

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

Monkeypox - the United Kingdom ex Nigeria - 2018

Opening date: 12 September 2018

Latest update: 28 September 2018

In September 2018, the United Kingdom reported two imported cases of monkeypox virus. As of 26 September 2018, a third case has been detected in the UK.

→Update of the week

On 26 September 2018, the UK reported an additional case of monkeypox. The case was involved in the care of the case in Blackpool Victoria Hospital before monkeypox was diagnosed.

The case is currently isolated to minimise the risk of onward transmission to others. The patient is currently being treated in the specialist unit at Royal Victoria Infirmary in Newcastle.

West Nile virus - Multistate (Europe) - Monitoring season 2018

Opening date: 30 May 2018

Latest update: 28 September 2018

During the West Nile virus transmission season (expected to be between June and November), ECDC monitors the occurrence of West Nile virus 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 2 (Global Administrative Unit Layers 2) level where there is ongoing virus transmission.

→Update of the week

Between 21 and 27 September 2018, EU Member States reported 132 human West Nile virus infections in Greece (37), Italy (42), Hungary (23), Romania (21), Croatia (8) and Bulgaria (1). EU neighbouring countries reported 34 cases, all in Serbia. In four areas, human cases were reported for the first time: Croatia (2), Bulgaria (1) and Serbia (1). All other human cases were reported from areas that have been affected during previous transmission seasons. This week, 9 deaths were reported by Romania (5), Greece (2), Bulgaria (1) and Italy (1).

In the same week, 12 outbreaks among equids were reported by Hungary (15), Italy (9), Greece (1) and Germany (1). This is the first time a West Nile virus infection was detected in an equid in Germany.

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

Opening date: 1 August 2018

Latest update: 28 September 2018

On 1 August 2018, the Ministry of Health of the Democratic Republic of the Congo (DRC) declared the 10th outbreak of Ebola virus disease in the country. The outbreak affects North Kivu and Ituri Provinces in the northeast of the country, close to the border with Uganda.

→Update of the week

Over the past week, the Ministry of Health of the Democratic Republic of the Congo has reported 11 additional cases in Beni (8), Tchomia (2) and Mabalako (1). Additionally, since the last CDTR, a new health zone in Ituri has reported confirmed cases. The first case reported in this newly affected health zone, Tchomia, had an epidemiological link with a confirmed case in Beni.

As of 26 September 2018, there have been 154 Ebola virus disease cases (123 confirmed, 31 probable), including 101 deaths (70 confirmed, 31 probable), since the beginning of the outbreak.

Over the past week, violent incidents took place in Beni. The occurrence of these incidents and the concomitant occurrence of labour strikes that also took place in Beni and Butembo have negatively interfered with response activities that were taking place in both health zones. However, according to the Ministry of Health, as of 27 September 2018, response activities in Beni and Butembo have resumed.

Chikungunya and dengue – Multistate (World) – Monitoring global outbreaks

Opening date: 27 January 2017

Latest update: 28 September 2018

Chikungunya and dengue are vector-borne diseases that affect 50 to 100 million people each year worldwide. Over the past decade, chikungunya and dengue have been detected in an increasing number of countries. Chikungunya virus infection has been circulating in Asia and Africa and has reached the Caribbean and the Americas since 2013 to 2014. In 2017, France and Italy reported autochthonous chikungunya cases. Dengue fever is present in Asia, the Pacific, the Caribbean, the Americas and Africa. In 2018, no autochthonous dengue or chikungunya cases were detected in EU/EEA Member States.

→Update of the week

Chikungunya: The virus is widespread in the Americas, with several countries reporting cases in 2018. Additionally, since the last report, new cases have also been detected in Thailand. Since the previous CDTR update on 24 August 2018, a new outbreak has been reported in Sudan and WHO has declared that the outbreak in Kenya is under control. No outbreaks have been identified in Europe and the Australia and Pacific region since the previous report.

Dengue: Compared with the same period in 2017, Paraguay, Thailand, Cambodia, Taiwan and Bangladesh have observed an increasing trend in the number of cases.

II. Detailed reports

Monkeypox - the United Kingdom ex Nigeria - 2018

Opening date: 12 September 2018

Latest update: 28 September 2018

Epidemiological summary

On 8 September 2018, the UK reported the first-ever case of [monkeypox](#) detected in the UK. The case is a resident of Nigeria, which is where the individual is believed to have contracted the infection before travelling to the UK.

