

This weekly bulletin provides updates on threats monitored by ECDC.

## NEWS

### Chinese new year 2018

This year the Chinese new year falls on 16 February, it is the year of the Dog according to Chinese zodiac. The Chinese new year is the biggest travel period in China, as it is the time for family reunions. Most employees in China have at least seven days off work and most students take one month absence from school. The celebrations last for 15 days.

The winter season in China poses an increased risk of respiratory and gastrointestinal infections. Additionally, indoor crowding could increase the risk of spread of infections via aerosols and direct human contact such as influenza, tuberculosis, meningococcal infection, measles, diphtheria, mumps and other vaccine preventable diseases. The mosquito and tick activity is very low or non-existent at the time, thus the risk of vector-borne diseases is considered to be very low. According to the [Chinese National Influenza Center](#), there is an increase of seasonal influenza both in south and north of the country as expected for this time of the year. Influenza B/Yamagata and A(H1N1)pdm09 have been reported as most circulating viruses. Seasonal influenza vaccine should be considered for travellers. The trivalent influenza vaccine for the 2017–2018 season in the northern hemisphere does not include an influenza B/Yamagata component, therefore vaccination with the quadrivalent vaccine that includes all four components should be favoured, see also [ECDC risk assessment](#).

In the past years several outbreaks of highly pathogenic avian influenza have been detected in birds and poultry in China. In addition to the animal outbreaks human cases of avian influenza [A\(H7N9\)](#), [A\(H9N2\)](#) and [A\(H5N6\)](#) have been reported during 2017 and 2018. All the cases reported exposure to poultry or live poultry markets prior to the onset of illness. Usually, an increasing number of human cases due to avian influenza infection are reported between the months January and March.

Currently the risk of travel-related importation of human cases due to avian influenza virus infection from China is low. Nevertheless, travellers should avoid direct exposure to poultry and refrain from visiting live poultry markets or backyard farms. If respiratory symptoms and fever occur, the person should consult a physician to enable early diagnosis and treatment. The physician should be informed about the travel to China. In addition, travellers who have visited areas at risk in China should avoid visiting farms after their return for at least 10-days (incubation period) and during the symptomatic period, if they develop symptoms. This is in order to prevent a possible virus introduction to poultry in the EU.

Travellers prior to their travel to China are advised to consult their healthcare providers regarding their vaccination, as there are currently multiple ongoing worldwide outbreaks of measles, diphtheria, and mumps. This in order to avoid importation of these infections to China and bringing the infections back to their countries of residence.

The risk of food and water borne outbreaks is, in general, increased during mass-gatherings when large numbers of people eat from commercial outlets, many of which may have been setup temporarily and some that may not meet food safety standards. Additionally, travellers should follow [good hygiene practices and recommendations](#) regarding the food- and waterborne diseases.

For more information about infectious diseases and healthcare management during the Chinese New Year visit the [China CDC](#) website. For information on current disease outbreaks impacting Europe, please see the [ECDC weekly communicable disease threat report](#).

## I. Executive summary

### EU Threats

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#### Influenza – Multistate (Europe) – Monitoring season 2017 – 2018

Opening date: 11 October 2017

Latest update: 26 January 2018

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

→Update of the week

Influenza activity in week three of 2018 (15 -21 January 2018) is widespread in the majority of reporting countries, while increasing activity was observed in countries in eastern Europe.

The conclusions of the ECDC [Rapid Risk Assessment of seasonal influenza, EU/EEA, 2017–2018](#) published on 20 December 2017 remain valid.

### Non EU Threats

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#### New! Listeriosis - South Africa - 2017 - 2018

Opening date: 25 January 2018

Latest update: 26 January 2018

The South African National Department of Health is monitoring a large listeriosis outbreak in the country. The outbreak was detected in October 2017 when increasing number of neonatal cases of listeriosis were observed. Retrospective epidemiological investigations established that the increase in the number of listeriosis cases occurred since May 2017.

→Update of the week

In 2018, the outbreak has continued with almost one hundred additional cases reported since the beginning of the year.

Since 1 January 2017, 820 laboratory-confirmed cases have been detected. Outcome data are available for 29% (238/820) of the cases, of which 34% (82/238) have died.

