

This weekly bulletin provides updates on threats monitored by ECDC.

NEWS

World malaria report 2018

In 2017, an estimated 219 million malaria cases occurred worldwide, with 15 countries in sub-Saharan Africa and India carrying almost 80% of the global malaria burden. For the third consecutive year, the WHO European Region has not reported any indigenous malaria case. The incidence rate of the disease declined between 2010 and 2017 but recent data show insufficient progress, according to the WHO's [World malaria report 2018](#).

Five countries accounted for nearly half of all malaria cases worldwide: Nigeria (25%), Democratic Republic of the Congo (11%), Mozambique (5%), India (4%) and Uganda (4%). Brazil, Nicaragua and Venezuela registered increases in malaria transmission. Of an estimated 435 000 malaria deaths in 2017, nearly 80% were concentrated in 17 countries in the WHO African Region and India.

The WHO European Region has reported zero indigenous cases since 2015. Between 6 000–7 000 cases are reported to [TESSy](#) annually (2008–2015), resulting in an incidence of 0.6–1.0 cases per 100 000 population. In Europe, malaria is mainly a travel medicine issue as the vast majority of cases are imported. Despite the region being free from indigenous malaria, the vector that was responsible for its transmission (*Anopheles* mosquitoes) is still present in most of the EU countries, which highlights the need for sustained epidemiological surveillance and public health response.

Plasmodium falciparum is the most prevalent malaria parasite in the WHO African Region, accounting for 99.7% of estimated malaria cases in 2017, as well as in the WHO South-East Asia (62.8%), Eastern Mediterranean (69%) and Western Pacific Regions (71.9%). *Plasmodium vivax* is the predominant parasite in the WHO Region of the Americas, representing 74.1% of malaria cases.

Artemisinin-based combination therapies have been integral to the recent success of global malaria control and protecting their efficacy for the treatment of malaria is a global health priority. Although multidrug resistance, including artemisinin (partial) and partner drug, has been reported in four countries of the Greater Mekong Subregion, there has been a massive reduction in malaria cases and deaths. In Africa, artemisinin (partial) resistance has not been reported to date.

Prevention of malaria is currently based on two complementary methods: chemoprophylaxis and protection against mosquito bites. While several malaria vaccines are under development, none are available yet.

Read more about malaria in the [ECDC factsheet](#) and [ECDC Surveillance Atlas of Infectious Diseases](#).

I. Executive summary

EU Threats

Influenza – Multistate (Europe) – Monitoring season 2018 – 2019

Opening date: 8 October 2018

Latest update: 23 November 2018

Influenza transmission in Europe shows a seasonal pattern, with peak activity during the winter months. So far this season, influenza viruses have been detected sporadically in specimens from persons with respiratory illness presenting to medical care. Both influenza A and B type viruses were detected.

→Update of the week

For week 46 between 12 and 18 November 2018, influenza activity was low throughout the WHO European Region.

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

Opening date: 30 May 2018

Latest update: 23 November 2018

During the West Nile virus transmission season (expected to be between June and November 2018), 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 16 and 22 November 2018, EU Member States reported 8 human West Nile virus infections, all reported by Italy. The most recent onset dates are from week 43, 22 to 28 October. No cases were reported by EU neighbouring countries. All human cases were reported from previously affected areas. This week 5 deaths were reported by Italy (3) and Greece (2).

In the same week, six outbreaks among equids were reported by Italy (4) and Spain (2).

Autochthonous dengue – Spain – 2018

Opening date: 10 October 2018

Latest update: 23 November 2018

Since October 2018, the Spanish Ministry of Health has reported six confirmed autochthonous dengue cases in Spain.

→Update of the week

On 16 November 2018, the Catalan Public Health Agency (ASPCAT) confirmed the first case of autochthonous dengue in Catalonia. The case lives in Barcelona and reported no recent travel history outside Catalonia. Onset of symptoms began between 16 to 18 October 2018. This is the sixth case of autochthonous dengue reported in Spain and has no known relationship with the other cases reported this year.

Non EU Threats

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

Opening date: 1 August 2018

Latest update: 23 November 2018

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 and Ituri Provinces in the northeast of the country close to the border with Uganda. On 17 October 2018, the [International Health Regulations \(IHR\) Emergency Committee](#) concluded that the epidemic does not at this stage constitute a public health emergency of international concern.

→Update of the week

Since the previous CDTR, the Ministry of Health of the Democratic Republic of the Congo has reported 49 additional cases.