On 11 September 2018, the UK reported an additional case of monkeypox. The patient is currently being treated in a high consequence infectious disease facility at the Royal Liverpool Hospital. On 4 September 2018, the case arrived in the UK after recent travel to Nigeria for holidays.

On 26 September 2018, the UK reported the third case of monkeypox detected in the country. The case was involved in the care of the case in Blackpool Victoria Hospital before monkeypox was diagnosed. The case is currently isolated to minimise the risk of onward transmission to others. The patient is currently being treated in the specialist unit at Royal Victoria Infirmary in Newcastle.

Since the re-emergence of monkeypox in Nigeria in September 2017, the [Nigeria Centre for Disease Control](#) continues to receive reports and responds to cases across the country. Between September 2017, when the outbreak started, and 31 August 2018, 262 suspected cases were reported from 26 states. Of these, 113 were confirmed in 16 states, with seven deaths. The highest number of cases was reported from states in the South-South Region of Nigeria.

Sources: [Public Health England \(PHE\)](#) | [WHO](#) | [Nigeria CDC](#) | [Eurosurveillance](#)

ECDC assessment

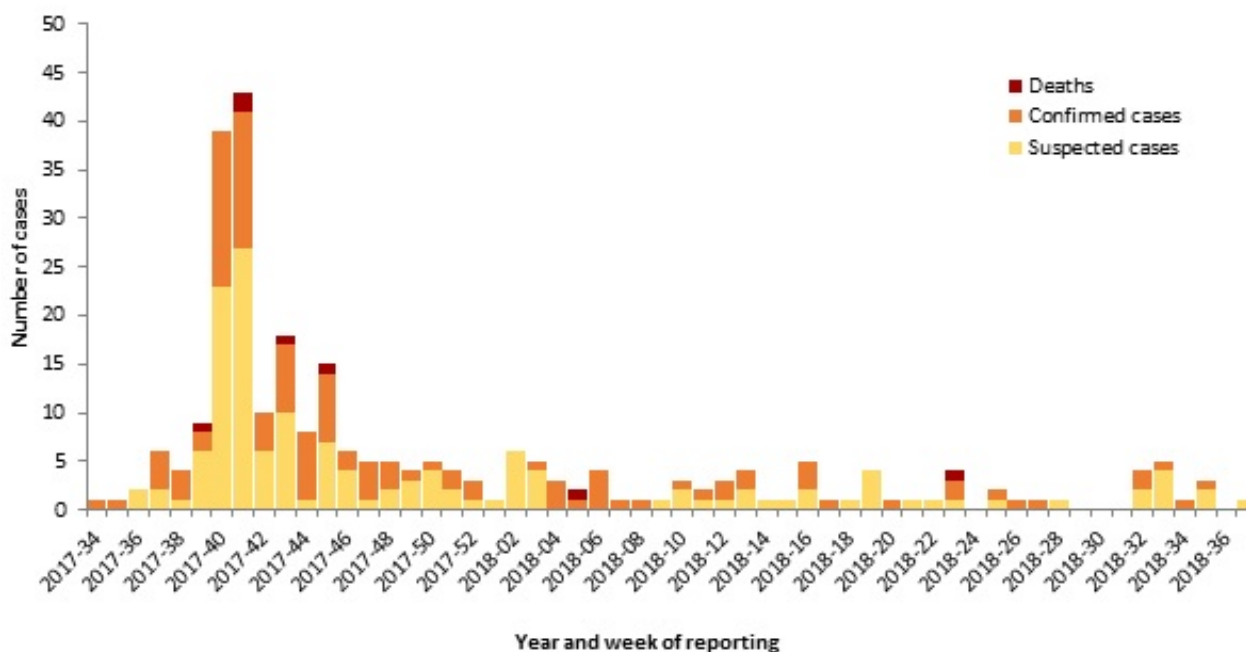
The third case reported by the UK is not unexpected as the individual risk of infection through contact with a monkeypox patient depends on the nature and duration of the contact. Family members, close contacts (e.g. immediate neighbour on aircraft) or persons who have provided care to patients, including health care workers (HCWs) who have not applied preventive measures, have a moderate risk for infection. In the community, the risk of transmission is considered negligible. The ECDC rapid risk assessment published on 21 September 2018 remains valid.

Actions

ECDC is in daily contact with PHE and monitors this event through epidemic intelligence. ECDC published a [rapid risk assessment](#) on 21 September 2018.

