

This weekly bulletin provides updates on threats monitored by ECDC.

NEWS

NEW TOOL FOR THE EARLY DETECTION OF PUBLIC HEALTH THREATS FROM TWITTER DATA: *epitweetr*

ECDC has launched a free, open source interactive tool to help with the automatised early detection of public health threats using Twitter data.

The [R-based tool *epitweetr*](#) allows users to automatically monitor trends of tweets by time, place and topic, with the aim of detecting public health threats early through signals, such as an unusual increase in the number of tweets. It was designed to support public health experts with the early detection of threats from infectious diseases but can be extended to all hazards and other fields of study by modifying the topics and keywords.

The *epitweetr* package includes an interactive web application (based on the R package Shiny) with five pages: 1. Dashboard, where a user can visualise and explore tweets, and download the associated outputs and data; 2. Alerts page, where you can view the current alerts and associated information; 3. Geotag evaluation page, where you can evaluate the geolocation algorithm in different tweet fields to manually choose the geolocation threshold; 4. Configuration page, where you can change settings and check the status of the underlying processes; 5. Troubleshooting page, with automatic checks and hints for using *epitweetr* with all its functionalities.

To make *epitweetr* as widely available as possible, R was chosen as the computing platform. R is free, open source, and runs on any modern operating system.

epitweetr can be downloaded free of charge from the ECDC website, the CRAN website (for CRAN users) or GitHub (for GitHub users).

[Download the tool](#)

START OF SEASONAL INFLUENZA REPORTING IN EUROPE

Weekly influenza updates on seasonal influenza in Europe will resume in week 41 of 2020 (ending 13 October 2020). The first update will present data collected in week 40 (ending 4 October 2020). Summaries of the weekly influenza report will be published in the [Communicable Disease Threats Report](#) (CDTR) and [Flu News Europe](#). The [recommended composition](#) of **quadrivalent** and **trivalent** influenza virus vaccines for the northern hemisphere's 2020–2021 influenza season has been published by WHO.

I. Executive summary

EU Threats

West Nile virus - Multi-country (World) - Monitoring season 2020

Opening date: 20 May 2020

Latest update: 2 October 2020

During the transmission season for West Nile virus, which usually runs from June to November, ECDC monitors the occurrence of infections in the EU/EEA and EU-neighbouring countries. ECDC publishes weekly epidemiological updates to inform blood safety authorities. Data reported through The European Surveillance System (TESSy) are presented at the NUTS 3 (nomenclature of territorial units for statistics 3) level for EU/EEA Member States and at the GAUL 1 (global administrative unit layers 1) level for EU-neighbouring countries.

→Update of the week

Between 25 September and 1 October 2020, EU Member States reported 14 human cases of WNV infection, from Greece (7), Spain (5) and Italy (2). The province of Badajoz, Spain, reported locally-acquired human cases of WNV infection for the first time through TESSy. All other cases were reported from areas that have been affected during previous transmission seasons. This week, two deaths were reported, by Greece (1) and Spain (1). No human cases of WNV infection or deaths were reported from EU-neighbouring countries.

On 25 September 2020, [Spanish health authorities published a rapid risk assessment](#) concluding that the overall risk, taking into account the probability of transmission and the impact of the disease, is moderate in areas where WNV infections have been detected in mosquitoes, equids, birds and/ or humans during the current or previous seasons, especially in western Andalusia in the surroundings of the Guadalquivir marshes and the Janda region in Cádiz, Extremadura and the wetlands of the Ebro Delta in the province of Tarragona. This risk remains during the vector activity season, from April to November, being highest in late summer and early autumn. The risk is very low in the rest of Spain and between December and March. The detection of new cases cannot be ruled out, although transmission is expected to decline considerably following the vector control activities and dissemination of protection measures against mosquito bites. Between 2017 and 2019, WNV activity declined, with very few outbreaks among equids and without any human cases in Spain. The increase in the incidence of WNV-related meningoencephalitis during this summer is unprecedented. The circulation of WNV as well as the existence of competent vectors had already been documented in the affected areas. The population is susceptible in principle, although a part of the population may have some protection from previous contact with the virus, as the area has been endemic for many years. According to information from entomologists working in the field, this season's vector activity is especially high in the Puebla and Coria del Rio area in the province of Seville, with an abundant presence of *Culex perexiguus* around rice fields but also around inhabited areas. In inhabited areas, the presence of *Culex pipiens* was also common.

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

Sources: TESSy

COVID-19 associated with SARS-CoV-2 – Multi-country (World) – 2020

Opening date: 7 January 2020

Latest update: 2 October 2020

On 31 December 2019, the Wuhan Municipal Health and Health Commission reported a cluster of pneumonia cases of unknown aetiology with a common source of exposure at Wuhan's 'South China Seafood City' market. Further investigations identified a novel coronavirus as the causative agent of the respiratory symptoms for these cases. The outbreak rapidly evolved, affecting other parts of China and other countries worldwide. On 30 January 2020, WHO declared that the outbreak of coronavirus disease (COVID-19) constituted a Public Health Emergency of International Concern (PHEIC), accepting the Committee's advice and issuing temporary recommendations under the International Health Regulations (IHR). On 11 March 2020, the Director-General of WHO declared the COVID-19 outbreak a pandemic.

→Update of the week

Since 25 September 2020 and as of 02 October 2020, 2 055 355 new cases of coronavirus disease (COVID-19) (in accordance with the applied case definition in the countries) have been reported, including 39 836 new deaths.

Globally, the number of cases has increased from 32 295 362 to 34 350 717, and the number of deaths has risen from 984 040 to 1 023 876.

In the EU/EEA and the United Kingdom (UK), the number of cases has increased from 3 067 987 to 3404566 (+336 579 cases), and the number of deaths has risen from 187 876 to 190 763 (+2 887 deaths).

More details are available [here](#).

Non EU Threats

Ebola virus disease - eleventh outbreak - Democratic Republic of the Congo - 2020

Opening date: 4 June 2020

Latest update: 2 October 2020

On 1 June 2020, the Ministry of Health of the Democratic Republic of the Congo (DRC) [declared](#) the 11th outbreak of Ebola virus disease (EVD) in the country. The outbreak is located in Equateur Province in the north-west of the country, close to the border with Congo.