As of 21 November 2018, there have been 393 Ebola virus disease cases (346 confirmed, 47 probable), including 222 deaths (175 of which were confirmed cases), since the beginning of the outbreak. The Ministry of Health of the Democratic Republic of the Congo is currently conducting data cleaning of Ebola virus disease databases. Accordingly, the figures reported will likely change over the coming days as cases are reclassified.

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

Opening date: 27 January 2017

Latest update: 23 November 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. Dengue fever is present in Asia, the Pacific, the Caribbean, the Americas and Africa. In 2018, autochthonous cases of dengue were reported in Spain and in France. No autochthonous cases of chikungunya have been detected in EU/EEA Member States in 2018.

→ Update of the week

Chikungunya: The virus is largely spread in the Americas region, with several countries reporting cases in 2018. Additionally, new cases have also been detected in Sudan since the previous round table update on 19 October 2018. No outbreaks have been identified in Europe, Australia or the Pacific region.

Dengue: In the EU, locally acquired cases were reported in France and Spain. In the rest of the world, Thailand, Bangladesh and Mexico have observed an increasing trend in the number of cases compared with the same period in 2017. Additionally, new outbreaks have been reported in Senegal, Mauritania and Angola.

II. Detailed reports

Influenza – Multistate (Europe) – Monitoring season 2018 – 2019

Opening date: 8 October 2018

Latest update: 23 November 2018

Epidemiological summary

Week 46, 12–18 November 2018

Influenza activity was low throughout.

Influenza viruses were detected sporadically in specimens from persons with respiratory illness presenting to medical care.

Both influenza A and B type viruses were detected, but in low numbers.

For week 46, 2018, data from the 24 Member States and areas reporting to the EuroMOMO project indicated all-cause excess mortality to be at expected levels for this time of the year.

Source: [Flu News Europe](#) | [EuroMOMO](#)

ECDC assessment

As usual for this time of the year, influenza activity has been low since week 40, 2018 in the WHO European Region.

Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the [Flu News Europe website](#).

Recommendations on the composition of the 2018–2019 influenza virus vaccine are available from [WHO](#).

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

Opening date: 30 May 2018

Latest update: 23 November 2018

Epidemiological summary

Between 16 and 22 November 2018, EU Member States reported 8 human West Nile virus infections, all reported by Italy. The most recent onset dates are from week 43 (21 to 27 October 2018). No cases were reported by EU neighbouring countries. All human cases were reported from previously affected areas. This week, 5 deaths were reported by Italy (3) and Greece (2).

In the same week, six outbreaks among equids were reported by Italy (4) and Spain (2).

In 2018, as of 15 November 2018, EU Member States have reported 1 499 human cases in Italy (577), Greece (309), Romania (277), Hungary (214), Croatia (53), France (25), Austria (20), Bulgaria (15), the Czech Republic (5), Slovenia (3) and Cyprus (1). EU neighbouring countries reported 557 human cases in Serbia (415), Israel (128) and Kosovo* (14). To date, 176 deaths due to West Nile virus infection have been reported by Greece (47), Italy (45), Romania (42), Serbia (35), Kosovo* (3), Bulgaria (2), the Czech Republic (1) and Hungary (1).

During the current transmission season, 285 outbreaks among equids have been reported by Italy (149), Hungary (91), Greece (15), France (13), Spain (9), Austria (2), Romania (2), Germany (2), Slovenia (1) and Portugal (1).

In accordance with [European Commission Directive 2014/110/EU](#), prospective blood donors should be deferred for 28 days after leaving an area with evidence of WNV 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](#) | [Animal Disease Notification System](#)

