

This weekly bulletin provides updates on threats monitored by ECDC.

## NEWS

### European Immunization Week, 2019

This year, the European Immunization Week (EIW) is marked across the WHO European Region on 24–30 April 2019. It aims to raise awareness of the importance of immunisation for people's health and well-being. ECDC supports the European Immunization Week campaign led by the WHO Regional Office for Europe by providing scientific evidence on immunisation.

The WHO Regional Office for Europe and ECDC have issued a joint statement that urges addressing immunisation gaps in light of the ongoing measles outbreaks across Europe and the world. The statement highlights the importance of eliminating measles and rubella, as well as protecting children and adults from other vaccine-preventable diseases. This requires collective action and accountability to ensure high immunisation coverage for all.

For more information about EIW, visit the dedicated EIW page on the [ECDC website](#), join the conversation on social media by using the hashtags #VaccineHeroes, #ImmunizeEurope and #VaccinesWork and follow @ECDC\_VPD on Twitter for updates.

## I. Executive summary

### EU Threats

#### Dengue – France, Réunion – 2019

Opening date: 13 March 2018

Latest update: 26 April 2019

Since the beginning of 2018, an outbreak of unusual magnitude has affected the French Outermost Region of Réunion. In 2018, Réunion reported a total of 6 770 cases. Circulation has not been interrupted during the austral winter and the number of cases has started increasing again since the beginning of 2019.

→Update of the week

During the past week, [Réunion](#) has detected more than 1 200 cases of dengue.

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

Opening date: 8 October 2018

Latest update: 26 April 2019

Influenza transmission in Europe shows a seasonal pattern, with peak activity during the winter months.

→Update of the week

### Week 16, 2019 (15–22 April 2019):

Among 41 countries reporting on geographic spread, only 4 reported widespread activity. Specimens collected from individuals presenting with influenza-like illness or acute respiratory infection to sentinel primary healthcare sites yielded an influenza virus positivity rate of 17%. This represents a decrease for the sixth week in a row.

All countries reporting on influenza-like illness or acute respiratory infection thresholds reported activity below baseline levels.

Influenza type A virus detections dominated, with more A(H3N2) than A(H1N1)pdm09 viruses among sentinel and non-sentinel source specimens. Few influenza B viruses were detected.

Among all the specimens from patients with severe acute respiratory infection (SARI) collected in week 16 of 2019 that were tested for influenza viruses, 6% were positive and almost all were type A.

Pooled data from 23 Member States and areas reporting to the [EuroMOMO](#) project indicated that all-cause excess mortality observed remained at levels expected for this time of year.

## Rift Valley fever (RVF) – France (Mayotte) – 2019

Opening date: 31 January 2019

Latest update: 26 April 2019

Since November 2018, cases in human and animals have been reported across Mayotte. These are the first human cases reported in several years.

→Update of the week

According to [Agence de Santé Océan Indien](#), as of 18 April 2019, 122 human cases of Rift Valley fever confirmed by PCR and 104 Rift Valley fever epizootic foci have been reported on Mayotte, an increase of 21 human cases and 44 epizootic foci since the previous CDTR update on 22 March 2019.

No severe form of the disease (according to WHO definitions) was found among the 65 cases for which information on severity is available. However, as of 11 April 2019, 11 cases were hospitalised, including one pregnant woman and three cases with meningitis.

Among 101 investigated cases, 74 reported contact with animals, 7 cases reported consumption of raw or curdled milk and 20 cases had no reported risk factors.

Data on the commune of residence is available for 102 of the 122 confirmed cases. The vast majority of the cases are concentrated in the Centre-West (58%) and North (27%) areas of Mayotte, as previously reported.

## Non EU Threats

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

Opening date: 1 August 2018

Latest update: 26 April 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 and Ituri Provinces in the northeast of the country close to the border with Uganda. On 12 April 2019, the [International Health Regulations 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 167 additional cases, including 126 deaths. All cases reported during this period are confirmed. Among the new reported cases in the past week, three are healthcare workers. Additionally, during this period, severe security incidents took place. On 19 April 2019, an attack to a hospital in Katwa led to the death of a WHO epidemiologist. As a consequence, response activities in the health zones coordinated from Butembo were disrupted.

## Risk of communicable diseases related to cyclone Idai - Southern Africa - 2019

Opening date: 1 April 2019

Latest update: 26 April 2019

From the beginning of March to mid-March 2019, Cyclone Idai hit Malawi, Mozambique and Zimbabwe. Cyclone Idai resulted in several hundred casualties, hundreds of thousands of displaced people and an upsurge of infectious diseases outbreak such as cholera.

→Update of the week

Since the previous CDTR and as of 20 April 2019, [Mozambique](#) has reported more than 1 500 new cholera cases. In addition, following Cyclone Idai and as of 20 April 2019, Mozambique has reported more than 14 000 malaria cases.

In [Zimbabwe](#) and as of 17 April 2019, there is a high burden of acute respiratory tract infections in Chimanimani District and an 60 000 estimated people have been displaced.

## Influenza A(H7N9) – China – Monitoring human cases

Opening date: 31 March 2013

Latest update: 26 April 2019

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, additional cases from China have been reported. No autochthonous cases have been reported outside China. Most cases are isolated and sporadic zoonotic transmission from poultry to humans is the most likely explanation for the outbreak.

→Update of the week

In April 2019, one human case of avian influenza A(H7N9) was reported in an 82-year-old male who developed illness on 18 March 2019 and was hospitalized on 31 March 2019 with severe pneumonia. The case was reported from Gansu Province, but potential exposure occurred in the Inner Mongolia Autonomous Region of China. No further human cases were reported among his close contacts. Investigation is ongoing.

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

Opening date: 27 January 2017

Latest update: 26 April 2019

Chikungunya virus disease and dengue are vector-borne diseases that affect 50–100 million people each year. In the past decade, an increasing number of countries have detected cases of dengue and chikungunya virus disease. Chikungunya virus disease has been circulating in Asia and Africa and reached the Americas, the Caribbean and the Pacific since 2013–2014. Dengue is present in Africa, the Americas, Asia, the Caribbean and the Pacific. In 2018, France and Spain reported autochthonous dengue cases. No cases of either disease have been reported in continental Europe so far in 2019.

→Update of the week

**Chikungunya virus disease:** The virus is largely spread in the Americas region, with several countries reporting cases in 2019. Chikungunya virus disease cases have also been reported in Africa and Asia during this period. Since the previous CDTR update on 22 March 2019, Brazil, the Republic of the Congo and Thailand have reported the majority of the new cases. No outbreaks have been identified in the Australia and Pacific region and Europe since the previous report.

**Dengue:** Brazil and Réunion have observed a sharp increase in the past months. Côte d'Ivoire, Mauritius, the Maldives and Timor-Leste have reported new outbreaks this month.

