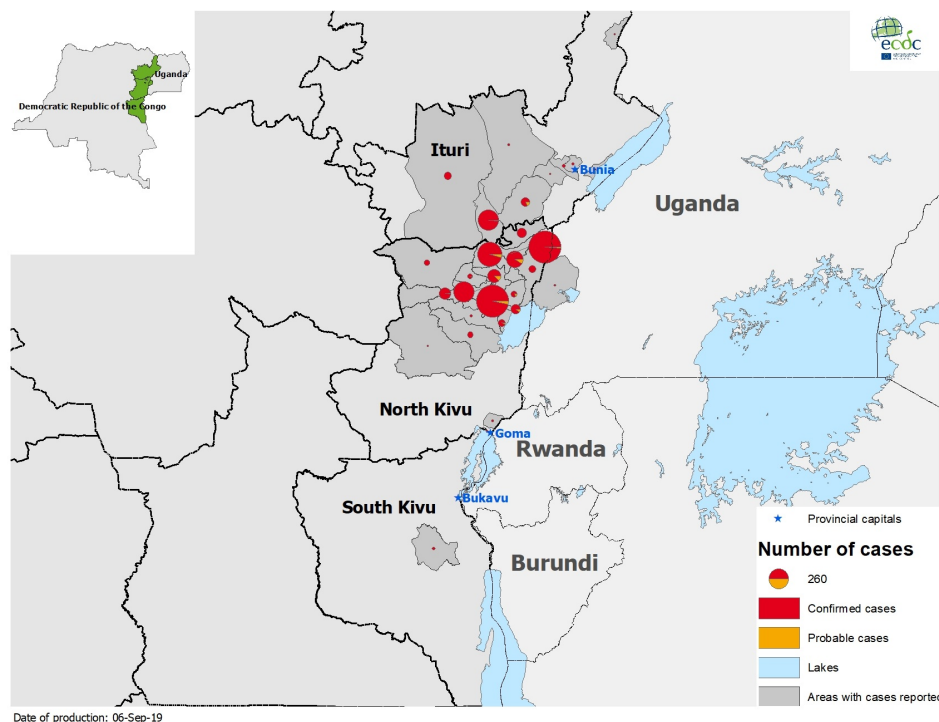
WHO assessment: As of 29 August 2019, the [WHO assessment](#) for the Democratic Republic of the Congo states that the risk of spread remains low at the global level, and very high at national and regional levels. There is cause for concern linked to the increased risk of geographical spread, both within the Democratic Republic of the Congo and to neighbouring countries.

Actions

ECDC published an [epidemiological update](#) on 13 June 2019 and updated its [rapid risk assessment](#) on 7 August 2019.

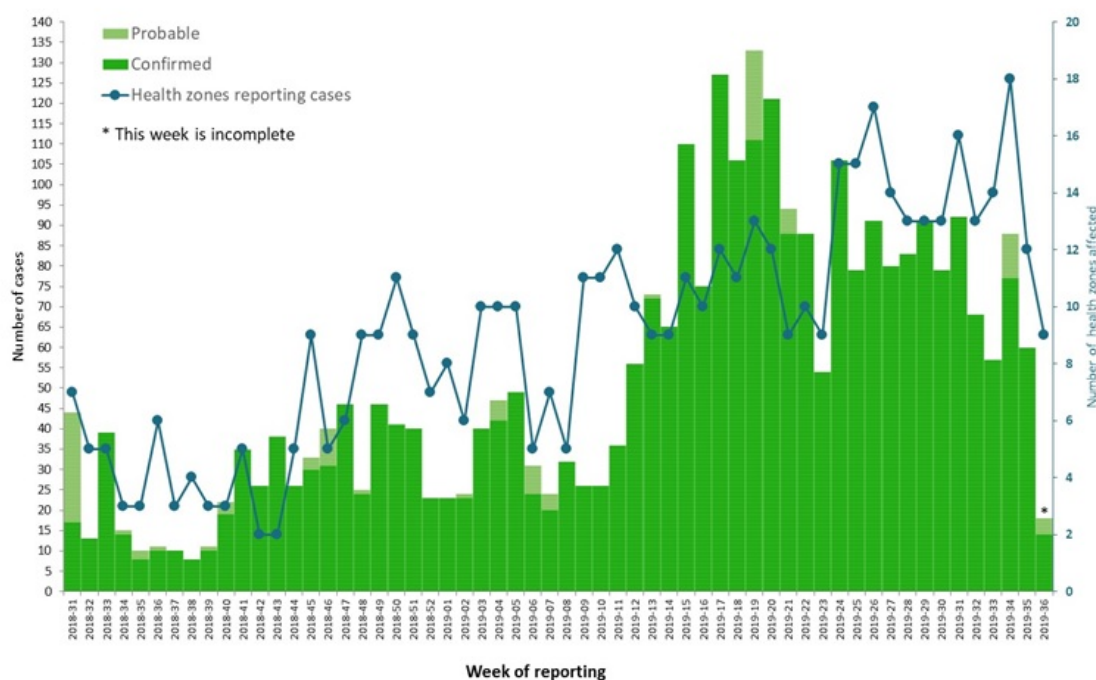
Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu, South Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 4 September 2019