→Update of the week

Since the last update, and as of 29 September 2020, four additional cases and three new deaths have been reported from Equateur Province in the DRC.

Makanza health zone is a newly affected region, bringing the total number of affected health zones to 13. The health zones reporting new cases and deaths are Bolomba and Makanza.

Recent allegations of sexual abuse and exploitation have been made by 51 women who were involved in the Ebola response in the DRC between 2018 and 2020, against aid workers claiming to be from the World Health Organization (WHO), the International Organization for Migration (IOM) and other NGOs. The [WHO](#) and [IOM](#) have released statements announcing the launch of thorough investigations, and other NGOs have swiftly followed suit.

Influenza A(H9N2) - Multi-country (World) - Monitoring human cases

Opening date: 30 January 2019

Latest update: 2 October 2020

Animal influenza viruses that infect people are considered novel to humans and have the potential to become pandemic threats.

→Update of the week

Since the CDTR update in June 2020, an additional human case of influenza A(H9N2) was reported in China. The case is a four-year-old girl from Meizhou, Guangdong province. She was admitted to hospital on 4 August 2020 after onset of illness on 3 August 2020. The patient had mild symptoms and recovered fully. A contact with domestic poultry was reported. No further cases were confirmed among the contacts of this case.

Cholera – Multi-country (World) – Monitoring global outbreaks

Opening date: 20 April 2006

Latest update: 2 October 2020

Several countries in Africa, the Americas and Asia have reported [cholera](#) outbreaks. Major ongoing outbreaks are being reported from the Democratic Republic of the Congo and Yemen. Haiti reported its last laboratory-confirmed case in February 2019.

→Update of the week

Since the last update on 28 August 2020, new cholera cases have been reported worldwide.

Countries reporting the majority of new cases since the previous update are Ethiopia and Somalia.

A list of all countries reporting new cases since our previous update on 28 August 2020 can be found below.

II. Detailed reports

West Nile virus - Multi-country (World) - Monitoring season 2020

Opening date: 20 May 2020

Latest update: 2 October 2020

Epidemiological summary

Between 25 September and 1 October 2020, EU Member States reported 14 human cases of WNV infection: Greece (7), Spain (5) and Italy (2). The province of Badajoz, Spain, reported locally-acquired human cases of WNV infection for the first time through TESSy. All other cases were reported from areas that have been affected during previous transmission seasons. This week, two deaths were reported, by Greece (1) and Spain (1). No human cases of WNV infection or deaths were reported from EU neighbouring countries.

On 25 September 2020, [Spanish health authorities published a rapid risk assessment](#) that the overall risk, taking into account the probability of transmission and the impact of the disease, is moderate in areas where WNV infections have been detected in mosquitoes, equids, birds and/ or humans during the current or previous seasons, especially in western Andalusia in the surroundings of the Guadalquivir marshes and the Janda region in Cádiz, Extremadura and the wetlands of the Ebro Delta in the province of Tarragona. This risk remains during the vector activity season, from April to November, being highest in late summer and early autumn. The risk is very low in the rest of Spain and between December and March. The detection of new cases cannot be ruled out, although transmission is expected to decline considerably following the vector control activities and dissemination of protection measures against mosquito bites. Between 2017 and 2019, WNV activity declined with very few outbreaks among equids and without any human cases in Spain. The increase in the incidence of WNV-related meningoencephalitis during this summer is unprecedented. The circulation of WNV as well as the existence of competent vectors had already been documented in the affected areas. The population is susceptible in principle, although a part of the population may have some protection from previous contact with the virus, as the area has been endemic for many years. According to information from entomologists working in the field, this season's vector activity is especially high in the Puebla and Coria del Rio area in the province of Seville, with an abundant presence of *Culex perexiguus* around rice fields but also around inhabited areas. In inhabited areas, the presence of *Culex pipiens* was also frequent.

Since the start of the 2020 transmission season and as of 1 October 2020, EU Member States have reported 257 human cases of WNV infection and 30 deaths through TESSy: Greece (130, including 20 deaths), Spain (72, including 7 deaths), Italy (43, including 3 deaths), Germany (5), Romania (4) and Hungary (3). The province of Badajoz, Spain, and three regions in Germany reported autochthonous human cases of WNV infection for the first time (regions of Barnim, Ostprignitz-Ruppin and Saalekreis). All other cases were reported from areas that have been affected during previous transmission seasons. No cases have been reported from EU-neighbouring countries.

Since the beginning of the 2020 transmission season, 134 outbreaks among equids have been reported. These outbreaks have been reported by Spain (102), Germany (16), Italy (11), France (3), Hungary (1) and Portugal (1) through ADNS. No outbreaks among birds have been reported through ADNS.

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

Sources: TESSy | Animal Disease Notification System

ECDC assessment

Human WNV infections have been reported in six EU Member States (Greece, Spain, Italy, Germany, Romania and Hungary) in which WNV enzootic transmission between mosquitoes and birds has previously been described.

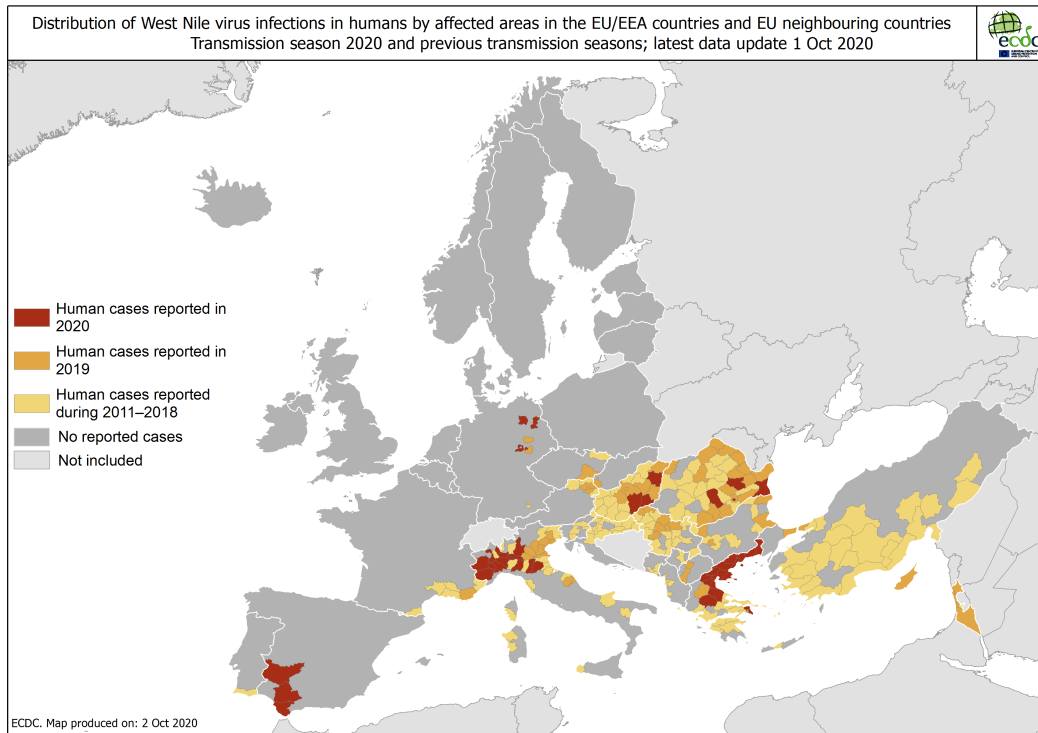
In accordance with Commission Directive 2014/110/EU, prospective donors should be deferred for 28 days after leaving a risk area for locally-acquired WNV infection, unless the result of an individual nucleic acid test is negative.