## II. Detailed reports

### Dengue – France, Réunion – 2019

Opening date: 13 March 2018

Latest update: 26 April 2019

#### Epidemiological summary

According to [regional authorities](#) and as of 24 April 2019, Réunion has detected more than 7 200 cases of dengue cases since the beginning of the year. Of these, 251 have been hospitalised and three died. Réunion reported 1 762 cases for the same period in 2018. The cases are widespread on the island.

According to [Santé publique France](#), the main circulating serotype is DENV-2, however, 14 autochthonous cases were serotyped DENV-1.

#### ECDC assessment

A sharp increase of dengue cases has been observed in Réunion since the beginning of 2019 and will likely continue in the coming weeks. The co-circulation of DENV-1 together with DENV-2 may increase the intensity of the outbreak since the population is not immune to the DENV-1 serotype. This may also increase the number of haemorrhagic fever cases.

The risk for onward transmission of dengue fever in Europe is linked to importation of the virus by viraemic travellers into receptive areas with established and active competent vectors (i.e. *Aedes albopictus* in mainland Europe, mainly around the Mediterranean Sea, and *Aedes aegypti* on the island of Madeira).

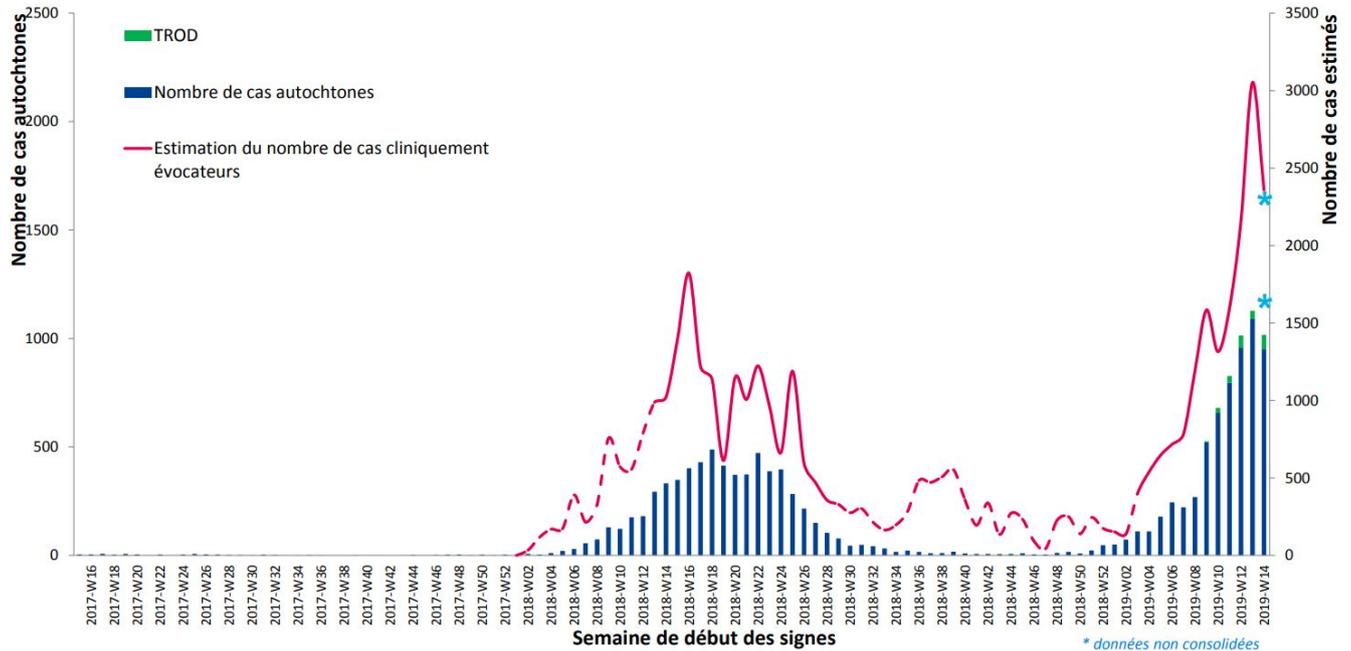
Environmental conditions for the growth of mosquito populations are currently improving in Europe, but they are still unfavourable for virus multiplication in the vector. The likelihood of sustained autochthonous dengue virus transmission in continental Europe associated with introduction by a returning traveller therefore remains low.

#### Actions

ECDC monitors this outbreak through epidemic intelligence on a weekly basis. ECDC published a rapid risk assessment, '[Dengue outbreak in Réunion, France – First update](#)', on 5 July 2018.

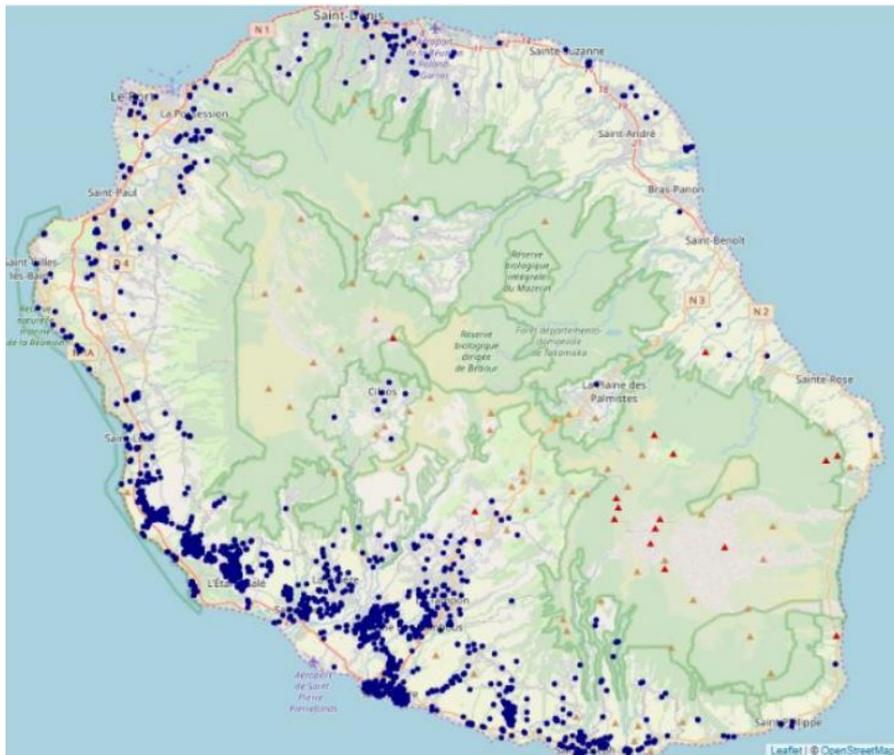
### Distribution of dengue cases by week of onset, Réunion, week 16-2017 to week 14-2019

Source: Santé publique France, Cire Océan Indien



### Geographical distribution of dengue cases in Réunion, week 13 & 14 2019

Source: Santé publique France, Cire Océan Indien



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

Opening date: 8 October 2018

Latest update: 26 April 2019

## Epidemiological summary

### 2018–2019 season overview:

Influenza activity in the European Region based on sentinel sampling exceeded a positivity rate of 10% in week 49 of 2018, 50% between weeks 3–7 of 2019 and peaked in week 5 of 2019.