As of 25 January 2018, the vehicle(s) of infection and the source of the outbreak is not known.

#### Yellow fever – Brazil – 2017

Opening date: 16 January 2017

Latest update: 26 January 2018

[Yellow fever](#) is a mosquito-borne viral infection occurring in some tropical areas of Africa and South America. Brazil experienced a major outbreak of yellow fever in 2016-2017. An upsurge of confirmed cases has been reported since December 2017.

→Update of the week

Between 16 and 23 January 2018, [Brazil](#) reported 95 cases and 33 deaths. The cases occurred in areas already reporting cases last week, São Paulo (41 cases), Minas Gerais (39 cases) and Rio de Janeiro (15) states.

Between 1 July 2017 and 23 January 2018, 2 653 epizootics were reported in non-human primates, of which 453 were confirmed, even in areas that were previously not considered to be at risk for yellow fever. The confirmed yellow fever epizootics were reported in four states: Mato Grosso, Minas Gerais, Rio de Janeiro, and São Paulo. The majority (86%) of the confirmed epizootics were registered in the state of São Paulo.

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

Opening date: 27 January 2017

Latest update: 26 January 2018

Chikungunya, dengue and Zika virus infections are vector-borne diseases that affect 50 to 100 million people each year. In the past decade, all three diseases have been reported across an increasing number of countries. Chikungunya virus infection has been reported in Asia and Africa, and since 2013/2014, in the Caribbean, the Americas and the Pacific. Dengue fever is present in Asia, the Pacific, the Caribbean, the Americas and Africa. Zika virus circulation is reported in Asia, the Pacific, the Caribbean, the Americas and Africa. In 2017, as of 20 December, no autochthonous dengue or Zika cases related to vector-borne transmission were detected in EU/EEA Member States. During 2017, France and Italy reported autochthonous chikungunya cases.

→ Update of the week

### Monthly summary:

This month, the significant events for chikungunya, dengue and Zika are:

**Chikungunya: Africa:** Between mid-December 2017 and 4 January 2018, [Kenya](#) reported 69 chikungunya cases in Mombasa.

**Dengue:** No significant events have been detected this month.

**Zika:** No significant events have been detected this month. In January ECDC stopped the monthly update of the Zika maps. For information on Zika distribution, please refer to [WHO webpage](#).

## Cholera – Multistate (World) – Monitoring global outbreaks

Opening date: 20 April 2006

Latest update: 26 January 2018

Several countries in Africa, Asia and the Americas are reporting [cholera](#) outbreaks. In addition to the current situation in Yemen, Somalia, Ethiopia and South Sudan, cholera is also progressing in the southern part of the African continent with outbreaks reported in the Democratic Republic of Congo (DRC), Zambia, Mozambique, Zimbabwe, Malawi and Angola.

→ Update of the week

Since the beginning of 2017, the Gulf of Aden and the Horn of Africa region have been the most affected areas. More recently, other countries situated in the southern part of Africa have experienced large cholera outbreaks.

Since the previous CDTR update on 15 December 2017, major increases in cholera cases are reported by Yemen with 59 940 cases and 22 deaths, DR Congo with 5 512 cases and 175 deaths, Zambia with 2 787 cases and 55 deaths, Somalia with 1 389 cases and Tanzania with 495 cases and 23 deaths.

Haiti has reported an increase by 779 cases and nine deaths since the last CDTR report on 15 December 2017. However, the 13 681 cases reported from January 2017 to 6 January 2018 remain lower than in 2016 when Haiti reported 41 421 cases during the whole year.

## II. Detailed reports

### Influenza – Multistate (Europe) – Monitoring season 2017 – 2018

Opening date: 11 October 2017

Latest update: 26 January 2018

#### Epidemiological summary

##### Week three of 2018 (15–21 January 2018)

Influenza activity is widespread in the majority of reporting countries, while increasing activity was observed in countries in eastern Europe.

Both influenza types B and A viruses were co-circulating and different patterns of circulation were observed between countries in the Region.

Of the individuals sampled, on presenting with influenza-like illness (ILI) or acute respiratory infections (ARI) to sentinel primary healthcare sites, 52% tested positive for influenza viruses, a slight increase compared to the previous weeks (42-50%).