Actions

During transmission seasons, ECDC publishes a set of WNV transmission maps and an epidemiological summary every Friday.

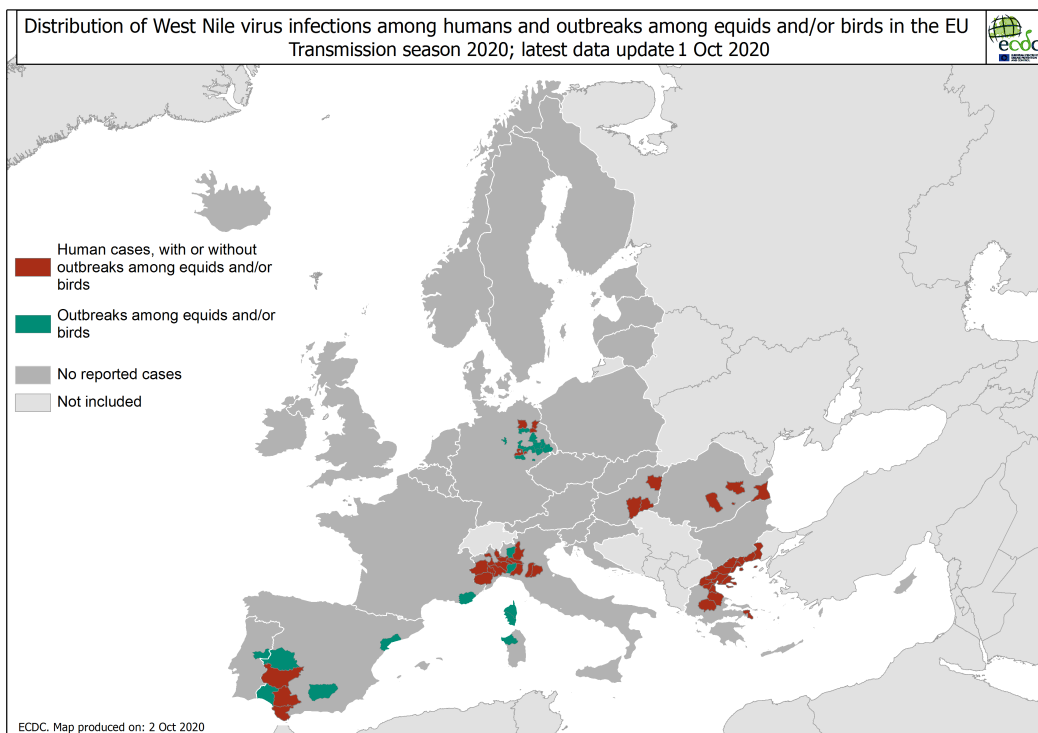
Distribution of human West Nile virus infections by affected areas as of 1 Oct

ECDC



Distribution of West Nile virus infections among humans and outbreaks among equids and/or birds in the EU as of 1 Oct

ECDC and ADNS



COVID-19 associated with SARS-CoV-2 – Multi-country (World) – 2020

Opening date: 7 January 2020

Latest update: 2 October 2020

Epidemiological summary

Since 31 December 2019 and as of 02 October 2020, 34 350 717 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 1 023 876 deaths.

Cases have been reported from:

Africa: 1 489 809 cases; the five countries reporting most cases are South Africa (676 084), Morocco (126 044), Egypt (103 317), Ethiopia (76 098) and Nigeria (59 001).

Asia: 10 702 442 cases; the five countries reporting most cases are India (6 394 068), Iran (461 044), Iraq (367 474), Bangladesh (364 987) and Saudi Arabia (335 097).

America: 16 915 337 cases; the five countries reporting most cases are United States (7 277 814), Brazil (4 847 092), Colombia (835 339), Peru (818 297) and Argentina (764 989).

Europe: 5 208 834 cases; the five countries reporting most cases are Russia (1 185 231), Spain (778 607), France (577 505), United Kingdom (460 178) and Italy (317 409).

Oceania: 33 599 cases; the five countries reporting most cases are Australia (27 096), Guam (2 550), French Polynesia (1 790), New Zealand (1 492) and Papua New Guinea (539).

Other: 696 cases have been reported from an international conveyance in Japan.

Deaths have been reported from:

Africa: 36 086 deaths; the five countries reporting most deaths are South Africa (16 866), Egypt (5 946), Morocco (2 229), Algeria (1 741) and Ethiopia (1 205).

Asia: 195 327 deaths; the five countries reporting most deaths are India (99 773), Iran (26 380), Indonesia (10 856), Iraq (9 231) and Turkey (8 262).

America: 566 374 deaths; the five countries reporting most deaths are United States (207 808), Brazil (144 680), Mexico (78 078), Peru (32 535) and Colombia (26 196).

Europe: 225 102 deaths; the five countries reporting most deaths are United Kingdom (42 202), Italy (35 918), France (32 019), Spain (31 973) and Russia (20 891).

Oceania: 980 deaths; the five countries reporting most deaths are Australia (888), Guam (49), New Zealand (25), French Polynesia (7) and Papua New Guinea (7).