ECDC assessment

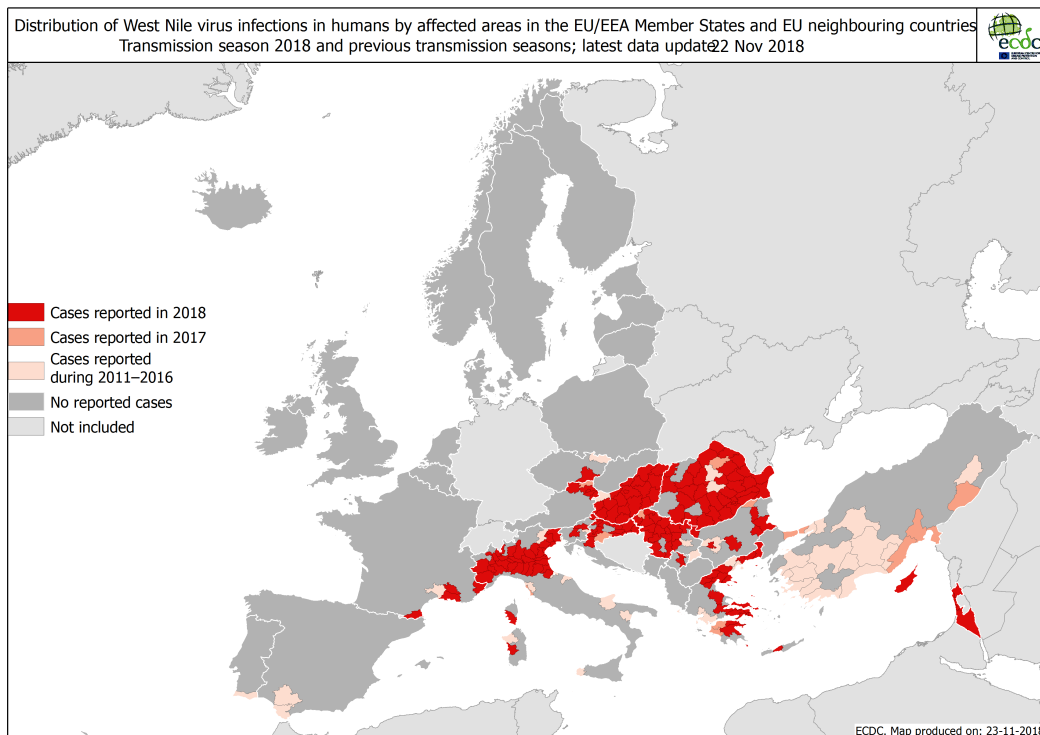
The 2018 transmission season started earlier than usual and higher case numbers have been reported compared with the same period in previous years. Mosquito-borne autochthonous human cases were reported in previously affected countries. Since it has been a particularly intense transmission season for West Nile virus, precautionary measures for travellers and residents, mainly the elderly and immunocompromised individuals, to affected areas must be highlighted. As expected at this time of the year, the weekly number of cases are decreasing.

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 [the latest epidemiological update](#) on 24 September 2018.

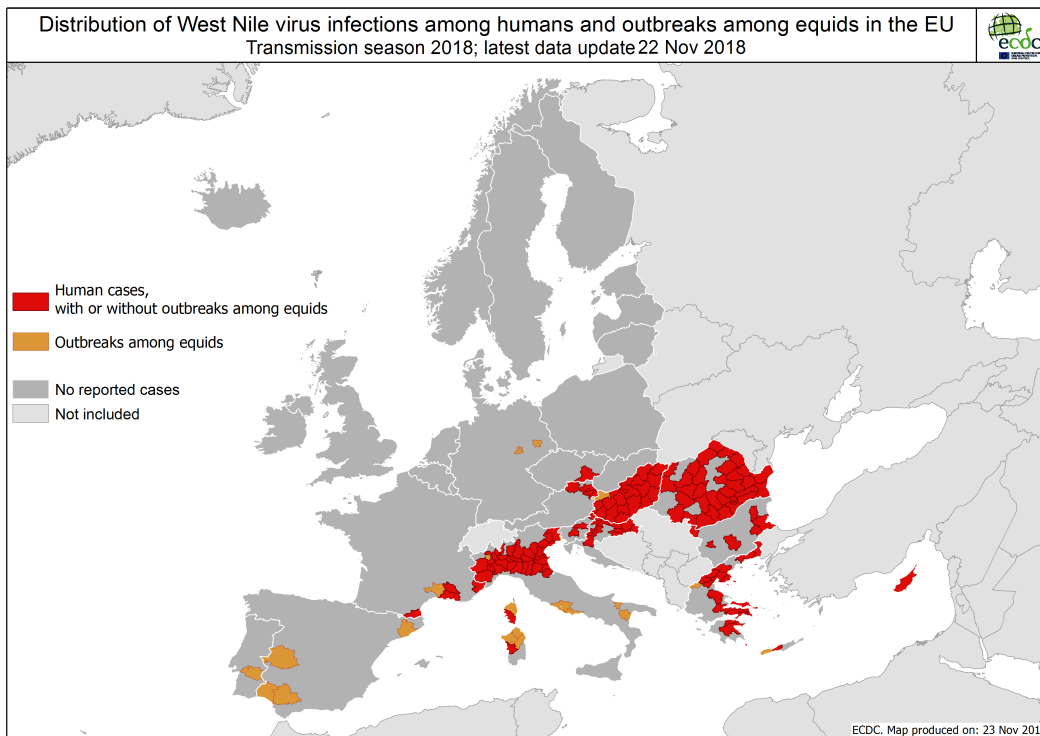
Distribution of human West Nile virus infections by affected areas as of 22 November 2018.