Number of monkeypox cases in Nigeria by year and week of reporting, from September 2017 and as of 15 September 2018

Nigeria CDC



West Nile virus - Multistate (Europe) - Monitoring season 2018

Opening date: 30 May 2018

Latest update: 28 September 2018

Epidemiological summary

Between 21 and 27 September 2018, EU Member States reported 132 human West Nile virus infections in Greece (37), Italy (42), Hungary (23), Romania (21), Croatia (8) and Bulgaria (1). EU neighbouring countries reported 34 cases, all in Serbia. In four areas, human cases were reported for the first time: Croatia (2), Bulgaria (1) and Serbia (1). All other human cases were reported from areas that have been affected during previous transmission seasons. This week, 9 deaths were reported by Romania (5), Greece (2), Bulgaria (1) and Italy (1).

In the same week, 12 outbreaks among equids were reported by Hungary (15), Italy (9), Greece (1) and Germany (1). This is the first time a West Nile virus infection was detected in an equid in Germany.

In 2018 and as of 27 September 2018, EU Member States have reported 1 266 human cases in Italy (495), Greece (261), Romania (237), Hungary (190), Croatia (44), France (16), Austria (15), Bulgaria (5) and Slovenia (3). EU neighbouring countries reported 404 human cases in Serbia (320), Israel (81) and Kosovo* (3). To date, 124 deaths due to West Nile virus infection have been reported by Italy (36), Romania (30), Serbia (29), Greece (26), Bulgaria (1), Hungary (1) and Kosovo* (1).

During the current transmission season, 201 outbreaks among equids have been reported by Italy (107), Hungary (78), Greece (10), France (2), Romania (2), Austria (1) and Germany (1).

In accordance with [European Commission Directive 2014/110/EU](#), prospective blood donors should defer for 28 days after leaving an area with evidence of West Nile virus circulation among humans unless the results of an individual nucleic acid test are negative.

*This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the International Court of Justice Opinion on the Kosovo Declaration of Independence.

Publications: [An early start of West Nile virus seasonal transmission: the added value of One Health surveillance in detecting early circulation and triggering timely response in Italy, June to July 2018](#)

[Early start of the West Nile fever transmission season 2018 in Europe](#)

ECDC links: [West Nile fever](#) | [Atlas](#)

Sources: [TESSy](#) | [ADNS](#)

ECDC assessment

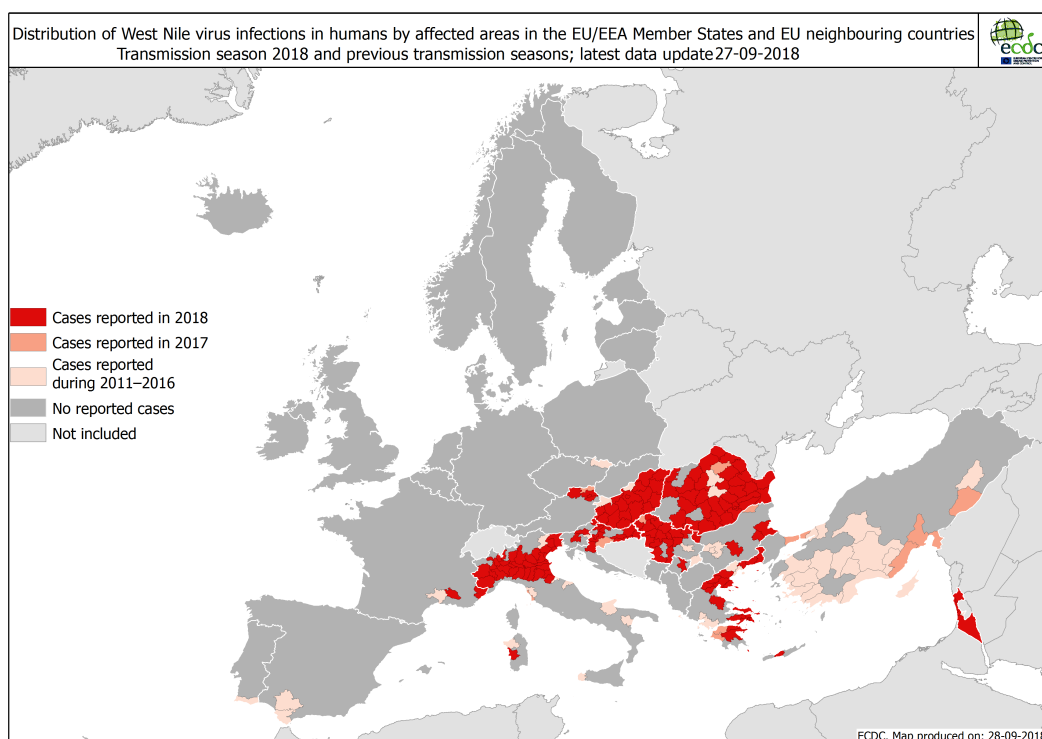
The 2018 transmission season started earlier than usual and higher case numbers have been reported compared with the same period in previous years. All human cases reported during the current transmission season were reported in previously affected countries. Since it is currently a particularly intense transmission season for West Nile virus, precautionary measures for travellers and residents, mainly elderly and immunocompromised individuals, to affected areas must be highlighted.