Other: 7 deaths have been reported from an international conveyance in Japan.

EU/EEA and the UK:

As of 02 October 2020, 3 404 566 cases have been reported in the EU/EEA and the UK: Spain (778 607), France (577 505), United Kingdom (460 178), Italy (317 409), Germany (294 395), Romania (129 658), Netherlands (123 966), Belgium (120 965), Sweden (93 615), Poland (93 481), Portugal (76 396), Czechia (74 255), Austria (46 317), Ireland (36 597), Hungary (28 631), Denmark (28 396), Bulgaria (21 096), Greece (18 886), Croatia (16 827), Norway (14 027), Slovakia (10 938), Finland (10 103), Luxembourg (8 595), Slovenia (5 865), Lithuania (4 784), Estonia (3 450), Malta (3 095), Iceland (2 769), Latvia (1 868), Cyprus (1 772) and Liechtenstein (120).

As of 02 October 2020, 190 763 deaths have been reported in the EU/EEA and the UK: United Kingdom (42 202), Italy (35 918), France (32 019), Spain (31 973), Belgium (10 023), Germany (9 508), Netherlands (6 410), Sweden (5 893), Romania (4 862), Poland (2 543), Portugal (1 977), Ireland (1 806), Bulgaria (832), Austria (802), Hungary (798), Czechia (678), Denmark (651), Greece (393), Finland (344), Croatia (284), Norway (274), Slovenia (138), Luxembourg (125), Lithuania (92), Estonia (65), Slovakia (48), Latvia (37), Malta (35), Cyprus (22), Iceland (10) and Liechtenstein (1).

EU:

As of 02 October 2020, 2 927 472 cases and 148 276 deaths have been reported in the EU.

Public Health Emergency of International Concern (PHEIC):

On 30 January 2020, the World Health Organization declared that the outbreak of COVID-19 constitutes a PHEIC. On 11 March 2020, the [Director-General of the WHO](#) declared the COVID-19 outbreak a pandemic. The [third](#) and [fourth](#) International Health Regulations (IHR) Emergency Committee meeting for COVID-19 were held in Geneva on 30 April and 31 July 2020, respectively. The committee concluded during both meetings that the COVID-19 pandemic continues to constitute a PHEIC.

Sources: [Wuhan Municipal Health Commission](#) | [China CDC](#) | [WHO statement](#) | [WHO coronavirus website](#) | [ECDC 2019-nCoV website](#) | [RAGIDA](#) | [WHO](#)

ECDC assessment

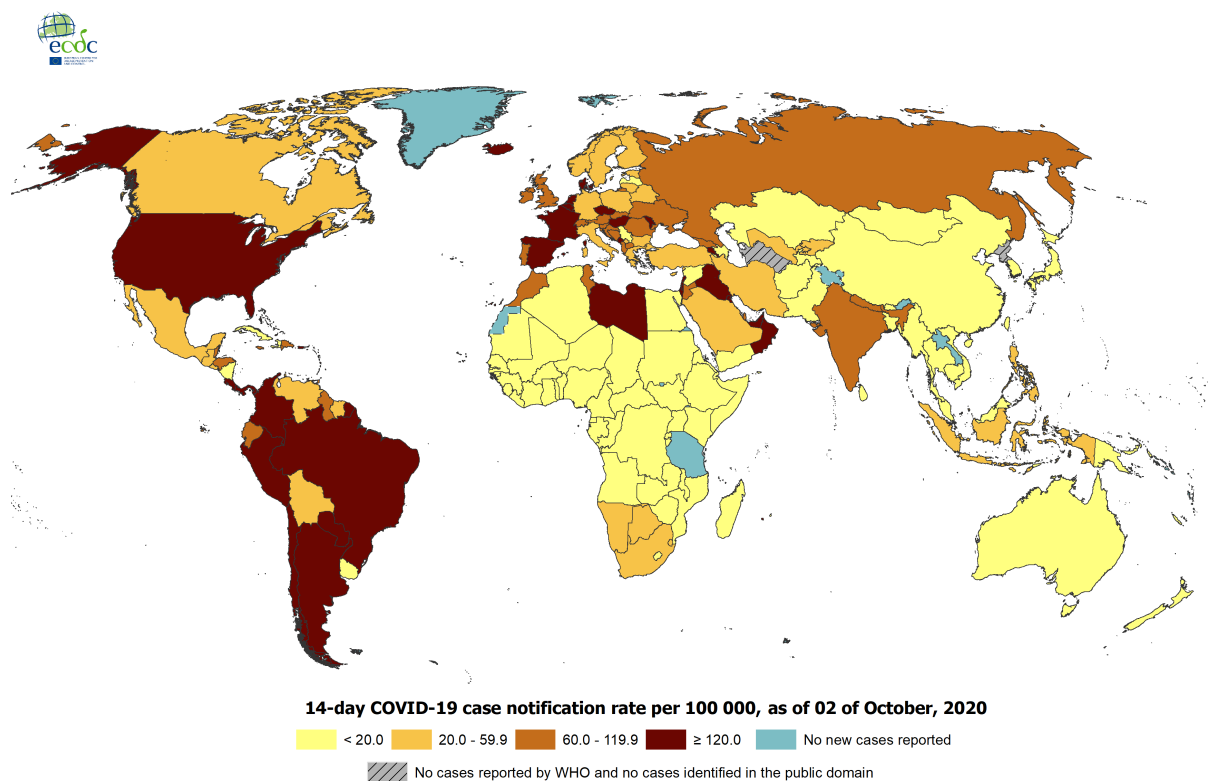
Information on the COVID-19 situation and a risk assessment can be found on [ECDC's website](#).

Actions

ECDC activities related to COVID-19 can be found on [ECDC's website](#).

Geographic distribution of 14-day cumulative number of reported COVID-19 cases per 100 000 population, worldwide, as of 02 October 2020

ECDC



Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat.

The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union.

Date of production: 02/10/2020

Ebola virus disease - eleventh outbreak - Democratic Republic of the Congo - 2020

Opening date: 4 June 2020

Latest update: 2 October 2020

Epidemiological summary

Since the start of the outbreak, and as of 29 September 2020, a total of 128 cases (119 confirmed, nine probable), including 53 deaths, have been reported from the Bikoro (32), Bolenge (1), Bolomba (16), Bomongo (2), Iboko (4), Ingende (13), Lilanga Bobangi (6), Lolanga Mampoko (7), Lotumbe (17), Makanza (1), Mbandaka (25), Monieka (2) and Wangata (2) health zones in the Equateur province of the DRC. Among the reported cases were three healthcare workers.