##### 2017–2018 season overview

From sentinel sources and non-sentinel for the Region overall, a higher proportion of type B viruses compared with type A viruses has been detected. Of the type A detections from sentinel sources, A(H1N1)pdm09 viruses have outnumbered A(H3N2) viruses, while in non-sentinel sources more A(H3N2) viruses were reported than A(H1N1)pdm09 viruses.

For type B viruses from both sentinel and non-sentinel sources, B/Yamagata lineage viruses have greatly outnumbered those of the B/Victoria lineage.

Different patterns of dominant type and A subtype were observed across the countries in the Region, an important cause of the observed differences between sentinel, non-sentinel and severe influenza sources of information.

While low in number, 64% of the genetically characterized A(H3N2) viruses belonged to clade 3C.2a, the clade of the vaccine virus described in the [WHO recommendations for vaccine composition for the northern hemisphere 2017–18](#), and 36% to clade 3C.2a1, with viruses in both clades being antigenically similar.

An early [risk assessment](#) based on data from EU/EEA countries was published by ECDC on 20 December 2017. First detections indicated circulation of A(H3N2) and B/Yamagata viruses in the highest proportions. As the A(H3N2) subtype dominated last season, a high proportion of the population should be protected.

[A situation analysis](#), was published in January by WHO, Regional Office for Europe, which provides a description of the evolving epidemiological pattern of the early season.

##### Other news

Based on data submitted to the [EuroMOMO](#) project there has, over the past weeks, been increased all-cause mortality among the elderly, notably in the southern part of the European Region and the United Kingdom (Scotland).

The US CDC published a Health Alert Network (HAN) notice, regarding increased A(H3N2) activity that affects mostly people aged over 65 and younger children, leading to more hospitalizations and deaths. Based on the moderate vaccine effectiveness, detailed information on recommended antiviral treatment is provided. See full report [here](#).

Additional information on global influenza activity is available from [WHO's biweekly global updates](#).

#### ECDC assessment

As expected for this time of year, influenza activity is increasing, putting pressure on healthcare systems and creating significant media attention. Vaccination programmes targeting the elderly, people with chronic diseases and healthcare workers should be continued and intensified in countries that have not reached the seasonal peak. Antiviral treatment with neuraminidase inhibitors should be advised for people at high risk of the complications of influenza, such as people with underlying chronic respiratory or cardiovascular diseases, and for people with severe or rapidly progressive symptoms. Antiviral prophylaxis should be considered during the early phases of outbreaks in closed settings such as nursing homes. Inter-personal distancing measures are also likely to provide protection for infants, the elderly and the frail.

#### Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the [Flu News Europe website](#). Risk assessments for the season are available on the [ECDC website](#) and on the [World Health Organization's Regional Office for Europe website](#).

## New! Listeriosis - South Africa - 2017 - 2018

Opening date: 25 January 2018

Latest update: 26 January 2018

### Epidemiological summary

Since 1 January 2017 and as of 25 January 2018, 820 laboratory-confirmed listeriosis cases have been reported in South Africa. Most cases have been reported from Gauteng Province (59%, 486/820) followed by Western Cape (13%, 105/820) and KwaZuluNatal (7%, 59/820) provinces. Cases have been diagnosed in both public (66%, 542/820) and private (34%, 278/820) healthcare sectors.

Diagnosis was based most commonly on the isolation of *Listeria monocytogenes* in blood culture (71%, 579/820), followed by cerebrospinal fluid (CSF) (23%, 188/820). Where age was reported (n=784), ages range from birth to 93 years (median 18 years) and 42% (329/784) are neonates aged <math>\leq 28</math> days. Of neonatal cases, 96% (317/329) had early-onset disease (birth to <math>\leq 6</math> days). Females account for 55% (431/783) of cases where gender is reported. Final outcome data is available for 29% (238/820) of cases, of which 34% (82/238) died.