ECDC



Distribution of West Nile virus infections among humans and outbreaks among equids in the EU as of 22 November 2018.

ECDC and ADNS



Autochthonous dengue – Spain – 2018

Opening date: 10 October 2018

Latest update: 23 November 2018

Epidemiological summary

Since October 2018, six confirmed autochthonous dengue cases have been reported in Spain.

On 9 and 16 October 2018, Spanish health authorities reported three confirmed autochthonous dengue cases in Spain. All cases belong to the same family and had onset of symptoms in late August 2018 after spending time together in municipalities in the Region of Murcia and Province of Cádiz during the possible time of infection. On 2 November 2018, two additional dengue cases were reported in Murcia region. All cases fully recovered and had no recent travel history to dengue-affected areas. Laboratory results showed that all five cases reported shared the same dengue serotype.

On 16 November 2018, the first case of autochthonous dengue was reported in Barcelona, Catalonia. Onset of symptoms began between 16 to 18 October 2018.

These cases are the first documented autochthonous dengue transmission in Spain since the end of the 19th century. Spanish authorities are continuing their investigations.

Source: [Catalan Public Health Agency](#), [Murcia Regional Government](#), [Murcia Regional Government](#), [Ministry of Health of Spain](#)

ECDC assessment

Isolated cases or small clusters of autochthonous dengue in the south of Spain are not unexpected as *Aedes albopictus* is present in the area. The map of the current known *Aedes albopictus* distribution as of June 2018 shows that the mosquito is established in the Province of Barcelona and Murcia region whereas is considered introduced in the Province of Cádiz. Similar occurrences have been documented in Europe in previous years. The risk of further transmission is considered to be low as weather conditions are expected to become unfavourable in the coming weeks. active case-finding activities are ongoing. More information regarding dengue fever and *Aedes albopictus* geographical distribution is available from ECDC's [factsheet](#) and [mosquito map](#).

Actions

ECDC is monitoring this event through epidemic intelligence. ECDC has produced a rapid risk assessment on '[Local transmission of dengue fever in France and Spain – 2018](#)' published on 22 October 2018.

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

Opening date: 1 August 2018

Latest update: 23 November 2018

Epidemiological summary

As of 21 November 2018, there have been 393 Ebola virus disease cases (346 confirmed, 47 probable), including 222 deaths (175 of which were confirmed cases), since the beginning of the outbreak.

Fourteen health zones in two provinces have reported confirmed or probable Ebola virus disease cases: Beni, Butembo, Mabalako, Masereka, Mutwanga, Musienene, Oicha, Kalunguta, Katwa, Kyondo and Vuhovi health zones in North Kivu Province and Komanda, Mandima and Tchomia Health Zones in Ituri Province.

During the past week, a review and reconciliation of case records was conducted. This review resulted in the addition of 16 probable cases, invalidation of 11 past deaths previously reported as probable cases and exclusion of duplicate confirmed cases. In addition, certain confirmed and probable cases were recategorised to health zones where their infection most likely occurred as opposed to the location of the Ebola virus disease treatment centre where they were admitted and 16 confirmed case deaths (deaths and listing errors) were cleaned.

Response activities: According to the WHO Regional Office for Africa Situation Report number 93, as of 19 November 2018, 4 668 contacts have been identified in Alimbongo (57), Beni (2 319), Butembo (161), Kalunguta (859), Katwa (530), Kyondo (201), Mabalako (163), Masereka (80), Musienene (71), Mutwanga (131) and Vuhovi (96). A total of 94% of these contacts were followed up.

According to the latest Ministry of Health update, as of 21 November 2018, 33 498 people have been vaccinated in Beni (16 527), Mabalako (4 544), Katwa (3 924), Mandima (1 663), Butembo (1 990), Kalunguta (1 751), Masereka (732), Bunia (434), Tchomia (355), Vuhovi (359), Mutwanga (292), Komanda (240), Musienene (234), Oicha (178), Kyondo (241) and Alimbongo (34).

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

ECDC assessment

ECDC assessment: The compassionate use of the Ebola virus disease vaccine and experimental treatments support response efforts. However, the implementation of response measures in outbreak areas remains challenging because of the prolonged humanitarian crisis, unstable security situation arising from a complex armed conflict and mistrust in the population to response teams. The number of outbreak cases and affected areas are increasing and it is unlikely that the outbreak will be controlled in the near future.