Source: ECDC



Distribution of confirmed and probable cases of Ebola Virus Disease, North Kivu, South Kivu and Ituri, Democratic Republic of the Congo, as of 4 September 2019

Source: ECDC



Ebola Virus Disease case distribution in DRC as of 4 September 2019

Source: ECDC

	Number of confirmed cases	Number of probable cases	Confirmed and probable cases	Number of deaths	Conf/Prob cases in past 7 days
Democratic Republic of the Congo	2945	109	3054	2052	
North-Kivu Province	2571	96	2667	1841	
Alimbongo	5	0	5	2	
Beni	661	9	670	437	ACTIVE
Bieni	16	1	17	13	
Butembo	280	2	282	340	ACTIVE
Goma	1	0	1	1	
Kalunguta	169	17	186	83	ACTIVE
Katwa	648	23	671	481	ACTIVE
Kayna	23	0	23	8	ACTIVE
Kyondo	20	4	24	17	
Lubero	31	2	33	6	
Mabalako	371	17	388	296	
Manguredjipa	18	0	18	12	
Masereka	50	6	56	23	
Musienene	84	1	85	34	ACTIVE
Mutwanga	32	0	32	12	ACTIVE
Nyiragongo	3	0	3	1	
Oicha	55	0	55	24	ACTIVE
Pinga	1	0	1	0	
Vuhovi	103	14	117	51	
Ituri province	368	13	381	208	
Ariwara	1	0	1	1	
Bunia	4	0	4	4	
Komanda	43	9	52	36	ACTIVE
Lolwa	3	0	3	1	
Mambasa	37	0	37	14	ACTIVE
Mandima	269	4	273	146	ACTIVE
Nyakunde	1	0	1	1	
Rwampara	8	0	8	3	
Tchomia	2	0	2	2	
South-Kivu	6	0	6	3	
Mwenga	6	0	6	3	
Uganda	1	0	1	1	
Kasese province	1	0	1	1	
Kasese	1	0	1	1	
Cumulative Total	2946	109	3055	2053	

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

Opening date: 24 September 2012

Latest update: 6 September 2019

Epidemiological summary

In 2019 and as of 2 September 2019, 182 MERS-CoV cases have been reported in Saudi Arabia (169) and Oman (13), including 48 deaths in Saudi Arabia (44) and Oman (4). In Saudi Arabia, 91 cases were primary (42 of whom reported contact with camels), 40 were healthcare-acquired, 31 were household contacts and 7 were unspecified secondary cases. In 2019, 73% of the 169 cases in Saudi Arabia were reported in Riyadh (105) and Eastern Provinces (18).

Since April 2012 and as of 2 September 2019, 2 479 cases of MERS-CoV, including 906 deaths, have been reported by health authorities worldwide.

Sources: [ECDC MERS-CoV page](#) | [WHO MERS-CoV](#) | [ECDC factsheet for professionals](#) | [Saudi Arabia Ministry of Health](#)