**Sources:** [South Africa NICD](#) | [WHO AFRO outbreaks and emergencies](#) |

### ECDC assessment

Listeriosis can be a serious bacterial infection acquired via ingestion of contaminated food. The infection is primarily affecting pregnant women, neonates, elderly and immunocompromised people. In pregnant women, the infection can cause premature labour and stillbirth, and neonatal meningitis in a new-born. Milder forms of the disease result in gastroenteritis, which however can lead to a severe infection in those with a weakened immune system.

Prior to the current outbreak in South Africa, the first documented outbreaks occurred in 1977 (14 cases) and 2015 (seven cases), and since then only sporadic cases have been detected throughout the country. Since October 2017, an increase in the number of neonatal cases was observed. This increase and the associated deaths are of concern, as South Africa's also has high prevalence of HIV infection. In addition, poorly regulated street food vendors are common across South Africa. Many people lack access to electricity and thus refrigeration.

Based on WGS analysis, no associated cases were reported in EU/EEA countries. The risk of spread to Europe is very low. Travellers with immune disorders, severe chronic illnesses, pregnant women and older adults should consult their doctor or seek advice from a travel clinic – particularly with regard to effective prevention measures – before travelling.

European travellers in South Africa should pay attention to standard hygiene measures to reduce the risk of infection, consume only bottled drinks, mineral water and factory-produced ice cubes; avoid unpasteurised milk and milk products; ensure that meat and fish are thoroughly cooked; properly wash fruits and vegetables before consumption; consider general hygiene conditions when consuming local products, such as freshly made fruit juices, coconut water, drinks and cocktails. Persons participating to groups at higher risk of a severe outcome should consider heating ready to eat meals, cold cuts and fish products before eating them, and avoid buying food from street vendors

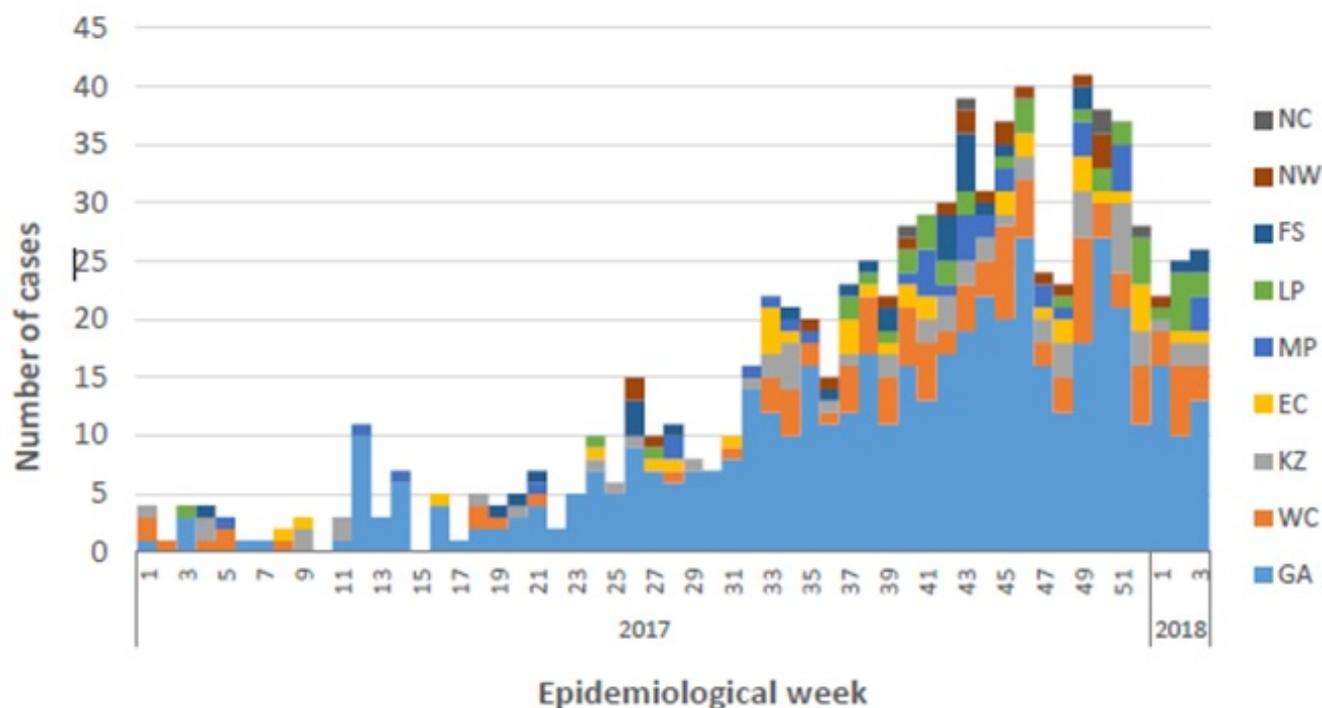
Travellers experiencing symptoms compatible to [listeriosis](#) upon return should consider consulting their health care provider.