Both influenza A virus subtypes have circulated, with co-circulation in certain countries, while others reported dominance of either the A(H1N1)pdm09 or A(H3N2) viruses.

Among hospitalised influenza virus-infected patients admitted to ICU wards, 99% were infected with type A viruses. Among those that were subtyped, 67% were A(H1N1)pdm09 viruses. Among influenza virus-infected patients admitted to other wards, 99% were infected with type A virus. Among those that were subtyped, 56% were A(H1N1)pdm09 virus.

Of the patient specimens from SARI surveillance that tested positive for influenza, 99% were infected with influenza type A virus, with 79% of those subtyped being A(H1N1)pdm09.

A recent summary of regional activity from October 2018–February 2019 was published in [Eurosurveillance](#).

Current influenza vaccines tend to work better against influenza A(H1N1)pdm09 and influenza B viruses than influenza A(H3N2) viruses.

WHO has published [recommendations](#) for the composition of influenza vaccines to be used in the 2019–2020 northern hemisphere season. The recommendation was that type B lineage viruses remain unchanged, while the A(H1N1)pdm09 and A(H3N2) viruses were updated.

Circulating viruses in the European Region remain susceptible to neuraminidase inhibitors supporting the use of antiviral treatment according to national guidelines.

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

### ECDC assessment

Influenza activity has decreased across countries. Influenza A(H3N2) and A(H1N1)pdm09 continue to co-circulate in Europe, but on a lower level. Influenza vaccine coverage among the elderly, chronic disease risk groups and healthcare workers was suboptimal in most EU Member States, according to the [VENICE report](#). Vaccine effectiveness was moderate and all-cause excess mortality has returned to normal levels for the time of the season.

### 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 and 2019–2020 influenza virus vaccines are available from the [WHO website](#).

## Rift Valley fever (RVF) – France (Mayotte) – 2019

Opening date: 31 January 2019

Latest update: 26 April 2019

### Epidemiological summary

According to the French authorities, from 22 November 2018–18 April 2019, 122 human cases and no deaths were reported in Mayotte. The majority of the cases were male, with a male-to-female ratio of 3:1 and age range of 4–75 years. All cases were locally acquired.

Further investigations identified 104 epizootic foci of Rift Valley fever, comprising one to six animals, including bovines (82) and small ruminants (22).

Most of the cases are concentrated in the Centre-West and North areas of Mayotte.

According to the French Agricultural Research Centre for International Development, seroprevalence among ruminants decreased from 2008–2017, but increased significantly in 2017 and 2018 (3.6%, IC95%: 2.3%–5.6%) and 2018–2019 (10.1%, IC95%: 6.5%–15.3%).

**Sources:** [Agence de Santé Océan Indien](#) | [Santé publique France](#) | [Emerging Infectious Diseases](#) | [Emerging Infectious Diseases](#) | [Université de la Réunion](#) | [OIE](#) | [WAHIS](#)

## ECDC assessment

Travellers to and residents of Mayotte are at low risk of infection if they apply appropriate preventive measures. However, those who are in contact with potentially infected animals (e.g. veterinarians and those involved in livestock farming, butchering and slaughtering of animals in affected areas) have an increased risk of infection and should therefore handle potentially infected animals in a secure manner by practising safe animal husbandry and slaughtering. In affected areas, consumption of raw milk and eating animal products that have not been thoroughly cooked should be avoided. In addition, as a precautionary measure, [personal protective measures against mosquito bites](#) should be applied. Transmission of the virus through blood contact or infected materials in healthcare settings can be prevented by applying the measures defined in WHO's '[Standard precautions in health care](#)' aide-memoire.

The occurrence of travel-related cases returning to the continental EU/EEA is not new as Rift Valley fever is endemic in many African countries. Importation of human cases from Mayotte cannot be excluded, particularly to connected EU Outermost Regions in the Indian Ocean (Réunion) and the continental EU/EEA.

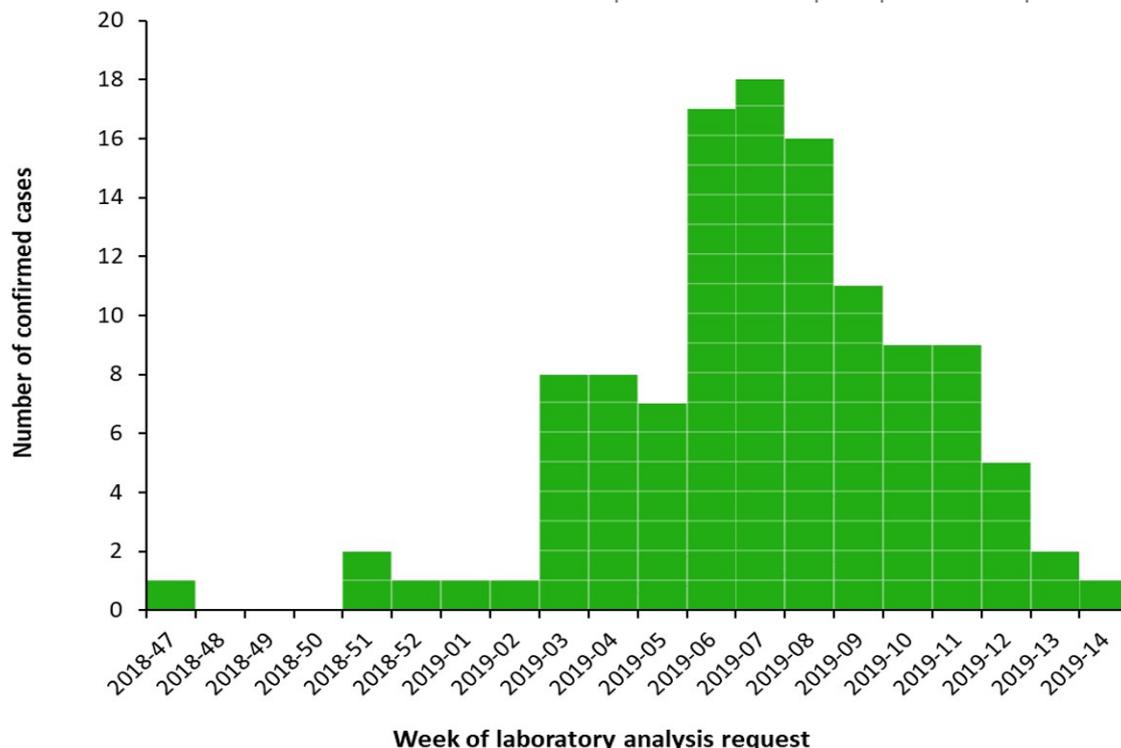
Overall, the current outbreak in Mayotte poses a very low risk for EU/EEA countries in terms of introduction through the animal trade as export of live animals and their meat and milk from Mayotte have been prohibited.