8/16

Since the beginning of the vaccination campaign with rVSV-ZEBOV-GP on 5 June 2020, 35 487 people have been vaccinated.

Background: Between May and July 2018, the [ninth Ebola outbreak](#) in the DRC occurred in Mbandaka, Bikoro and in the Equateur province, leading to a total of 54 cases, including 33 deaths. According to the World Health Organization, the current event seems to be separate from the [10th Ebola outbreak](#) in the eastern part of the country, which resulted in 3 470 cases, including 2 287 deaths, and was declared over on 25 June 2020. [Sequencing](#) results confirm the new outbreak as a separate spill-over event. This is the DRC's [11th outbreak](#) of Ebola virus disease since 1976, when the virus was first discovered.

In addition to Ebola outbreaks, the country is currently affected by other major outbreaks, such as COVID-19, cholera, monkeypox, polio and the bubonic plague.

Sources: [WHO DRC Twitter](#) | [WHO Afro Twitter](#) | [WHO Afro Sitrep](#) | [WHO Afro bulletin](#) | [WHO DON](#) | [WHO News item](#) | [Dr Tedros](#)

ECDC assessment

Ebola outbreaks in the DRC are recurrent, as the virus is present in animal reservoirs in many parts of the country. Implementing response measures is crucial, and a high level of surveillance is essential to detect and interrupt further transmission early on. Response measures can be challenging amid the other outbreaks ongoing in the country. In the past, cases among EU/EEA citizens infected with Ebola were mostly reported among healthcare workers deployed to support Ebola outbreak responses. As the current response is mostly conducted by locals, combined with the vaccine availability, this leads to a low likelihood of EU/EEA citizens being infected. For the general public living in the EU/EEA, there is a negligible likelihood of exposure, especially with current travel limitations.

WHO assessment: As of 3 September, [the WHO's assessment](#) states that the risk is high at the regional level, high at the national level and low at the global level. A lack of funding and insufficient human resources is constraining the response, which is being further hampered by strikes among locally-based response teams and the ongoing COVID-19 outbreak. In addition, response teams are currently operating in a logistically challenging environment, with many of the affected areas only accessible by boat or helicopter and with limited telecommunications capacity. Further challenges include: inadequate surveillance of deaths in communities; sub-optimal clinical care; and limited laboratory capacity.

Actions

ECDC is monitoring this event through its epidemic intelligence activities. On 25 May 2018, ECDC published a rapid risk assessment on the ninth outbreak in the DRC: [Ebola virus disease outbreak in Equateur Province, Democratic Republic of the Congo, First update](#).

One EUPHEM fellow is contributing remotely to the GOARN response for the DRC Ebola outbreak, from 18 September to 27 October.

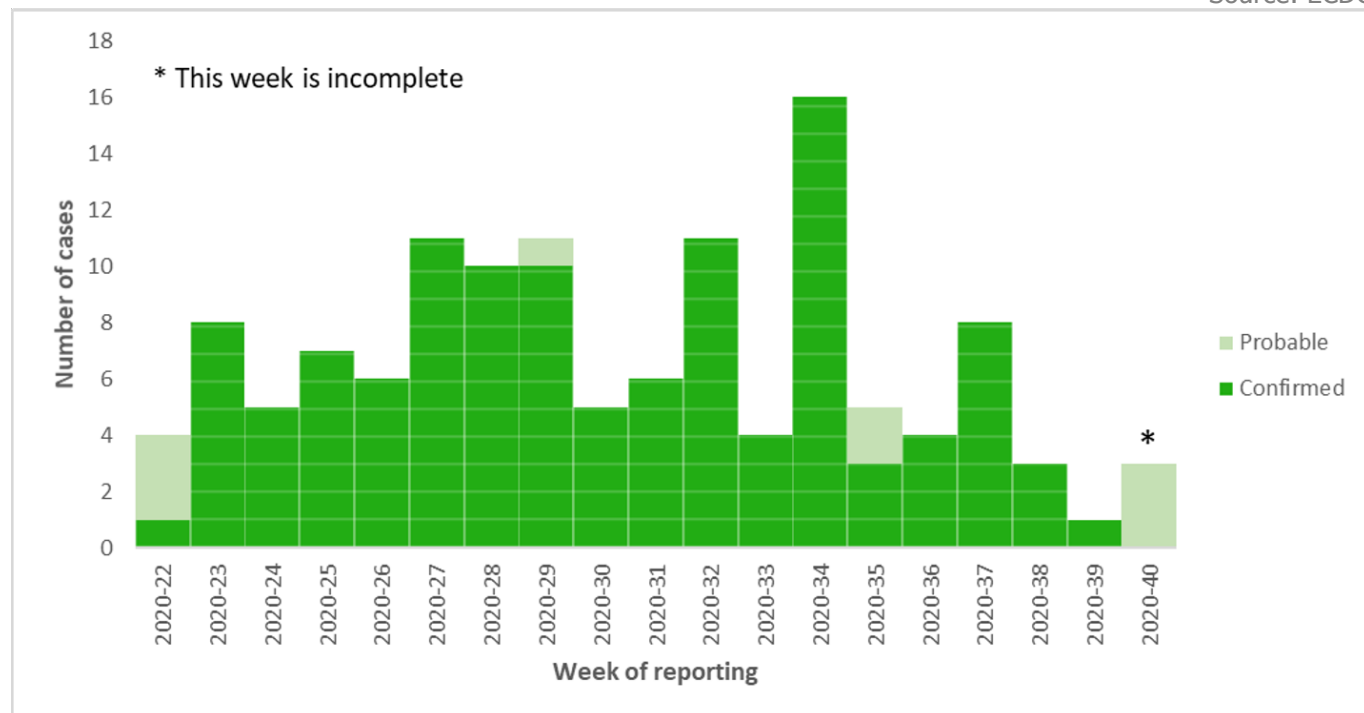
Distribution of Ebola Virus Disease cases in Equateur Province, Democratic Republic of the Congo, as of 29 September 2020