### Actions

ECDC is monitoring this event through EPIS FWD and epidemic intelligence.

## Epidemic curve of laboratory-confirmed listeriosis cases by epidemiological week and date of sample collection and province, South Africa, 01 January 2017 to 23 January 2018 (n=820)

South Africa Centre for Enteric Diseases and Division of Public Health Surveillance and Response



## Yellow fever – Brazil – 2017

Opening date: 16 January 2017

Latest update: 26 January 2018

### Epidemiological summary

Between July 2017 and week 2018-03, the Ministry of Health of Brazil reported 130 confirmed human cases of yellow fever including 53 deaths. The cases occurred in São Paulo (61 cases), Minas Gerais (50 cases), Rio de Janeiro (18) and Distrito Federal (one case).

From July 2017 to week 2018-03, the Ministry reported 453 confirmed epizootics. São Paulo is the state reporting the highest number of epizootics since July 2017 with 390 epizootics, Minas Gerais is reporting 58 epizootics since July. In addition, the Ministry reports a circulation of the virus in non-human primates in the municipalities of São Paulo.

On 15 January 2018, the Netherlands reported one confirmed yellow fever case in an unvaccinated 46-year-old male returning from Brazil. The person had visited Brazil between 19 December 2017 and 8 January 2018 and stayed in an area about 50 kilometres north of São Paulo, in the villages of Mairiporã and Atibaia.

WHO has determined that, in addition to the areas listed in previous updates, the entire state of São Paulo should now be considered at risk of yellow fever transmission. Consequently, vaccination against yellow fever is recommended for international travellers visiting any area in the state of São Paulo.

Sources: [MoH](#) | [ProMED](#) | [WHO](#)

### ECDC assessment

The detection of yellow fever confirmed cases in São Paulo State and the identification of epizootics in the urban area of São Paulo City (12 million inhabitants) is of concern. Authorities are launching a vaccination campaign in this area, previously considered not at risk for yellow fever transmission. In this context, the city of São Paulo should be considered an at-risk area for European citizen travelling to Brazil. According to WHO, travellers planning to visit areas at risk for yellow fever in Brazil should receive yellow fever vaccine at least 10 days prior to travelling, follow measures to avoid mosquito bites and be aware of yellow fever symptoms and signs as per international recommendations.

In Europe, *Aedes aegypti*, the primary vector of yellow fever in urban settings, is present in Madeira, Portugal and Fuerteventura, Canary Islands, Spain. Recent studies have shown that *Aedes albopictus* can potentially transmit the yellow fever virus. The risk of the virus being introduced into local competent vector populations in the EU through viraemic travellers from Brazil is considered to be very low.

## Actions

ECDC published updates of its rapid risk assessment 'Outbreak of yellow fever in Brazil' on [13 April 2017](#) and [18 January 2018](#).