## Actions

ECDC published a [rapid risk assessment on Rift Valley fever in Mayotte \(France\)](#) on 7 March 2019. ECDC will continue monitoring this event through epidemic intelligence activities and report again if there is a relevant epidemiological update.

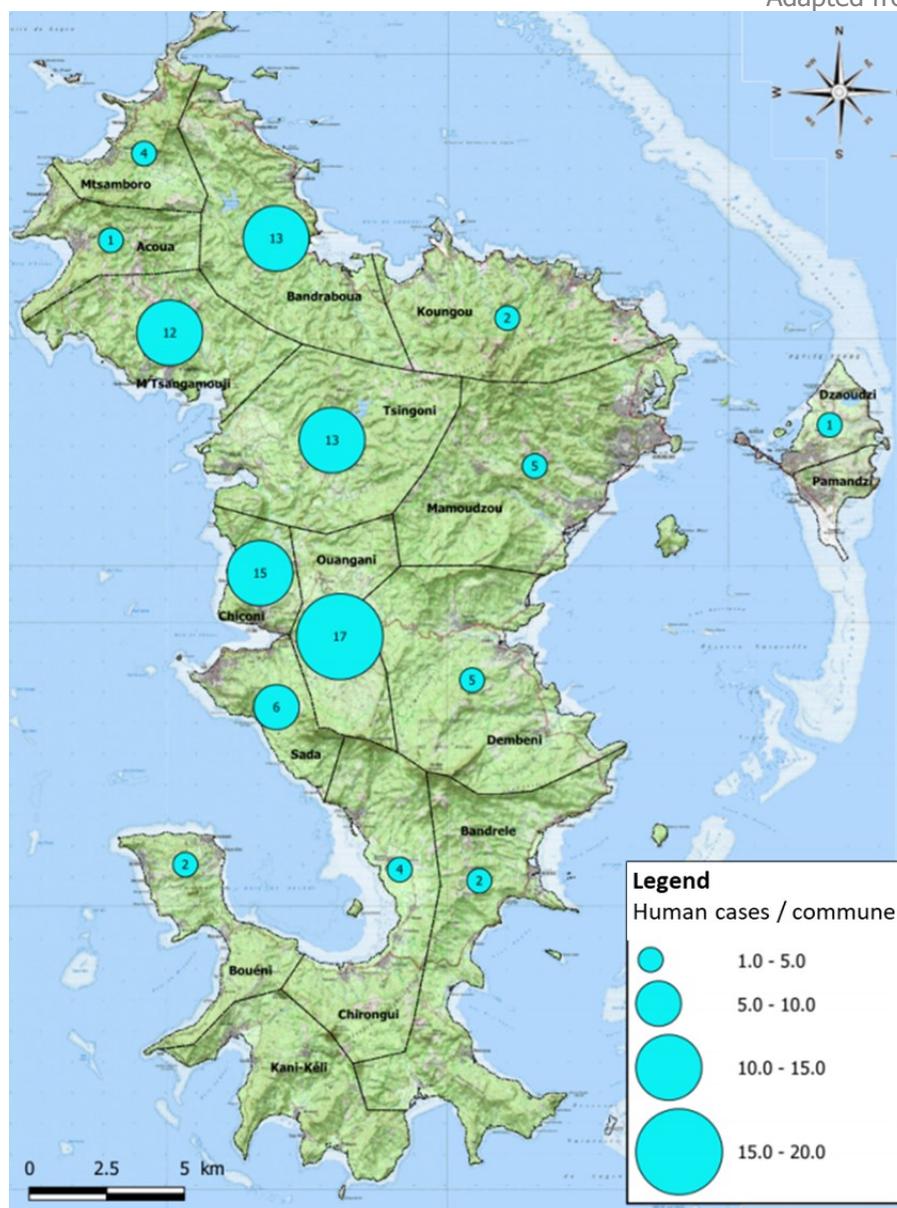
## Distribution of RVF confirmed human cases, Mayotte, 22 November 2018 to 18 April 2019

Adapted from Santé publique France epidemiological report num. 22



## Geographic distribution of human cases (n = 102 with known location) , from 22 November 2018 to 18 April 2019.

Adapted from Agence de Santé Océan Indien



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

Opening date: 1 August 2018

Latest update: 26 April 2019

### Epidemiological summary

Since the beginning of the outbreak and as of 24 April 2019, there have been 1 373 Ebola virus disease cases (1 307 confirmed, 66 probable), including 890 deaths (824 confirmed, 66 probable), according to the Ministry of Health of the Democratic Republic of the Congo.

As of 23 April 2019, 90 healthcare workers have been infected, 33 of whom have died.

Twenty-one health zones in two provinces have been reported confirmed or probable Ebola virus disease cases: Beni, Biena, Butembo, Kalunguta, Katwa, Kayna, Kyondo, Lubero, Mabalako, Manguredjipa, Masereka, Mutwanga, Musienene, Oicha and Vuhovi health zones in North Kivu Province and Bunia, Nyankunde, Komanda, Mandima, Rwampara and Tchomia health zones in

Ituri Province.

**Source:** [Ministry of Health of the Democratic Republic of the Congo](#) | [WHO Disease outbreak news](#) | [WHO Africa weekly bulletin](#)

## ECDC assessment

**ECDC assessment:** Response measures remain challenging in affected areas because of the prolonged humanitarian crisis, unstable security situation and resistance among the population. The fact that the outbreak is ongoing in areas with cross-border population flow with Rwanda, South Sudan and Uganda remains of particular concern.

A substantial proportion of cases continue to be among individuals not previously identified as contacts, highlighting the need to maintain enhanced surveillance in order to identify chains of transmission.

The overall risk of introduction and further spread of Ebola virus disease within the EU/EEA is very low. However, the risk can only be eliminated by stopping transmission at the local level.