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	119	9	128	53	
Equateur	119	9	128	53	
Bikoro	32	0	32	19	
Bolenge	1	0	1	1	
Bolomba	13	3	16	4	ACTIVE
Bomongo	2	0	2	1	
Iboko	4	0	4	1	
Ingende	11	2	13	5	
Lilanga Bobangi	6	0	6	0	
Lolanga Mampoko	7	0	7	2	
Lotumbe	17	0	17	2	
Makarza	1	0	1	0	ACTIVE
Mbandaka	21	4	25	17	
Monieka	2	0	2	0	
Wangata	2	0	2	1	
Cumulative Total	119	9	128	53	

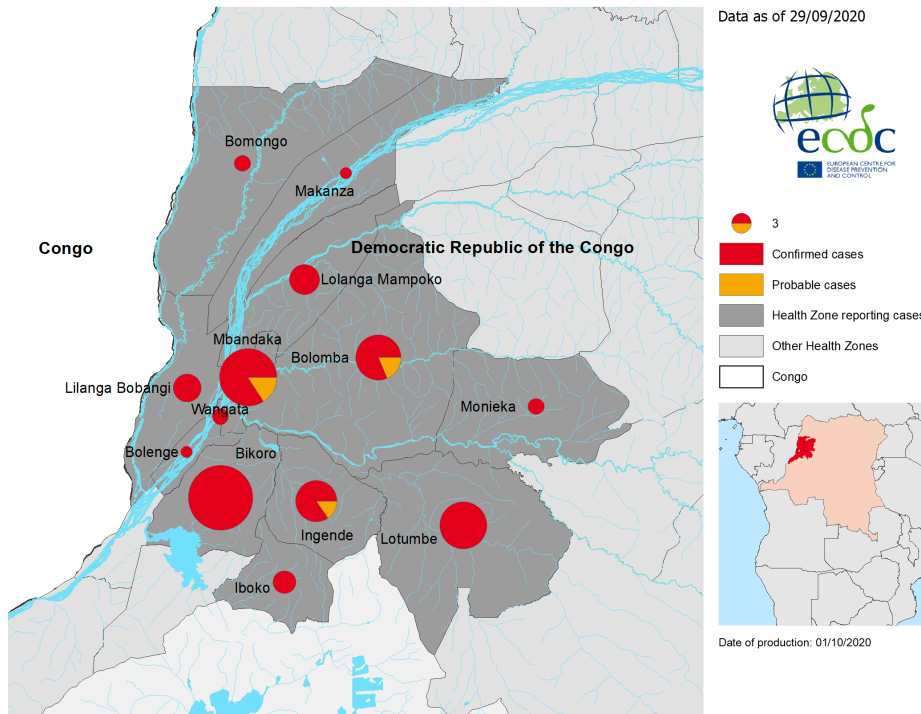
Distribution of Ebola virus disease cases in Equateur Province, Democratic Republic of the Congo, by week of reporting and as of 29 September 2020

Source: ECDC



Geographical distribution of confirmed and probable cases of Ebola virus disease, Equateur Province, Democratic Republic of the Congo, as of 29 September 2020

Source: ECDC



Influenza A(H9N2) - Multi-country (World) - Monitoring human cases

Opening date: 30 January 2019

Latest update: 2 October 2020

Epidemiological summary

Since the CDTR update in June 2020, an additional human case of influenza A(H9N2) was reported in China. The case is a four-year-old girl from Meizhou, Guangdong province. She was admitted to hospital on 4 August 2020 after onset of illness on 3 August 2020. The patient had mild symptoms and recovered fully. A contact with domestic poultry was reported. No further cases were confirmed among the contacts of this case.

Overall, six cases of human influenza A(H9N2) were reported in 2020, all in China. To date and since 1998, a total of 67 laboratory-confirmed cases of human infection with avian influenza A(H9N2) viruses have been reported from China (56), Egypt (4), Bangladesh (3), Oman (1), Pakistan (1), India (1) and Senegal (1). The previous human infection was reported from China, with disease onset in May 2020.

Sources: [ECDC avian influenza page](#) | [WHO avian and other zoonotic influenza page](#) | [Joint ECDC, EFSA and EU Reference Laboratory scientific for avian influenza report: Avian influenza overview May – August 2020](#) | [Emerging Infectious Diseases](#) | [Taiwan CDC](#) | [Hong Kong health department](#) | [WHO](#) | [media](#)

ECDC assessment

Although avian influenza A(H9N2) has caused infection in humans, human infections remain rare and no sustained human-to-human transmission has been reported. No human cases due to A(H9N2) have been reported in Europe.

Human cases related to the avian influenza A(H9N2) virus are detected sporadically and are not unexpected in regions where A(H9N2) is endemic in the poultry population (Asia, Africa and the Middle East). Direct contact with infected birds or a contaminated environment is the most likely source of infection.

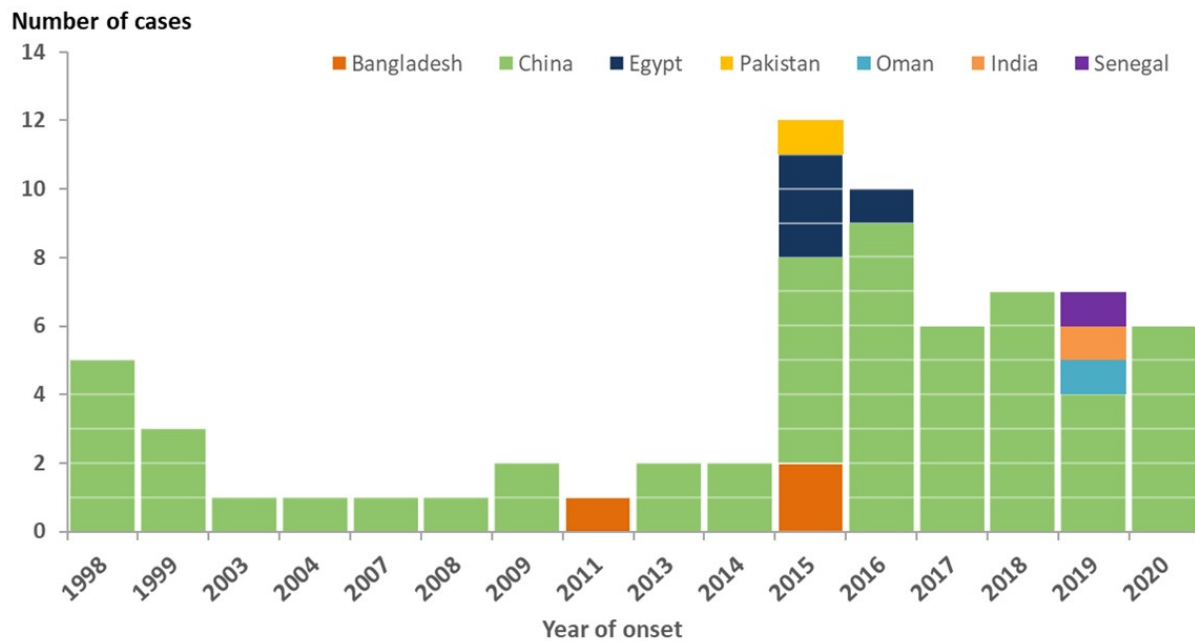
The risk of zoonotic influenza transmission to the general public in EU/EEA countries is still considered to be very low. As the likelihood of zoonotic transmission of newly introduced or emerging reassortant avian influenza viruses is unknown, the use of personal protective measures for people exposed to avian influenza viruses will minimise the remaining risk.