While no confirmed cases in neighbouring countries have been documented so far, the fact that the outbreak is ongoing in areas with an important cross-border population flow with Rwanda and Uganda remains of particular concern.

The probability that EU/EEA citizens who live or travel in Ebola virus disease-affected areas of the Democratic Republic of the Congo are exposed to the disease is low provided they adhere to the precautionary measures. The overall risk of introduction and further spread of Ebola virus within the EU/EEA is very low. However, the risk can only be eliminated by stopping transmission at a local level.

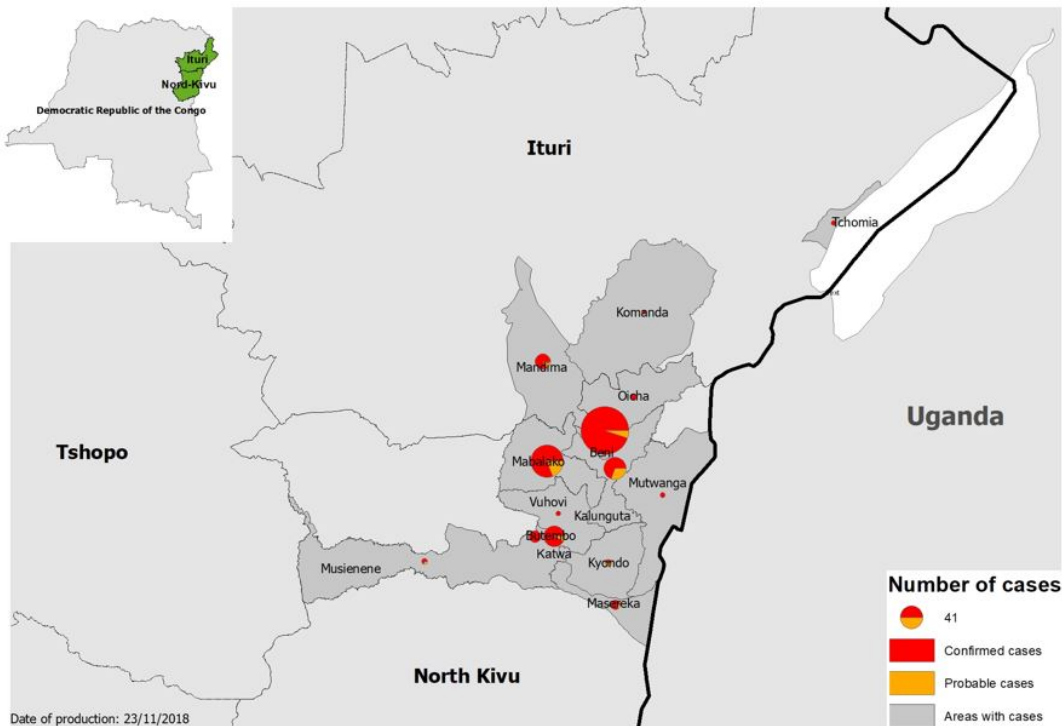
WHO assessment: As of 21 November 2018, the [WHO assessment](#) stated that the risk of spread is low at the global level, but remains very high at national and regional levels.

Actions

ECDC published an updated [rapid risk assessment](#) on 5 October 2018 and an [epidemiological update](#) on 12 November 2018.

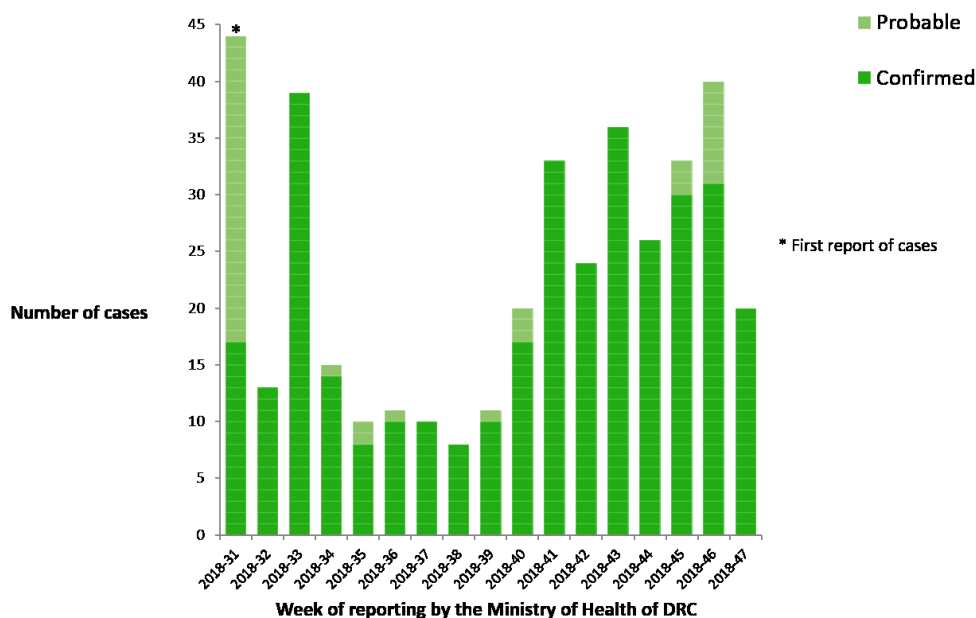
Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 21 November 2018