## Distribution of confirmed yellow fever cases by state, Brazil, 6 January 2017 - 16 January 2018

ECDC



Confirmed cases of locally-acquired yellow fever, as of 16 January 2018

States with confirmed locally-acquired cases since 6 January 2017

Area at risk for yellow fever transmission

Area considered at no risk for yellow fever transmission

Federal state

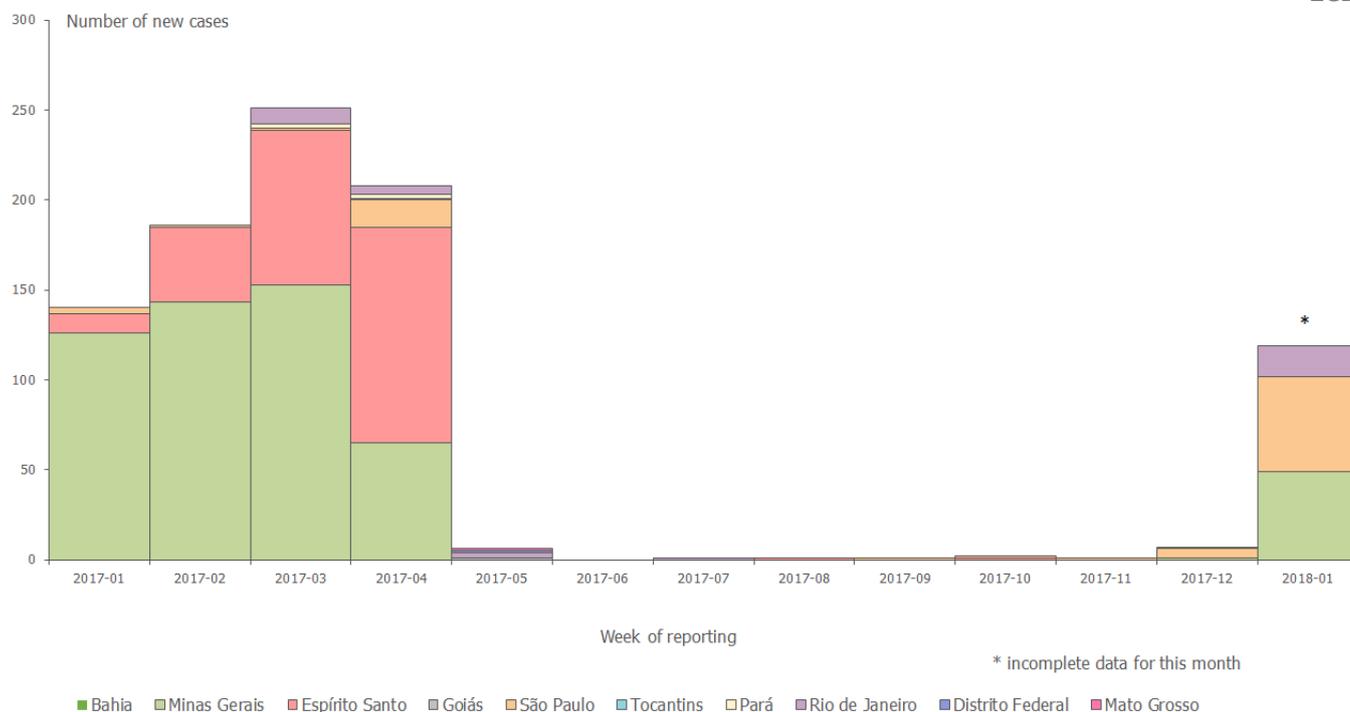
State capital city



ECDC. Map produced on: 16 Jan 2018  
ECDC map maker: <https://emma.ecdc.europa.eu>

## Distribution of confirmed human cases of yellow fever by month, Brazil, January 2017–January 2018

ECDC



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

Opening date: 27 January 2017

Latest update: 26 January 2018

### Epidemiological summary

#### Detailed information:

##### Europe

**Chikungunya:** In 2017, two distinct events, based on epidemiological and microbiological evidence, were detected in Europe. [France](#) reported two clusters, including 15 confirmed and two probable cases. [Italy](#) reported 238 confirmed and 190 probable cases. No autochthonous cases have been detected in Europe in 2018.

**Dengue:** In 2017 and 2018 (as of 25 January), no autochthonous dengue cases had been detected in EU/EEA Member States.

##### Americas and the Caribbean

**Chikungunya:** In 2017, as of 22 December, [PAHO](#) has reported almost 185 000 suspected and confirmed chikungunya cases in the Americas and the Caribbean region. Brazil represents 93% of these cases reported in the Americas since the beginning of 2017. In 2016, PAHO reported more than 498 000 cases during the same time period.