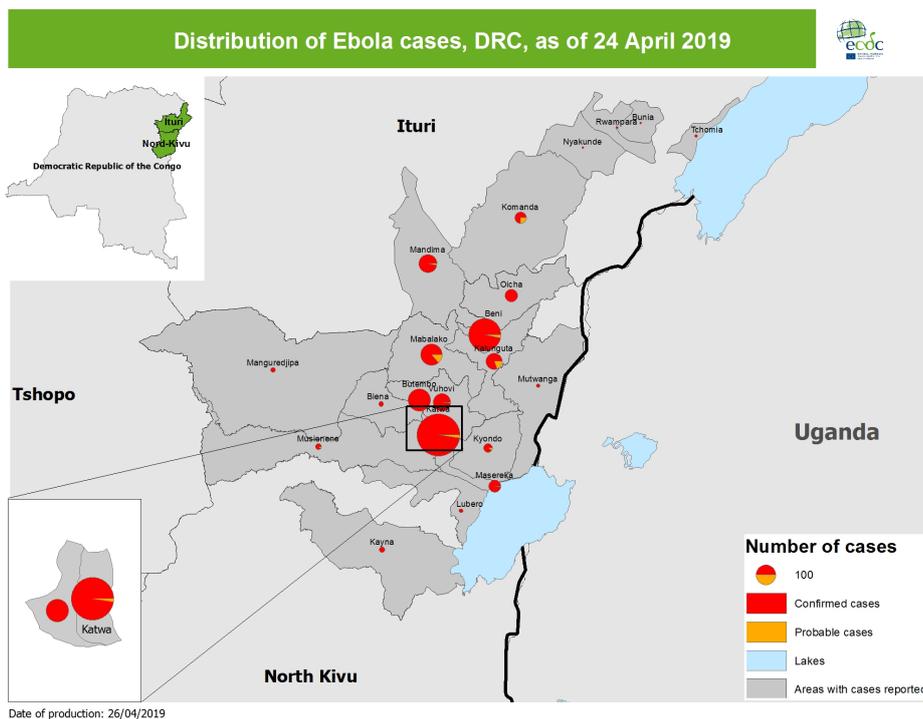
**WHO assessment:** As of 25 April 2019, the [WHO assessment](#) is that the risk of spread is low at the global level, but remains very high at national and regional levels.

## Actions

ECDC published an [epidemiological update](#) on 3 April 2019 and the fourth update of a [rapid risk assessment](#) on 16 April 2019.

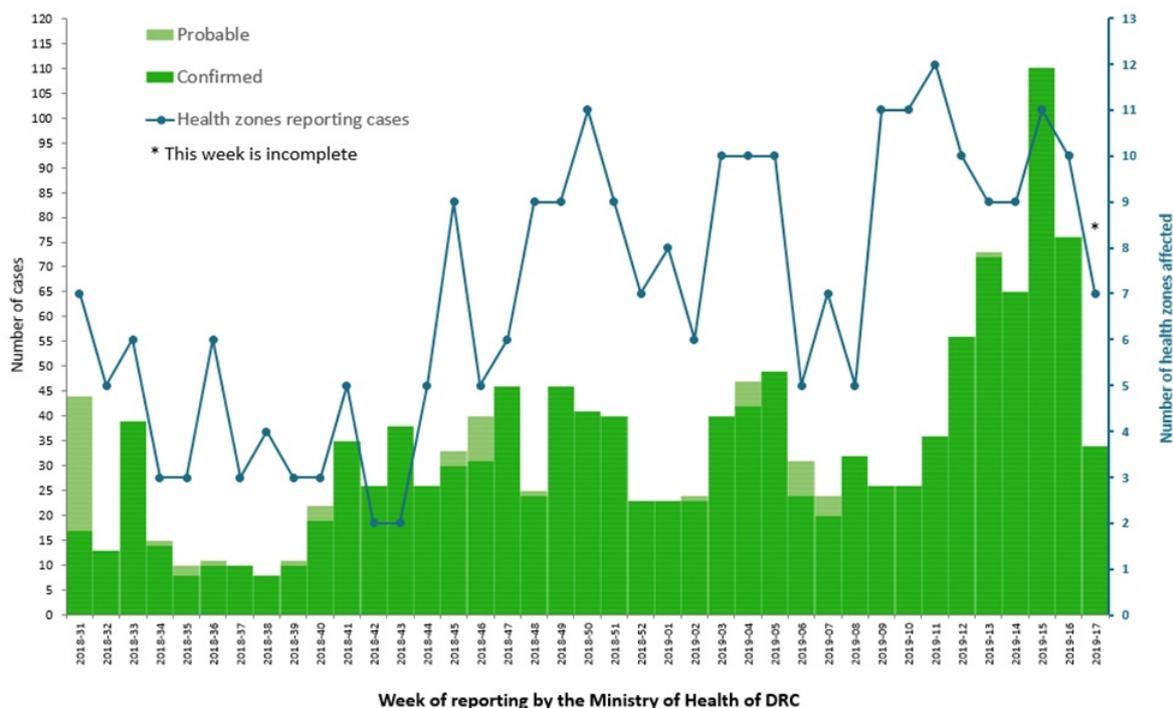
## Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 24 April 2019

ECDC



## Distribution of confirmed and probable cases of Ebola Virus Disease and health zones reporting cases, North Kivu and Ituri, Democratic Republic of the Congo, as of 24 April 2019

ECDC



## Risk of communicable diseases related to cyclone Idai - Southern Africa - 2019

Opening date: 1 April 2019

Latest update: 26 April 2019

### Epidemiological summary

From the beginning of March to mid-March 2019, Cyclone Idai hit Malawi, Mozambique and Zimbabwe. Cyclone Idai resulted in several hundred fatalities, hundreds of thousands of displaced people and an upsurge of infectious diseases outbreak such as cholera.

**Malawi:** As of 14 April 2019, according to the [United Nations Office for the Coordination of Humanitarian Affairs \(OCHA\)](#), 59 fatalities and 878 affected people have been reported after Cyclone Idai.

**Mozambique:** Following Cyclone Idai and as of 20 April 2019, [OCHA](#) reported 6 506 cholera cases, including 8 deaths in Beira, Dondo and Nhamatanda. During the same period, 14 159 malaria cases have been reported in Beira, Buzi, Dondo and

10/17

Nhamatanda. A cholera vaccination campaign was launched from 3–9 April 2019. According to [media reports](#), 803 125 people have received the vaccine, representing 98.6% of the target. According to [OCHA](#), the distribution of mosquito nets is ongoing, including in hospitals, accommodations sites and homes, and spraying of the city of Beira, urban areas of Dondo, Nhamatanda and Buzi will start on 25 April 2019. In addition, as of 20 April 2019, [OCHA](#) reported 603 fatalities and 77 000 displaced people.

**Zimbabwe:** Following Cyclone Idai and as of 9 April 2019, 299 fatalities have been reported, according to [ACAPS](#). As of 17 April 2019, 60 000 estimated people have been displaced, according to [OCHA](#).

Governmental and international partners have implemented an emergency response that involves ministries of health, WHO, OCHA, the World Food Programme, UNICEF, the International Organization for Migration and several NGOs. Assistance provided through the EU Civil Protection Mechanism, including mobile field hospitals and water purification equipment, are currently operational in Beira and surrounding areas. However, according to WHO, the humanitarian situation remains of concern especially because of poor access to affected areas, disruption of the water supply and poor sanitation and displacement of the population.