ECDC assessment

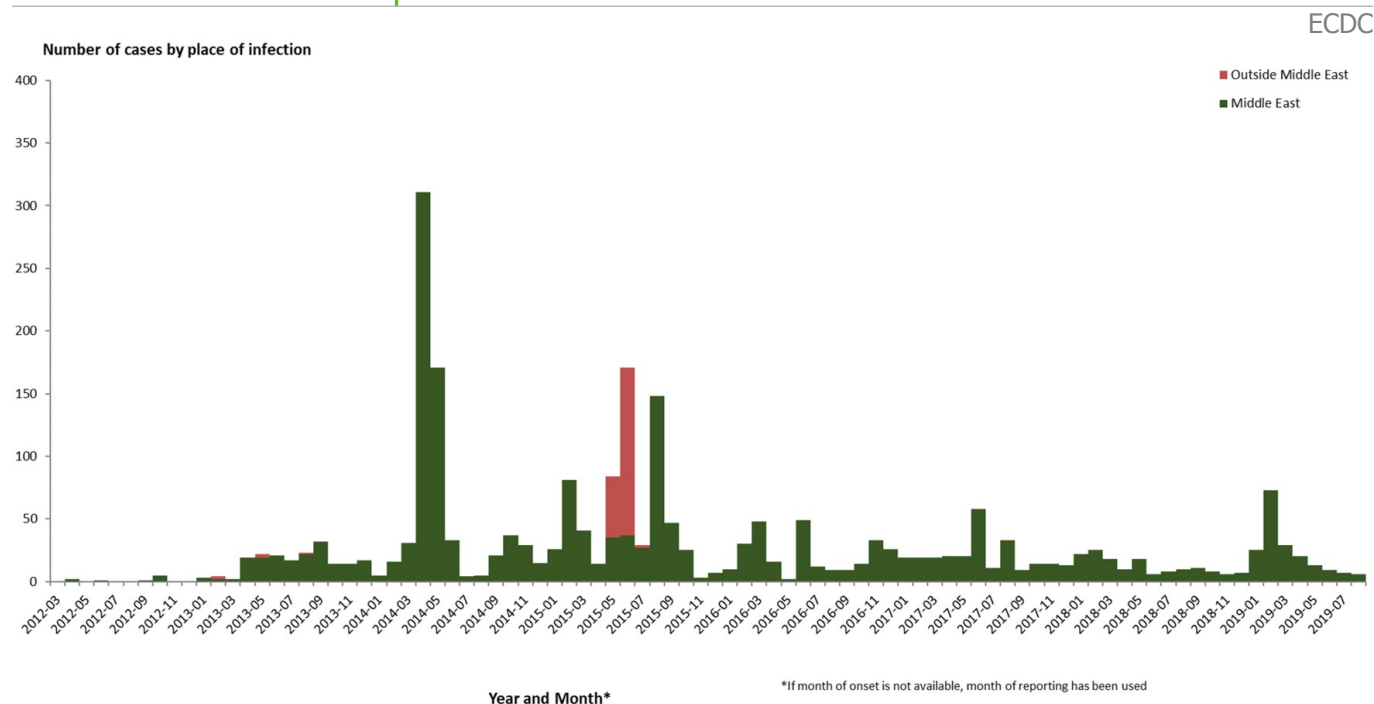
Human cases of MERS-CoV continue to be reported in the Arabian Peninsula, particularly in Saudi Arabia. The risk of sustained human-to-human transmission in Europe remains very low. The current MERS-CoV situation poses a low risk to the EU, as stated in a [rapid risk assessment](#) published on 29 August 2018. This risk assessment also provides details on the last case reported in Europe.

On 2 July 2019, ECDC published a [rapid risk assessment regarding public health risks related to communicable diseases during the hajj 2019, Saudi Arabia, 9–14 August 2019](#) that also addresses MERS-CoV.