Actions

During the transmission season, ECDC publishes [West Nile fever maps](#) together with an epidemiological summary every Friday. ECDC published a rapid risk assessment on the '[Early large increase in West Nile virus infections in the EU/EEA and EU neighbouring countries](#)' on 13 August 2018 and an [epidemiological update](#) on 31 August 2018.

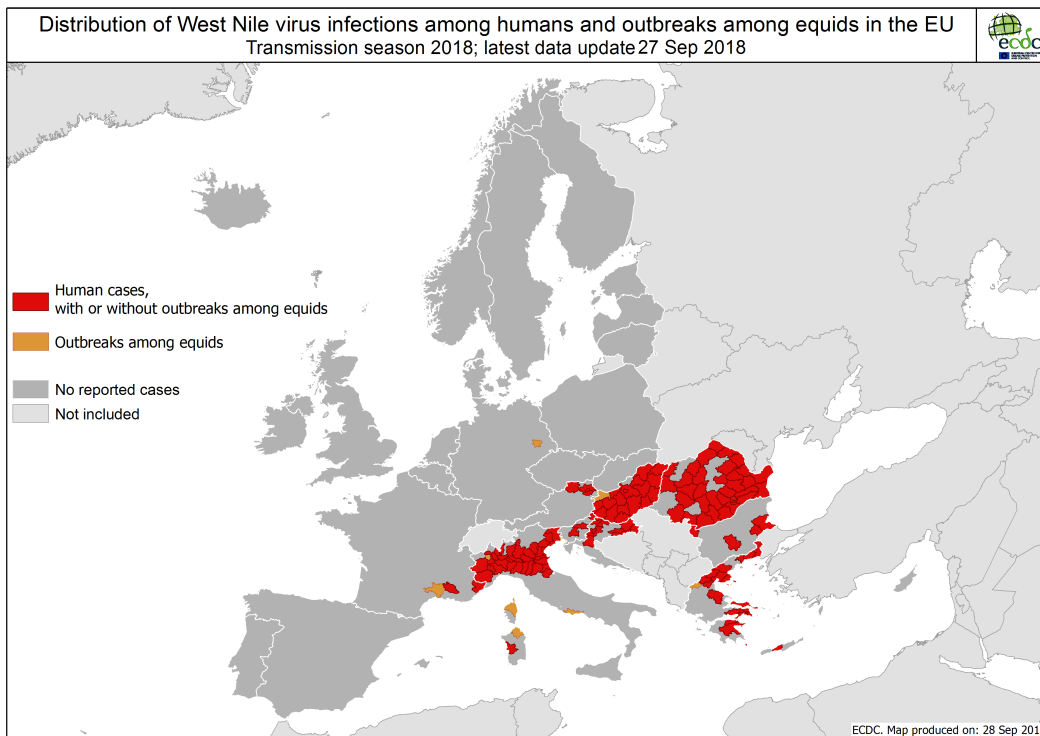
Distribution of human West Nile fever cases by affected areas as of 27 Sep

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Distribution of West Nile fever cases among humans and outbreaks among equids in the EU as of 27 Sep

TESSy and ADNS



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

Opening date: 1 August 2018

Latest update: 28 September 2018

Epidemiological summary

As of 26 September 2018, there have been 154 Ebola virus disease cases (123 confirmed, 31 probable), including 101 deaths (70 confirmed, 31 probable), since the beginning of the outbreak.

Nine health zones in two provinces have reported confirmed and probable Ebola virus disease cases: Mabalako, Beni, Butembo, Oicha, Masereka, Kalungata and Musienene health zones in North Kivu Province and Mangina and Tchomia health zones in Ituri Province.

Response activities: According to the European Civil Protection and Humanitarian Aid Operations (ECHO), as of 18 September 2018, 1 983 contacts have been identified in Beni (849), Mabalako (420), Butembo (322), Masereka (195), Mandima (111), Komanda (46) and Musienene (40) and 97.3% of these contacts were followed up.