**Sources:** [ACAPS](#) | [WHO Regional Office for Africa](#) | [OCHA](#) | [ReliefWeb](#) | [ECHO](#)

## ECDC assessment

Heavy rains, flooding and the resulting destruction and disruption of services increase the risk of waterborne infections such as cholera, airborne infections and vector-borne infections such as malaria and vaccine-preventable diseases in affected populations.

The risk of cholera infection in travellers visiting Mozambique remains low even though the likelihood of sporadic importation of cases may increase in the EU/EEA. According to [WHO](#), cholera vaccination should be considered for travellers at higher risk such as emergency and relief workers. Travellers to cholera affected areas should seek advice from travel health clinics in this regard.

Travellers to and citizens living in cholera-affected areas should 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.

The risk of malaria is considered low for travellers to and citizens living in affected areas if recommendations on the use of malaria chemoprophylaxis and mosquito-bite prevention practices are being followed.

## Actions

ECDC monitors this event through epidemic intelligence and reports on a weekly basis. The rapid risk assessment '[Cyclone Idai: risk of communicable diseases in the affected countries](#)' was published on 10 April 2019.

## Influenza A(H7N9) – China – Monitoring human cases

Opening date: 31 March 2013

Latest update: 26 April 2019

### Epidemiological summary

In March 2013, a novel avian influenza A(H7N9) virus was detected in humans in China. Since then and up to 20 April 2018, 1 568 cases have been reported, including 567 deaths. The outbreak shows a seasonal pattern. The first wave in spring 2013 (weeks 2013-7 to 2013-40) resulted in 135 cases, the second wave (weeks 2013-41 to 2014-40) led to 320 cases, the third wave (weeks 2014-41 to 2015-40) caused 223 cases, the fourth wave (week 41 of 2015 to week 40 of 2016) caused 120 cases, the fifth wave (week 41 of 2016 to week 40 of 2017) resulted in 766 cases, the sixth wave (week 41 of 2017 to week 40 of 2018) resulted in three cases and the seventh wave that started in week 41 of 2018 resulted in one case.

The 1 568 cases were reported from Zhejiang (310), Guangdong (259), Jiangsu (253), Fujian (108), Anhui (101), Hunan (95), Shanghai (56), Jiangxi (50), Sichuan (38), Beijing (35), Guangxi (32), Hubei (31), Hebei (29), Henan (28), Shandong (27), Hong Kong (21), Guizhou (20), Xinjiang (14), Chongqing (9), Yunnan (8), Gansu (6), Shaanxi (7), Taiwan (5), Tianjin (5), Liaoning (5), Jilin (3), Tibet (3), Shanxi (3), Inner Mongolia (2), and Macau (2). Three imported cases were reported in Canada (2) and Malaysia (1).

**ECDC links:** [Avian influenza](#) | [ECDC rapid risk assessment: Influenza A\(H7N9\) virus in China – Implications for public health – Seventh update, 3 July 2017](#) | [ECDC/EFSA joint report: Avian influenza overview October 2016–August 2017](#)

**Sources:** [Chinese Center for Disease Control and Prevention](#) | [Hong Kong Centre for Health Protection](#) | [WHO](#) | [WHO FAQ page](#) | [ECDC](#)

## ECDC assessment

Based on the seasonal pattern of avian influenza A(H7N9) viruses, more human cases are expected, as influenza activity increases during the winter months. During previous seasons, the number of human cases peaked in January. During the entire month of January 2018, one case was identified, but in the past two years, three cases were reported in January 2018, February 2018 and March 2019. A change in disease pattern is expected due to the ongoing poultry vaccination program in China.

The possibility of humans infected with influenza A(H7N9) returning to the EU/EEA cannot be excluded. However, the risk of the disease spreading in Europe through humans is still considered low, as there is no evidence of sustained human-to-human transmission.

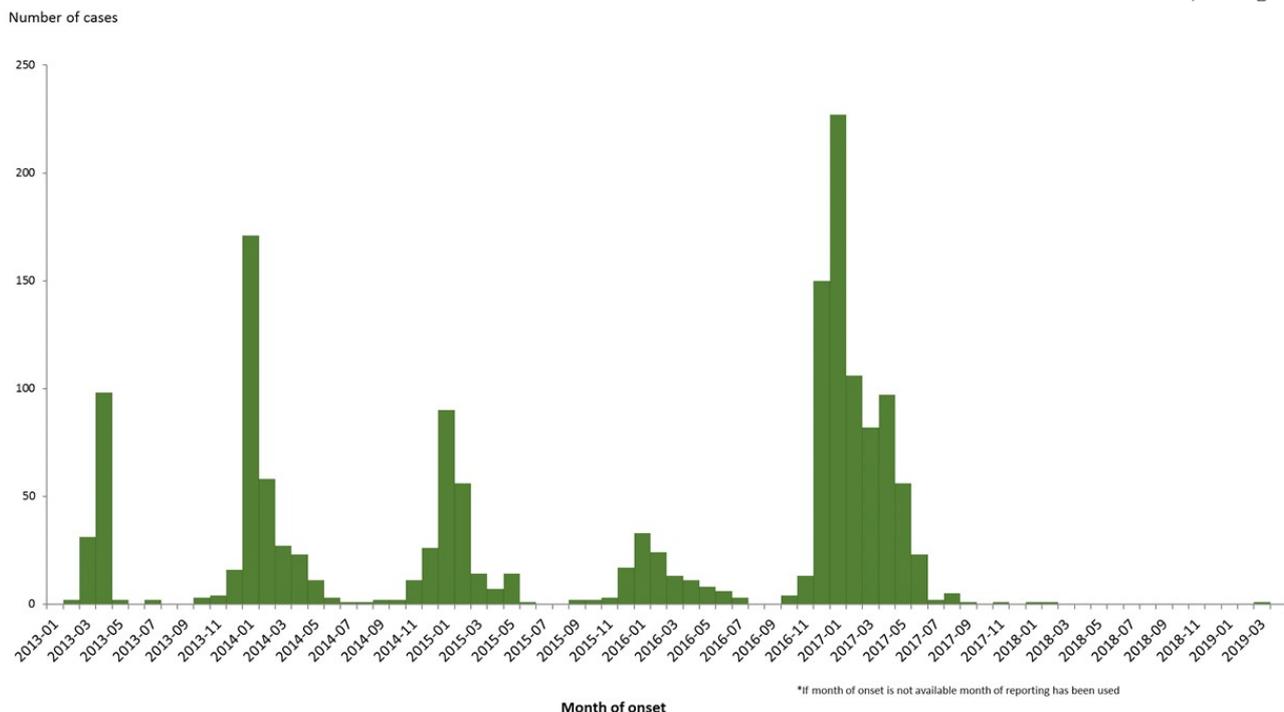
Source: [WHO](#)

## Actions

ECDC published the seventh update of its [rapid risk assessment](#) on 3 July 2017, addressing the genetic evolution of influenza A (H7N9) virus in China and the implications for public health. ECDC monitors this event through epidemic intelligence and will report only if there is an epidemiological update.