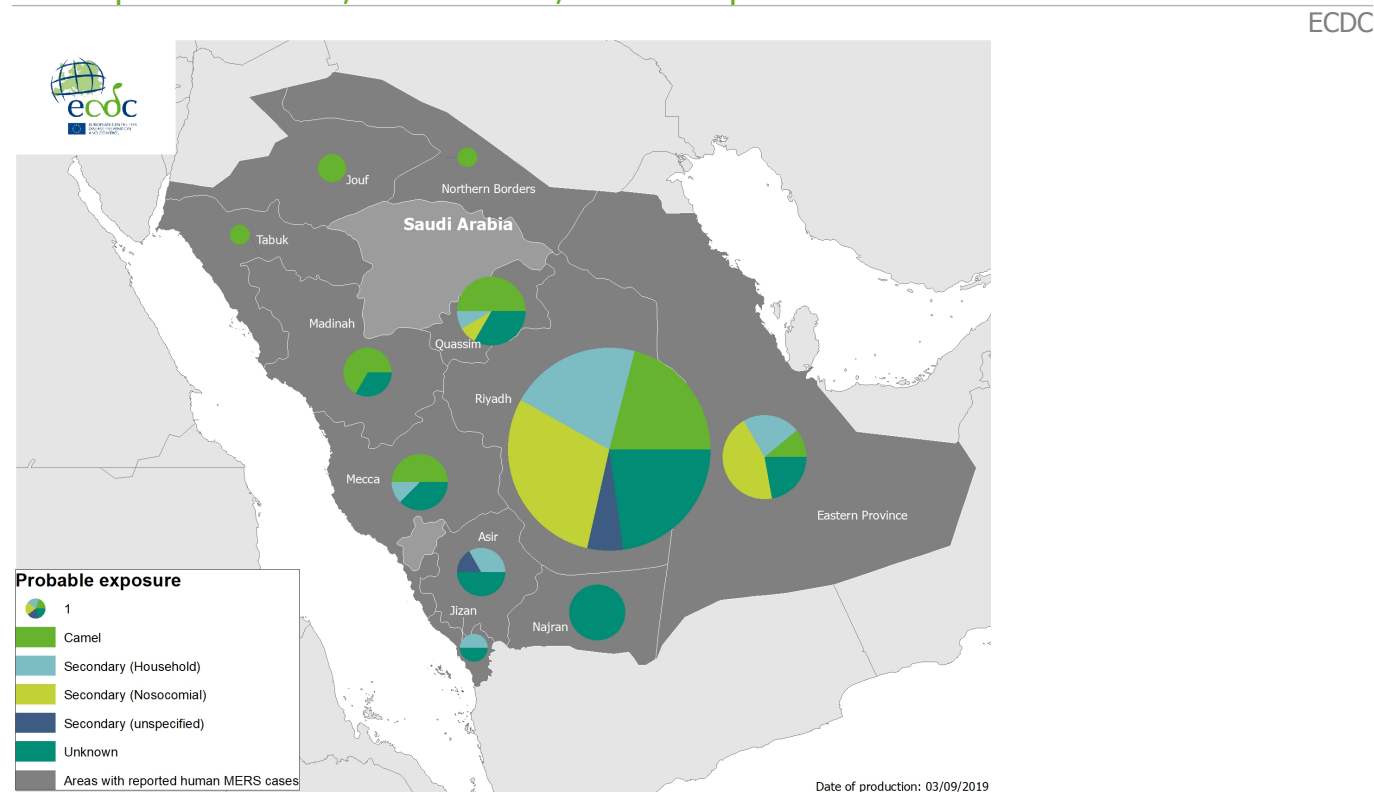
Actions

ECDC monitors this threat through epidemic intelligence and reports on a monthly basis.

Distribution of confirmed cases of MERS-CoV by place of infection and month of onset, from March 2012 to 2 September 2019



Geographical distribution of confirmed MERS-CoV cases by probable region of infection and exposure in 2019, Saudi Arabia, as of 2 September 2019



Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 6 September 2019

Epidemiological summary

Wild poliovirus:

In 2019 and as of 28 August, 71 cases have been reported in two endemic countries: Pakistan (58) and Afghanistan (13). This is 50 cases more than in the same period in 2018 (21).

Circulating vaccine-derived poliovirus (cVDPV):

In 2019 and as of 28 August, 59 cases of cVDPV have been reported in 11 countries. This is six cases less than during the same period in 2018 (65, in five countries).

New countries reporting cases of cVDPV in 2019 are: Angola, China, Ethiopia and Myanmar

Three cases of cVDPV1 have been reported in Myanmar.

Fifty-six cases of cVDPV2 have been reported in Ghana (1), the Central African Republic (4), Nigeria (15), the Democratic Republic of the Congo (23), Angola (6), Benin (1), China (1), Ethiopia (1), Cameroon (3) and Niger (1).

No cases of cVDPV3 have been reported.

Sources: [Global Polio Eradication Initiative](#) | [ECDC](#) | [ECDC Polio interactive map](#)

ECDC assessment

The WHO European Region has remained polio-free since 2002. Inactivated polio vaccines are used in all EU/EEA countries. The risk of reintroduction of the virus in Europe exists as long as there are non- or under-vaccinated population groups in European countries and poliomyelitis is not eradicated. According to WHO, one EU/EEA country (Romania) and two neighbouring countries (Bosnia and Herzegovina and Ukraine) remain at [risk of a sustained polio outbreak](#) following wild poliovirus importation or emergence of cVDPV due to suboptimal programme performance and low population immunity.

ECDC link: [ECDC comment on risk of polio in Europe](#) | [ECDC risk assessment](#)

Actions

ECDC provides updates on the polio situation on a monthly basis. ECDC monitors reports of polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identifies events that increase the risk of reintroducing wild poliovirus in the EU.

ECDC maintains an interactive [map](#) showing countries that are still endemic for polio and have ongoing outbreaks of cVDPV.

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