ECDC



Distribution of confirmed and probable cases of Ebola Virus Disease, North Kivu and Ituri, Democratic Republic of the Congo, as of 21 November 2018

ECDC



*The MoH of DRC are currently conducting data cleaning. Thus, these figures are likely to change over coming days as cases are being reclassified.

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

Opening date: 27 January 2017

Latest update: 23 November 2018

Epidemiological summary

Europe

Chikungunya:

No autochthonous chikungunya cases were detected in continental EU/EEA countries.

Dengue:

Since October 2018, [Spain](#) has reported six autochthonous cases of dengue from three different regions (Cádiz, Murcia and Barcelona).

Since October 2018, [France](#) has reported seven autochthonous cases in Alpes-Maritimes (5) and Hérault (2).

Americas and the Caribbean

9/13

Chikungunya:

Bolivia: In 2018, as of 17 October, Bolivia has reported 80 confirmed chikungunya cases. This represents an increase of two cases since the previous RT update on 19 October 2018. For the same period in 2017, Bolivia reported 22 cases.

Brazil: In 2018, as of 28 October, Brazil has reported 60 913 confirmed cases. This represents an increase of 8 300 confirmed cases since the previous RT update on 19 October 2018. Among the confirmed cases, the Brazilian Ministry of Health has reported 34 deaths due to chikungunya. For the same period in 2017, 189 deaths were confirmed due to chikungunya.

Colombia: In 2018, as of 10 November, Colombia has reported 598 chikungunya cases. A total of 150 are laboratory-confirmed and 12 remain suspected cases. This represents an increase of 89 cases since the previous round table report on 19 October 2018.

Costa Rica: In 2018, as of 19 October, Costa Rica has reported 109 suspected chikungunya cases. This represents an increase of one suspected case since the previous round table update on 19 October 2018.

Cuba: According to media quoting health authorities as of 11 October 2018, cases of chikungunya have been reported in Havana. Additional cases have been also reported in Holguín, Camagüey, Sancti Spiritus and Villa Clara provinces.

El Salvador: In 2018, as of 10 November, El Salvador has reported 354 suspected cases. This represents an increase of 51 suspected cases since the previous round table update on 19 October 2018. For the same period in 2017, El Salvador reported 536 suspected cases.

Mexico: In 2018, as of 11 November, Mexico has reported 37 confirmed chikungunya cases, 17 more since the previous update. For the same period in 2017, Mexico reported 39 confirmed cases.

Nicaragua: In 2018, as of 11 November, Nicaragua has reported 296 cases (270 suspected and 26 confirmed). This represents an increase of 86 suspected cases since the previous round table update on 19 October 2018. For the same period in 2017, Nicaragua reported 25 confirmed cases.

Paraguay: In 2018, as of 27 October, Paraguay has reported 1 164 probable chikungunya cases. Additionally, Paraguay is reporting 67 cases as confirmed cases in the regions of Central, Amambay, Guairá and Paraguari. This represents an increase of two probable cases since the previous round table update on 19 October 2018.

Dengue:

In 2018 and as of 3 November 2018, the Pan American Health Organization has reported 446 000 suspected and confirmed dengue cases in the Americas region. Brazil accounted for half of the cases (218 000), followed by Mexico (62 000), Nicaragua (46 000), Colombia (32 000) and Paraguay (30 000). Since July, Mexico has recorded a fourfold increase. Brazil is following the same trend as last year.

According to French health authorities, five confirmed dengue cases have been reported in **Guadeloupe** as of 18 November 2018. The last confirmed case detected on the island was in April 2016. Additionally, one case of dengue has been confirmed in Saint Martin. DENV-1 has been identified.