According to the Ministry of Health, as of 26 September 2018, 12 029 people were vaccinated in Mabalako (4 122), Beni (3 662), Mandima (1 632), Katwa (903), Butembo (884), Masereka (270), Komanda (164), Tchomia (156), Oicha (121), Kinshasa (65) and Bunia (50).

Travel: According to WHO disease outbreak news (DON) released on 14 August 2018, Burundi, Central African Republic, Rwanda, South Sudan, Uganda and Zambia have implemented [entry screening](#).

[Belgium](#), [Germany](#), [Italy](#) and [Spain](#) have issued advice against traveling to the North Kivu region due to the Ebola outbreak. Additionally, the [CDC](#) and [WHO](#) have issued travel recommendations.

Sources: [Ministry of Health of the Democratic Republic of the Congo](#) | [WHO](#)

ECDC assessment

Several cases have been confirmed in the city of Butembo. These cases are of concern as the city of more than 1 million inhabitants is a commercial and travel hub between the DRC and Uganda. The situation has the potential for new chains of

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transmission if not rapidly controlled.

Due to the security situation and humanitarian crisis in North Kivu Province, the implementation of outbreak control measures may be challenging. The risk of introduction of the virus by an infected traveller to the EU/EEA is considered very low at this stage.

Transport routes linking the affected areas to other regions in the DRC and several neighbouring countries (mainly Rwanda and Uganda) may facilitate the spread of the virus. The situation is aggravated by the displacement of people due to conflict and crisis. According to [WHO](#), the public health risk is considered high at the national and regional levels.

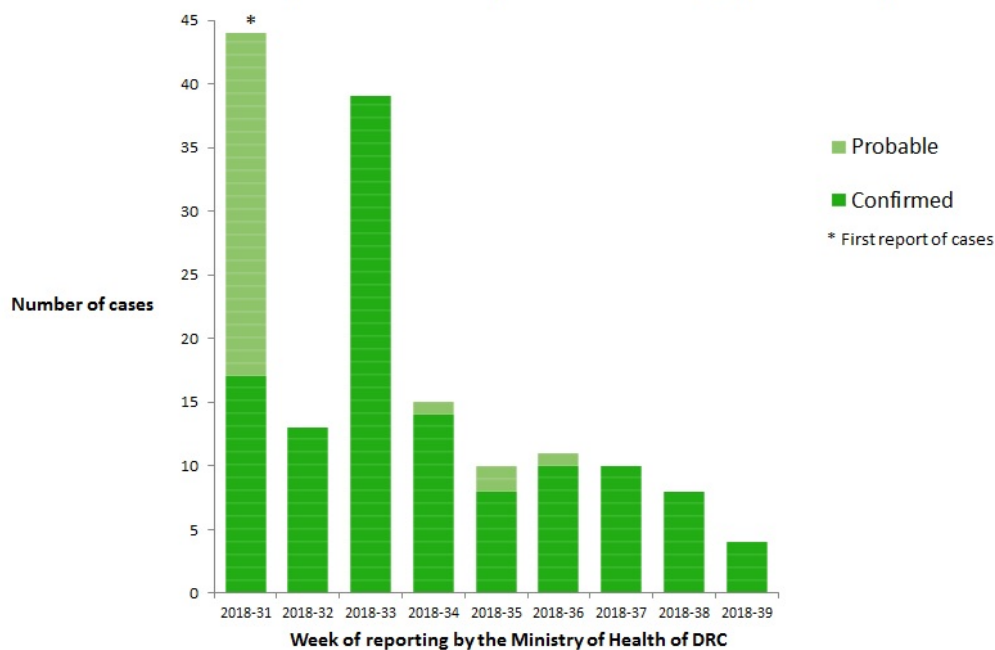
Actions

ECDC is monitoring this threat on a daily basis through epidemic intelligence. ECDC published a [rapid risk assessment](#) on 9 August 2018 and an [epidemiological update](#) on 11 September 2018.

Distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of Week 39 September 2018

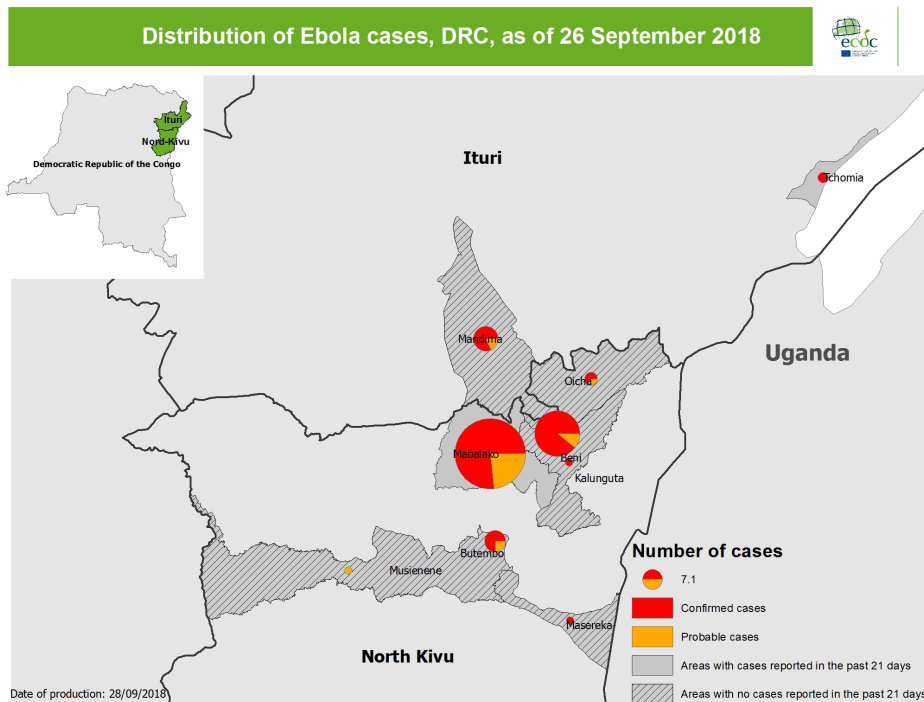
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Distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 26 September 2018



Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 26 September 2018

ECDC



Chikungunya and dengue – Multistate (World) – Monitoring global outbreaks

Opening date: 27 January 2017

Latest update: 28 September 2018

Epidemiological summary

Europe

No autochthonous dengue or chikungunya cases were detected in continental EU/EEA countries this year.

Americas and the Caribbean

Chikungunya:

Bolivia: In 2018 and as of 11 September 2018, Bolivia has reported 78 confirmed cases. There has been an additional case since the previous update on 24 August 2018. For the same period in 2017, Bolivia reported 22 cases.

Brazil: In 2018 and as of 25 August 2018, Brazil has reported 50 356 confirmed cases. This represents an increase of 9 515 confirmed cases since the previous update on 24 August 2018. Among the confirmed cases, the Brazilian Ministry of Health has reported 22 deaths due to chikungunya. For the same period in 2017, 186 deaths were reported. The number of cases reported in 2018 is substantially lower than for the same period in 2016 and 2017.

Colombia: In 2018 and as of 12 August 2018, Colombia has reported 441 chikungunya cases. Among these cases, 82 are laboratory-confirmed cases and eight are suspected. This represents an increase of 47 suspected cases since the previous update on 24 August 2018.

Costa Rica: In 2018 and as of 9 September 2018, Costa Rica has reported 106 suspected chikungunya cases. This represents an increase of 29 suspected cases since the previous update on 24 August 2018.

El Salvador: In 2018 and as of 16 September 2018, El Salvador has reported 265 suspected cases. This represents an increase of 43 suspected cases since the previous update on 24 August 2018. For the same period in 2017, El Salvador reported 451 suspected cases.

Mexico: In 2018 and as of 9 September 2018, Mexico has reported 20 confirmed chikungunya cases, an increase of two since the previous update on 24 August 2018. For the same period in 2017, Mexico reported 24 confirmed cases.

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Nicaragua: In 2018 and as of 16 September 2018, Nicaragua has reported 224 suspected cases. This is 66.3% fewer cases than in 2017. Additionally, 26 cases were confirmed for the same time period in Nicaragua. This represents an increase of 40 suspected cases since the previous update on 24 August 2018. For the same period in 2017, Nicaragua reported 22 confirmed cases.

Paraguay: In 2018 and as of 9 September 2018, Paraguay has reported 1 162 probable chikungunya cases. Additionally, Paraguay reported 67 cases as confirmed cases in the Central, Amambay, Guairá and Paraguarí Departments. This represents an increase of three probable cases since the previous update on 24 August 2018.