Actions

ECDC monitors avian influenza strains through its epidemic intelligence activities in order to identify significant changes in the epidemiology of the virus. ECDC, together with EFSA and the EU reference laboratory for avian influenza, produces a quarterly updated report of the [avian influenza situation](#). The most [recent report](#) was published on 30 September 2020. ECDC has published an [outbreak alert](#) for new avian influenza outbreaks of A(H5) among wild and domestic birds.

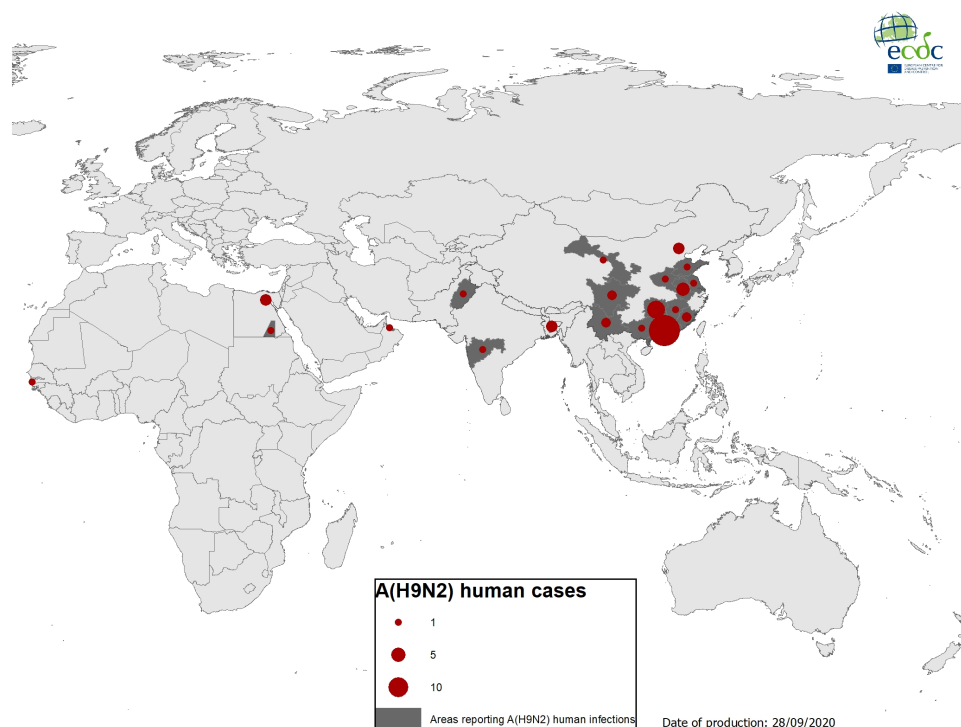
Distribution of confirmed human cases of A(H9N2) by reporting country, 1998 – 28 September 2020

Source: ECDC



Geographical distribution of confirmed human cases of A(H9N2), 1998 – 28 September 2020

Source: ECDC



Cholera – Multi-country (World) – Monitoring global outbreaks

Opening date: 20 April 2006

Latest update: 2 October 2020

Epidemiological summary

Americas

Haiti: In 2020, as of September, no confirmed cholera cases have been reported in Haiti. In 2019, Haiti reported 684 suspected cases including three deaths (CFR: 0.4%). According to a [UNICEF report](#), the last confirmed cholera cases in Haiti were reported in February 2019. Since the beginning of the outbreak in 2010 and as of 25 January 2020, Haiti has reported 820 461 suspected cholera cases, including 9 792 deaths (CFR: 1.2%).

Dominican Republic: In 2020, as of 5 September, no cholera cases have been reported in the Dominican Republic. During the same period in 2019, 12 cholera cases were reported.

Africa

Benin: In 2020 and as of 6 September, Benin has reported 196 suspected cases, with only one laboratory-confirmed case. Five deaths have been reported (CFR: 2.5%).

Ethiopia: In 2020 and as of 6 September, 14 728 cases, including 257 associated deaths (CFR: 1.8%) have been reported in Ethiopia. It represents an increase of 3 301 new cases and 81 new deaths since the last report. The cases have been reported from three regions: Sidama, SNNP and Oromia.

Kenya: In 2020 and as of 28 August, the number of cumulative cases reported in the country is still 711, including 13 deaths (CFR: 1.8%). There is no update since the previous report, but the outbreak in Garissa is now under control.

However, an outbreak is still ongoing on Turkana county, which is experiencing its fourth wave this year, with a total of 279 cases in 2020. In 2019, 5 150 cases, including 39 associated deaths (CFR: 0.8%), were reported.

Nigeria: In 2020, and as of 6 September, 1 115 suspected cases and 61 associated deaths have been reported. Among these cases, 40 have been confirmed. This represents an increase of 65 new cases and two new deaths since the last report. For the same period in 2019, 2 497 cases, including 38 deaths, were reported.

13/16

Uganda: In 2020, and as of 7 September, Uganda has reported 1 488 cases. Most cases have been reported from four provinces: Moroto (483), Nabilatuk (543), Napak (72) and Kotido (390). Six deaths have been reported so far in 2020.