The figures for each country of the Americas region can be found on the [WHO health information platform](#).

Asia**Chikungunya:**

No updates are available for this region.

Dengue:

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

Thailand: In 2018 and as of 19 November, Thailand has reported 47 915 cases. This represents a 50% increase compared with the same period last year.

Bangladesh: As of 18 November 2018, Bangladesh has reported 9 435 cases nationwide, which represents a nine-fold increase compared to last year's figures.

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

Malaysia has reported 67 042 cases of dengue as of 20 November 2018, compared with 78 000 for the same time period in

2017.

Sri Lanka: According to the MoH and as of 19 November 2018, Sri Lanka has reported 43 149 cases of dengue, compared with 171 000 cases for the same time period in 2017.

Singapore: According to national authorities and as of 20 November, Singapore has reported 2568 cases. The numbers of cases are consistent with the burden reported in 2017 for the same time period.

There are no updates available for Cambodia, Laos, Vietnam, China, India or the Philippines.

Africa

Chikungunya:

Sudan: On November 2018, media sources quoting health authorities report 15 944 chikungunya cases in Kassala state, bordering Eritrea. According to the same sources, chikungunya cases have been also reported in Port Sudan. This represents an increase of 1 966 cases since the WHO DON released on 15 October, when an outbreak of chikungunya and dengue was reported in the area.

Dengue:

Senegal: According to WHO and as of 3 November 2018, Senegal has reported 2 123 suspected cases, of which 216 are confirmed. Six regions are currently affected. The serotyping has identified three circulating serotypes: DENV-1, DENV-2 and DENV-3.

Mauritania: Between 15 September and 26 October 2018, Mauritania has reported 65 confirmed cases of dengue fever across six regions of the country. The serotype is DENV-2.

Angola: Media, quoting health authorities is reporting 1339 cases of dengue in Angola as of 22 October. The cases are mainly affecting the capital city Luanda.

Réunion: Since the beginning of 2018 and as of 11 November 2018, there have been 6 670 cases of dengue in Réunion. Cases have significantly decreased over the past weeks, however, the circulation of the virus has not been interrupted.

Australia and the Pacific

Chikungunya: No outbreaks are reported since the previous monthly update.

Dengue:

There are no updates for Australia and New Caledonia.

According to the Pacific Public Health Surveillance Network and [local health authorities](#), there are DENV-1 outbreaks or active circulation in **Wallis and Futuna** (198 autochthonous cases), Tahiti, Bora Bora, Moorea, and Rangiroa. DENV-2 is circulating in Kiribati and Tonga.

ECDC assessment

Chikungunya and dengue are endemic in large regions of the intertropical convergence zone. Isolated cases or small clusters of autochthonous dengue in the south of Europe are not unexpected as *Aedes albopictus* is present in the area. The risk of further transmission is considered to be low as the weather conditions are becoming unfavourable to mosquito activity.