Dengue:

In 2018 and as of 15 September 2018, the Pan American Health Organization (PAHO) has reported 358 000 suspected and confirmed dengue cases across the Americas region. This is an increase of 40 000 cases since the last ECDC update on 24 August 2018. Brazil accounts for more than half of the cases (198 800), followed by Nicaragua (32 400), Mexico (29 600), Paraguay (28 800) and Colombia (24 900). Compared with last year's figures, Brazil follows the same trend. The figures for each country of the America can be found on PAHO and WHO's [Health Information Platform for the Americas](#).

Asia

Chikungunya:

Thailand: In 2018 and as of 13 September 2018, Thailand has reported 342 cases from nine provinces. Satun is the most affected province and the other provinces affected are Bangkok, Krabi, Nakhon Si Thammarat, Narathiwat, Phuket, Songkhla, Surat Thani and Trang. This represents an increase of 141 cases since the previous update on 24 August 2018.

Dengue:

In Asia, the following countries have reported an increasing trend compared with last year:

Thailand has reported 36 955 cases as of 1 September 2018. This represents an increase of 8 815 cases since the previous update on 24 August 2018 and an increase of approximately 15 000 cases compared with the same period last year.

Cambodia has reported 5 436 suspected dengue cases in 2018 as of 18 August 2018. This represents an increase of 2 479 cases since the previous update on 24 August 2018 and approximately 3 000 additional cases compared with last year.

Taiwan has reported 129 autochthonous cases as of 22 September 2018. Last year, for the same time period, three autochthonous cases were reported on the island.

Bangladesh has reported 2 100 cases nationwide as of 24 September 2018. This is a threefold increase compared with last year.

The following countries have reported a decreasing trend of dengue compared with the same period in 2017:

Laos has reported 3 586 dengue cases as of 11 August 2018.

Malaysia has reported 53 814 cases of dengue as of 24 September 2018.

Sri Lanka has reported 38 784 cases of dengue as of 25 September 2018, compared with 150 000 cases for the same period in 2017.

Vietnam: According to WHO, Vietnam has reported 39 692 cases as of 4 August 2018, compared with 90 000 cases for the same period in 2017.

Singapore has reported 2 062 cases as of 24 September 2018. The numbers are in line with those reported in 2017 for the same period.

Several media sources have reported cases in India, Myanmar, Pakistan, and the Philippines, but no official numbers were provided at the national level.

Africa

Chikungunya:

Kenya: As of 31 August 2018, WHO considers the chikungunya outbreak under control in the country. The last reported cases in Kenya were on 24 June 2018. Since the beginning of the outbreak in December 2017 until June 2018, Kenya reported 1 465 chikungunya cases and no deaths. Among these cases, 50 were laboratory-confirmed.

Sudan: In September 2018, media sources quoting the Ministry of Health reported an outbreak of chikungunya cases in the state of Kassala bordering Eritrea. So far, 11 000 cases have been reported, including seven deaths.

Dengue:

There are no updates regarding Tanzania and Ethiopia.

[Senegal](#): As of 24 September 2018, media reports quoting health authorities reported six confirmed cases. An outbreak started in the region of Fatick. In 2017, [Senegalese health authorities](#) reported 79 cases.

[The Seychelles](#) have reported 124 confirmed cases as of 2 September 2018. The number of confirmed cases have been on a decline since the beginning of the outbreak in 2015. The serotypes DENV-1, DENV-2 and DENV-3 are circulating.

[Réunion](#) has reported 6 573 autochthonous cases of dengue on the island in 2018 as of 9 September 2018. This is an increase of 97 cases since the previous update on 24 August 2018. Cases have started to decrease over the past three weeks, reaching approximately 30 cases per week. The most affected area remains the western part of the island. The circulating serotype is DENV-2.

Australia and the Pacific

Chikungunya: No outbreaks have been reported since the previous report on 24 August 2018.

Dengue:

[Australia](#) has reported 492 cases of dengue in 2018 as of 28 August 2018. Fewer dengue cases have been reported to date in 2018 compared with 2013 to 2017.

[New Caledonia](#) has reported 1 792 confirmed dengue cases in 2018 as of 3 August 2018. The number of cases are showing a downward trend. DENV-2 is the predominant circulating serotype.

According to the Pacific Public Health Surveillance Network and [local health authorities](#), there are DENV-1 outbreaks or active circulation in [Wallis and Futuna](#) (194 autochthonous cases), Tahiti, Bora Bora, Ra'iatea, Mo'orea, Nuku Hiva and Rangiroa. DENV-2 is circulating in American Samoa, Kiribati and Tonga.

ECDC assessment

Chikungunya and dengue are endemic in large regions of the intertropical convergence zone. Introduction in Europe in areas with competent vectors via viraemic travellers is possible, although the mosquito vector population density is expected to decline in the coming weeks.