**Dengue:** In 2017, as of 31 December 2017, [PAHO](#) has reported more than 574 000 suspected and confirmed dengue cases, including 364 deaths. This is an increase of 18 deaths since the last CDTR report on 22 December 2017. Most of the cases are reported by Brazil (249 056), Mexico (89 893), Peru (76 093) and Nicaragua (64 712). In 2018, as of 23 January 2018, PAHO reported 2 494 suspected and confirmed cases of dengue, including three deaths, in the American and the Caribbean region. In 2016, PAHO had reported about 2.17 million confirmed and probable cases, including 1 046 deaths in this region.

##### Asia

**Chikungunya:** In 2017, as of 31 December, [Pakistan](#) reported 8 387 suspected and confirmed cases, which is an increase of 387 cases since the previous CDTR report on 22 December 2017. An outbreak of chikungunya continues [nationwide](#), with the majority of cases from Karachi city, Sindh Province.

In 2017, as of 24 December, [India](#) reported over 62 000 suspected chikungunya cases, which is an increase of 1 000 cases since the previous CDTR report on 22 December. In 2016, India reported 64 057 suspected cases during the entire year, and 27 553

8/14

cases in 2015.

**Dengue:** In 2017, the most affected countries in Asia were Sri Lanka, Vietnam and India. These countries, along with Laos, report an increase of cases in 2017 compared with the same time period in 2016. Malaysia, Cambodia, Philippines and Singapore fewer cases in 2017 than in 2016.

In 2017, as of 31 December, [Sri Lanka](#) reported about 185 000 dengue cases, including at least [395 deaths](#). This is an increase of 7 000 cases since the previous report on 22 December. The highest number of dengue cases, over 40 000 cases, were reported in July. In 2018, as of 11 January, Sri Lanka reported 4 271 cases. All four dengue virus types have been detected in Sri Lanka. The [current outbreak](#) is predominantly due to DENV-2, which is not the usual type circulating in Sri Lanka. In 2016, Sri Lanka reported 55 000 cases for the entire year.

In 2017, as of 31 December, [Vietnam](#) reported more than 184 000 dengue cases, including 32 deaths. This is an increase of 11 000 cases since the previous CDTR report on 22 December. Though the cumulative number of cases is much higher than in previous years, there is now a consistent downward trend. In 2016, 122 000 cases including 43 deaths were reported.

In 2017, as of 24 December, [India](#) reported more than 157 000 dengue cases, including 250 deaths. This is an increase by 2 000 cases since the previous CDTR report on 22 December. In 2016, India reported 129 166 cases, including 245 deaths.

In 2017, as of 22 December, [Laos](#) reported over 11 000 cases, including 14 deaths. A declining trend has been observed for over three months. In 2018, as of 5 January, 17 cases have been reported. In 2016, as of 30 December, 5 617 cases had been reported.

In 2017, as of 26 December, [Thailand](#) reported more than 51 000 dengue cases, including at least two deaths. This is an increase of more than 22 000 cases since the previous CDTR report on 22 December. In 2018, as of 14 January, 168 cases have been reported.

In 2017, [China](#) reported about 5 900 cases of dengue. The number of reported cases in December (139) was lower than the previous month and follows historical trends.

In 2017, as of 2 January, [Cambodia](#) reported 3 216 suspected dengue cases, which is an increase of 160 cases since the previous CDTR report on 22 December. The reported number of cases in 2017 is lower than during the same time period in 2014–2016.

In 2017, as of 23 December, [Malaysia](#) reported more than 82 000 dengue cases, which is an increase of 1 000 cases since the previous CDTR report on 22 December. In 2018, as of 22 January, 3 405 cases have been reported, with [one death](#). In 2016, Malaysia reported around 100 000 cases during the whole year, including 231 deaths.

In 2017, as of 30 December, [Singapore](#) reported 2 755 dengue cases, which is an increase of 235 cases since the previous CDTR report on 22 December. The reported number of cases in 2017 is lower than during the same time period in 2012–2016. In 2018, as of 22 January, [Singapore](#) reported 217 cases.

In 2017, as of 2 December, [Philippines](#) reported over 131 000 cases, including 526 deaths, which is an increase of 34 000 cases since the CDTR report on 1 December. For the same period in 2016, Philippines reported 208 805 cases.