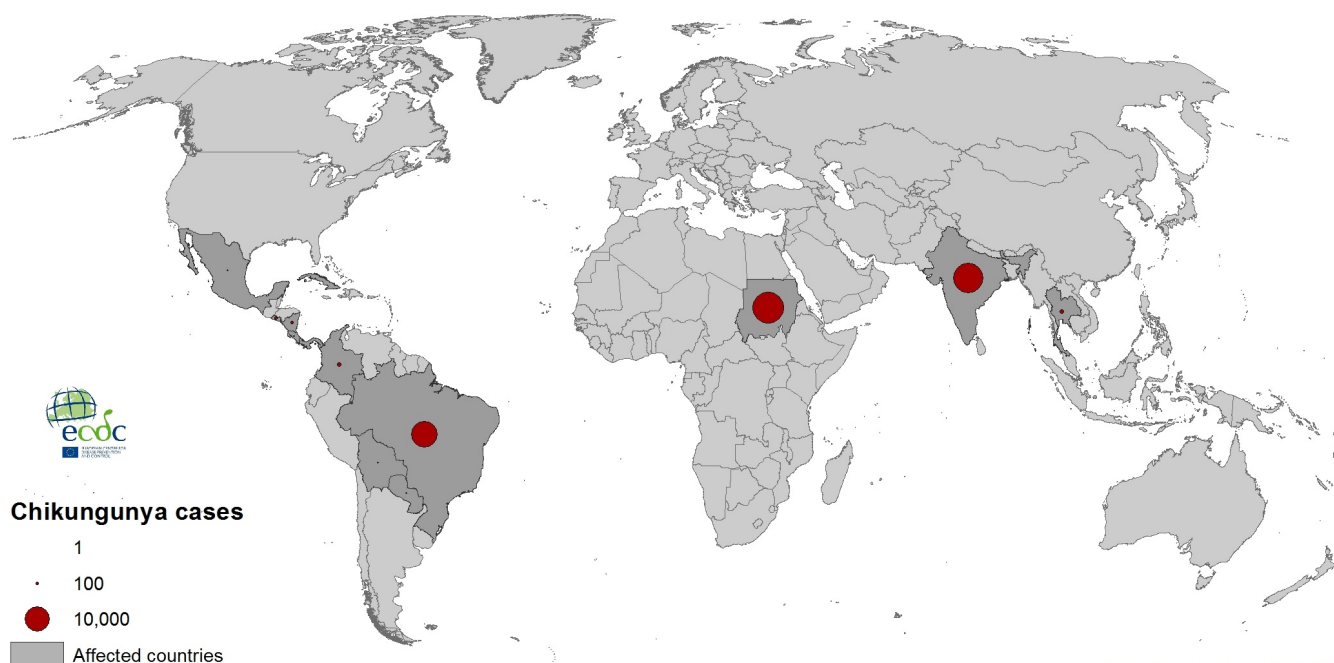
ECDC has produced a [rapid risk assessment](#) on 'Local transmission of dengue fever in France and Spain - 2018' published on 22 October 2018 and a [rapid risk assessment](#) on the dengue outbreak on Réunion on 6 July 2018.

Actions

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

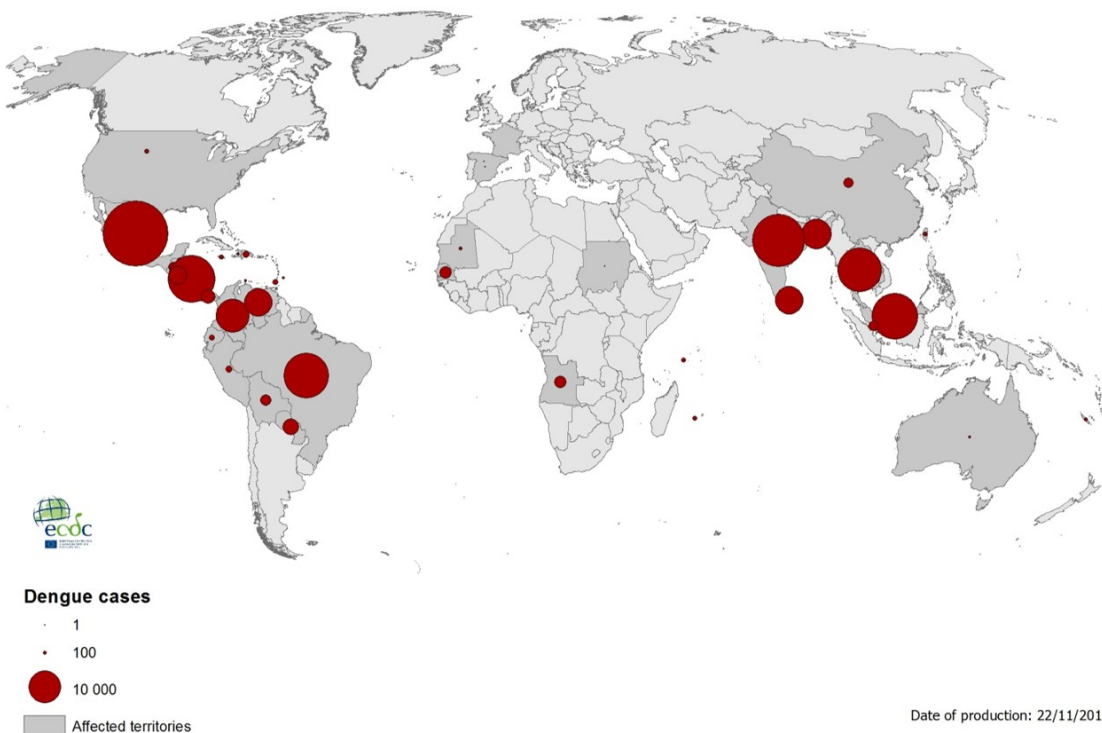
Geographical distribution of chikungunya cases – World – September to November 2018

ECDC



Geographical distribution of dengue cases – World – September to November 2018

ECDC



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