## Distribution of confirmed cases of A(H7N9) by first available month February 2013 - 20 April 2019 (n= 1 568)

Source: WHO, Hong Kong



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

Opening date: 27 January 2017

Latest update: 26 April 2019

### Epidemiological summary

#### Europe

##### Chikungunya virus disease/dengue:

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

#### Americas and the Caribbean

**Chikungunya virus disease:**

**Brazil:** In 2019 and as of 16 March 2019, Brazil has reported 12 942 probable cases, represents an increase of 8 793 cases since the previous CDTR update. Rio de Janeiro, Tocantins, Pará and Acre are the regions with the highest incidence reported in 2019. During the same period in 2018, 23 484 probable cases, including nine confirmed deaths, were reported in Brazil. So far, no fatal cases have been confirmed this year, according to the Brazilian Ministry of Health.

**Colombia:** In 2019 and as of 13 April 2019, Colombia has reported 202 cases. Among these cases, four are laboratory-confirmed. This represents an increase of 89 cases since the previous CDTR update.

**El Salvador:** In 2019 and as of 6 April 2019, El Salvador has reported 105 suspected cases, an increase of 35 cases since the previous CDTR update. For the same period in 2018, El Salvador reported 76 suspected cases.

**Mexico:** In 2019 and as of 14 April 2019, the Mexican Ministry of Health has reported two confirmed cases, an increase of an additional case since the previous CDTR update. For the same period in 2018, Mexico reported five confirmed cases.

**Nicaragua:** In 2019 and as of 7 April 2019, Nicaragua has reported 46 suspected cases. Among these cases, none were confirmed. For the same period in 2018, Nicaragua reported 98 suspected cases, including 22 confirmed cases.

**Paraguay:** In 2019 and as of 7 April 2019, Paraguay has reported 11 probable cases, an increase of one more case since the previous CDTR update. For the same period in 2018, Paraguay reported 125 cases.

**Peru:** In 2019 and as of 7 April 2019, Peru has reported 79 cases in 24 districts across the country. For the same period in 2018, Peru reported 113 cases.

**Dengue:**

The Pan American Health Organization (PAHO) has reported 561 000 suspected and confirmed dengue cases in the Americas region in 2019 as of 6 April 2019. Brazil has already recorded 439 000 cases since the beginning of the year, a more than fourfold increase compared with the same period in 2018. Brazilian health officials have warned the general population about the steep increase after the country detected 254 000 cases over the past month.

The figures for each country of the Americas region can be found on the [PAHO Health Information Platform](#).

**Asia****Chikungunya virus disease:**

**India:** No update is available since the previous CDTR update.

**Malaysia:** In 2019 and as of 6 April 2019, 239 cases have been reported in Malaysia. The majority of the cases have been reported in Kuala Langat District, where 159 have been notified so far.

**Thailand:** In 2019 and as of 23 April 2019, Thailand has reported 3 141 cases with no deaths associated in 21 provinces. The most affected provinces are located in the southern part of the country. This represents an increase of 590 cases since the previous CDTR update, although the number of cases reported by week is declining.

**Dengue:**

In South Asia, the **Maldives** have reporting 1 303 cases so far this year, according to a media report citing the Ministry of Health on 1 April 2019. This represents a fourfold increase compared with the same period in 2018. Most cases are reported from the atolls of Haa Alifu, Raa, Alifu Dhaalu, Laamu and Gaafu Dhaalu.

In South-East Asia, **Timor-Leste** has reporting an outbreak of dengue fever since the beginning of the year. According to media quoting local authorities, 532 cases have been recorded between January and 10 April 2019, which is three times higher than for the same period in previous years. The outbreak is mainly affecting the city of Dili.

The following countries have reported an increasing trend compared with last year:

As of 16 March 2019, **Laos** has reported 1 143 cases. Dengue activity is higher compared with the same period in the previous five years.

As of 30 March 2019, **Cambodia** has reported 3 270 cases of dengue. According to WHO, dengue activity continues to show an upward trend since the beginning of 2019, remaining above the threshold level.

As of 22 April 2019, **Malaysia** has reported 41 861 cases of dengue in 2019, compared with 18 200 cases for the same period in 2018.

As of 30 March 2019, [the Philippines](#) has reported 55 976 dengue cases, compared with 31 247 for the same period in 2018.

As of 20 April 2019, [Singapore](#) has reported 2 593 cases of dengue, compared with 680 cases for the same period in 2018.

According to health authorities and as of 14 April 2019, [Pakistan](#) has reported 935 cases of dengue, compared with approximately 650 cases for the same period in 2018.

As of 30 March 2019, [Vietnam](#) has reported 48 647 cases of dengue. This represents a threefold increase compared to the same period in 2018.

Sri Lanka is following a similar trend as in 2018. According to the Ministry of Health and as of 23 April 2019, [Sri Lanka](#) reported 14 185 cases of dengue in 2019, compared with 15 778 cases for the same period last year. Colombo, Jaffna and Gampaha districts are the most affected areas.

There are no official updates available for India or Thailand.

### **Africa**

#### **Chikungunya virus disease:**

[Democratic Republic of the Congo](#): No update is available since the previous CDTR update.

[Republic of the Congo](#): According to WHO, an outbreak continues in the Republic of the Congo since its declaration on 9 February 2019. In 2019 and as of 7 April 2019, there have been 5 272 suspected cases reported, of which 61 were laboratory-confirmed. No outbreak-related deaths have been reported. This is an increase of 3 044 cases since CDTR published on 22 March 2019. Cases are reported in 8 of 12 departments in the Republic of the Congo: Kouilou, Bouenza, Pointe-Noire, Plateaux, Pool, Niari, Lékoumou and Brazzaville. The department of Kouilou is the most affected, with 41% of cases reported. This is the first outbreak reported in the Republic of the Congo since 2011.

[Sudan](#): No update is available since the previous CDTR update.

#### **Dengue:**

According to WHO, a new outbreak has been detected in [Côte d'Ivoire](#). Since the beginning of the year and as of 15 March 2019, the country is reporting 56 suspected and 11 confirmed cases.

According to WHO, the outbreak in [Kenya](#) remains active. Since October 2018 and as of 8 April 2019, the country has detected 660 suspected and 286 confirmed cases. The outbreak has mainly affected Mombasa County (southern Kenya).

[Tanzania](#) continues to record dengue cases. Since August 2018 and as of 14 April 2019, 475 suspected dengue fever cases have been reported from the Dar es Salaam and Tanga Regions. This is an increase of 313 cases since the last update.