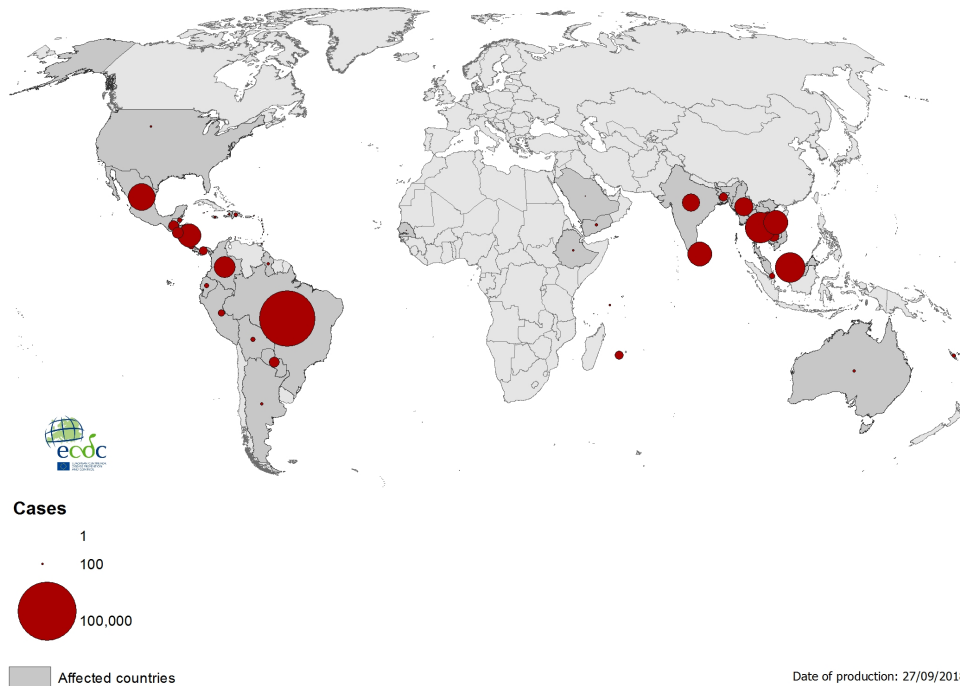
ECDC published a [rapid risk assessment](#) on chikungunya in France on 24 August 2017, a [rapid risk assessment](#) on chikungunya in Italy on 9 October 2017 and a [rapid risk assessment](#) on the dengue outbreak in Reunion on 6 July 2018.

Actions

ECDC monitors these threats through epidemic intelligence and reports on a monthly basis.

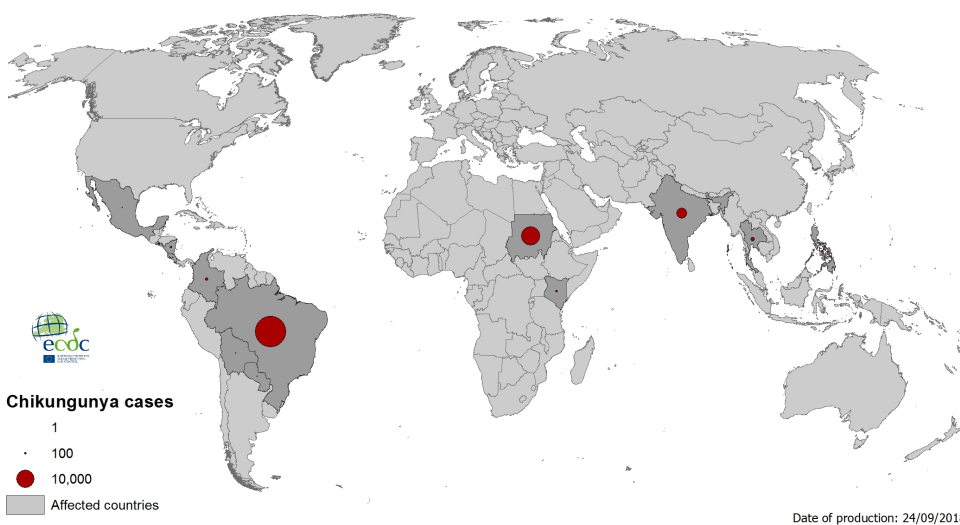
Geographical distribution of dengue cases detected worldwide in the past three months, as of 27 September 2018

ECDC



Geographical distribution of Chikungunya cases detected worldwide in the past three months, as of 24 September 2018

ECDC



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