Somalia: In 2020, and as of 16 August, WHO has reported 5 485 suspected cholera cases, including 30 associated deaths (CFR: 0.5%). This represents an increase of 144 new cases and one new death since the previous report. According to the WHO, in 2020 cholera cases have been reported from the regions of Banadir, Bay, Hiran and Lower Shabelle. Most of the deaths were reported in Banadir Region (19), and over 50% of the deaths were infants aged two years and below.

Cameroon, DR Congo, Burundi, and Mozambique have no updates available since the last report in the CDTR. However, in Mozambique, according to [media](#) sources, the vaccination campaign has been launched at the end of September, mainly in Pemba and Metuge regions.

Asia

Bangladesh: In 2020 and as of 6 September, 87 915 acute watery diarrhoea (AWD) cases have been reported in the Cox's Bazar. This represents an increase of 7 763 AWD cases since the previous CDTR update. For the whole of 2019, 191 057 AWD cases were reported in the Cox's Bazar. According to WHO, between 5 September and 29 December 2019, 239 cases of AWD tested positive by means of a cholera rapid diagnostic test or culture in Cox's Bazar, Bangladesh.

No additional cholera cases have been reported in [Malaysia](#) since last CDTR update.

Yemen: There is no official update since last report in the CDTR. In 2020 and as of 2 August, WHO has reported 167 278 suspected cholera cases, including 48 associated deaths (CFR: 0.03%).

[India](#) has no update available since the last report in the CDTR.

Disclaimer: Data presented in this report originate from several sources, both official public health authorities and non-official, such as media. Data completeness depends on the availability of reports from surveillance systems and their accuracy, which varies between countries. All data should be interpreted with caution as there may be areas of under-reporting and figures may not reflect the actual epidemiological situation.

ECDC assessment

Cholera cases have continued to be reported in eastern Africa, the Horn of Africa and the Gulf of Aden over the past few months. Cholera outbreaks have also been reported in the western and southern part of Africa and in some areas of Asia. Despite the high number of cholera outbreaks reported worldwide, few cases are reported each year among returning EU/EEA travellers. The risk of cholera infection in travellers visiting countries with ongoing outbreaks remains low, although sporadic infections among EU/EEA travellers are possible. In 2018, 26 cases were reported in EU/EEA Member States, while 17 and 23 cases were reported in 2017 and 2016, respectively. All cases had travel history to cholera-affected areas. The risk of further transmission of *Vibrio cholerae* within the EU/EEA is very low.

According to the WHO, vaccination should be considered for travellers at higher risk, such as emergency and relief workers who are likely to be directly exposed. Vaccination is generally not recommended for other travellers.

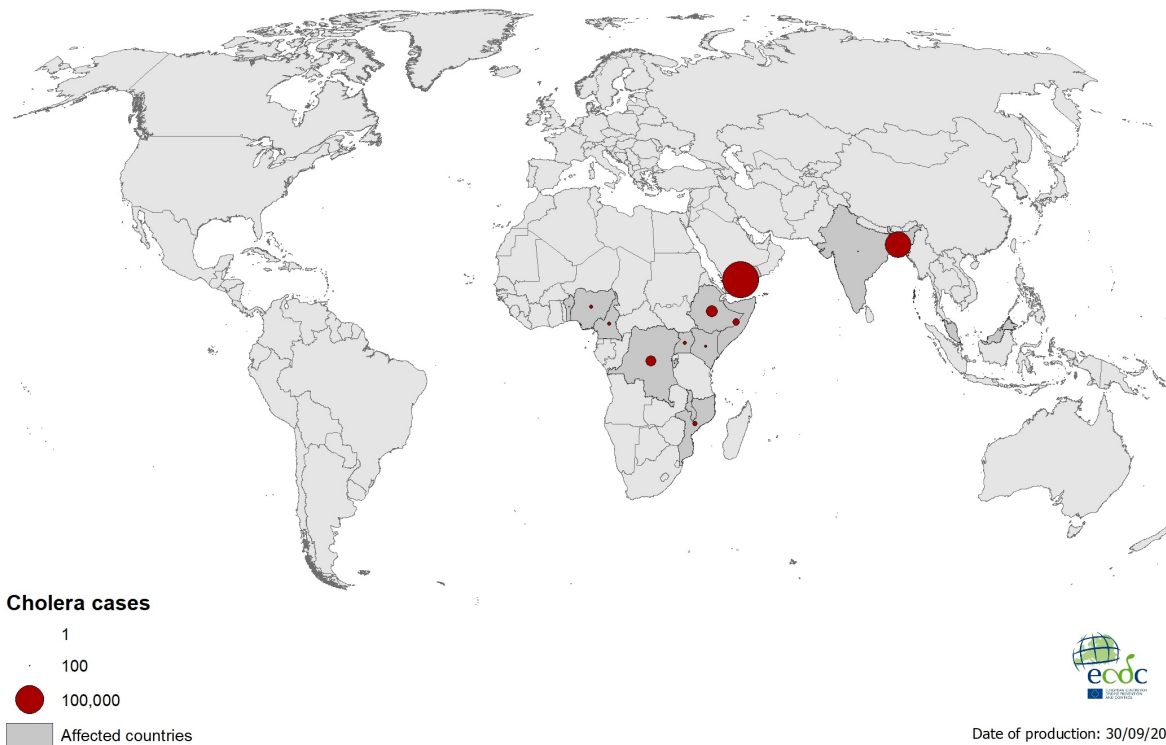
Travellers to cholera-endemic areas should seek advice from travel health clinics to assess their personal risk and apply precautionary sanitary and hygiene measures to prevent infection. These can include drinking bottled water or water treated with chlorine, carefully washing fruit and vegetables with bottled or chlorinated water before consumption, regularly washing hands with soap, eating thoroughly cooked food and avoiding the consumption of raw seafood products.

Actions

ECDC monitors cholera outbreaks globally through its epidemic intelligence activities in order to identify significant changes in epidemiology and to inform public health authorities. Reports are published on a monthly basis. The worldwide overview of cholera outbreaks is available on [ECDC's website](#).

Geographical distribution of cholera cases reported worldwide in 2020

Source: ECDC



Geographical distribution of cholera cases reported worldwide from July to September 2020

Source: ECDC



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