The island of [Réunion](#) continues to see a sharp increase in dengue cases. According to [regional authorities](#) and as of 24 April 2019, Réunion has detected more than 7 200 cases of dengue cases since the beginning of the year. A specific threat is dedicated to Réunion in this CDTR.

According to WHO, [Mauritius](#) has reported 63 confirmed cases from 26 February–10 April 2019. The most affected area is Port Louis (Vallée des Prêtres).

### **Australia and the Pacific**

#### **Chikungunya virus disease:**

No outbreaks have been reported since the previous update.

#### **Dengue:**

According to WHO, [Australia](#) has reported 333 cases of dengue in 2019, as of 9 April, compared with 165 for the same period last year.

As of 9 April 2019, [New Caledonia](#) has reported 2 166 dengue cases, showing an important increase since the beginning of the year. The circulating serotype is DENV-2.

[French Polynesia](#) has reported DENV-1 in Tahiti, Moorea, Raiatea, Bora Bora and Rangiroa. On 11 April 2019, Tahiti declared an outbreak of DENV-2 with eight autochthonous cases reported. Since DENV-2 has not circulated in the country since the year 2000, the epidemic could increase in magnitude.

## ECDC assessment

Chikungunya virus disease and dengue are endemic in large regions of the intertropical convergence zone. Environmental conditions for the growth of mosquito populations are currently improving in Europe, but they are still unfavourable for the virus multiplication in the vector. The likelihood of sustained autochthonous dengue virus transmission in continental Europe associated with introduction by a returning traveller therefore remains low.

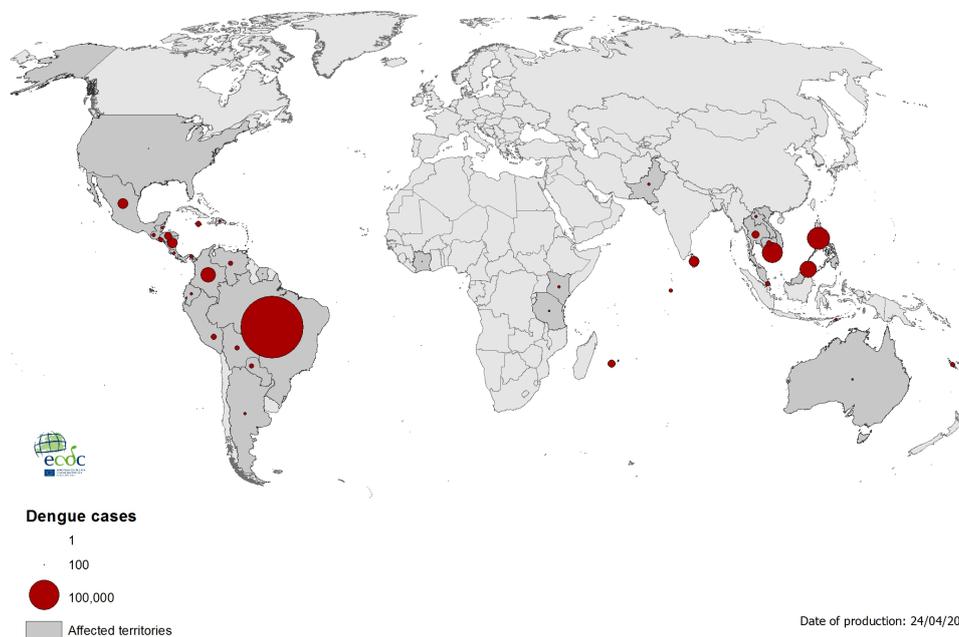
ECDC produced a [rapid risk assessment](#) on 'Local transmission of dengue fever in France and Spain - 2018' published on 22 October 2018 and a [rapid risk assessment](#) on the dengue outbreak in Réunion on 5 July 2018.

## Actions

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

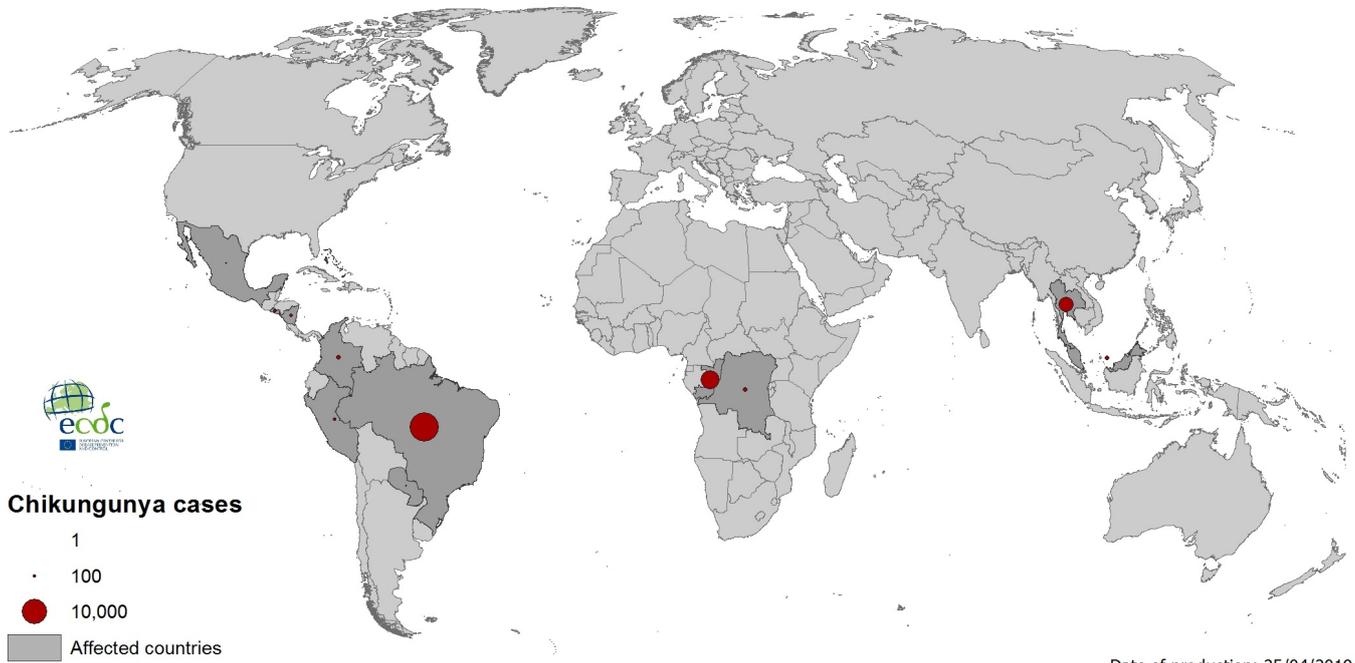
## Geographical distribution of dengue cases reported worldwide, February to April 2019

ECDC



### Geographical distribution of chikungunya cases reported worldwide, February to April 2019

ECDC



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