In 2017, as of 31 December, [Pakistan](#) reported more than 125 000 suspected dengue cases, including 69 deaths. No change since the last CDTR report on 22 December.

On 18 January 2018, Nepal, according to [media](#), reported 57 dengue cases. Additionally, one death was reported on 4 January 2018.

### Australia and the Pacific

**Chikungunya:** No outbreaks detected.

**Dengue:** In 2017, as of 15 December, [Australia](#) reported 1 035 dengue cases in 2017, which is an increase of 96 cases since the previous CDTR report on 22 December. The reported number of cases in 2017 is lower than during the same time period in 2012–2016. In 2018, as of 12 January, Australia reported eight cases of dengue virus infection. The number of cases refers to both imported and autochthonous cases. In [Australia](#), autochthonous cases have occurred only in Queensland.

Between 18 and 31 December 2017, [French Polynesia](#) reported 15 dengue cases, of which 12 were confirmed as DENV-1 infection.

In 2017, [New Caledonia](#) reported 4 431 dengue cases, including 11 deaths. The circulating serotypes are DENV-1, DENV-2 and

DENV-3. In 2018, as of 17 January, New Caledonia reported 14 cases of dengue virus infection.

In 2017-2018, as of 22 January, [Wallis and Futuna](#) reported 39 confirmed or probable cases of dengue, including nine confirmed cases. Eight of the cases were confirmed as DENV-1.

Between August 2017 and 18 December 2017, according to media, [Samoa](#) reported 2 466 cases, including five deaths. This is an increase of 944 cases since the previous CDTR on 22 December. The most affected age group is those under 19 years of age. Samoa has confirmed a DENV-2 outbreak, detected in October 2017.

On 22 January 2018, [American Samoa](#) reported 485 confirmed dengue cases.

According to [media](#) quoting health authorities, on 31 December 2017, there is an outbreak of dengue on Fiji. In 2017 and as of 31 December, 3 136 confirmed cases have been reported from the Northern, Central and Western divisions. The number of confirmed cases per week range from 39 to 78, with a sustained increase every week.

## Africa

### Chikungunya:

Between mid-December 2017 and 4 January 2018, [Kenya](#) reported 69 chikungunya cases in Mombasa, in the southeast of Kenya. Among these cases, 32 were sampled and 27 tested positive for chikungunya by PCR. The suspected cases were reported across six sub-counties of Mombasa: Mvita, Kisauni, Nyalı, Chagamwe, Jomvu and Likoni.

### Dengue:

Between 28 September 2017 and 7 January 2018, [Senegal](#) reported 805 dengue cases, 138 of which are confirmed. This is an increase of 22 cases since the previous report on 22 December. DENV-1 is the only circulating serotype. The majority of the confirmed cases were reported from the Louga Region (129). As of 7 January 2018, no severe cases and no deaths had been reported.

In 2017, as of 16 December, [Ivory Coast](#) reported 1 421 suspected dengue cases, 322 of which are confirmed. Two deaths have been reported. This is an increase of two suspected cases since the previous report on 22 December. Three of the four dengue virus subtypes have been identified in 272 confirmed cases: DENV-2 (181 cases), DENV-3 (78 cases) and DENV-1 (13 cases). Most of the cases (95%) occurred in Abidjan.

In 2017, as of 10 December, [Burkina Faso](#) reported 14 445 suspected cases, including 29 deaths (CFR: 0.2%). This is an increase of 1 310 suspected cases and one death since the previous report on 22 December. DENV-1, DENV-2 and DENV-3 are circulating, with predominance of DENV-2 (72%). The majority of the cases (62%) were reported in the central region. On 28 September 2017, the Ministry of Health formally declared an outbreak.

In 2017, as of 10 December, [Mali](#) reported 429 cases of dengue fever, representing an increase of 11 cases since the previous report on 22 December. All cases were reported from Bamako and the Kati health district northwest of Bamako.

As of 31 December, [Egypt](#), reported 245 cases and no deaths in 2017.

In 2017, [Sudan](#) reported 139 cases, including three deaths. According to [media](#), state of Kasala is the most affected, with 118 cases reported.

In 2017, as of 12 December, [La Reunion](#) reported 94 cases. This is an increase of eight cases since the previous CDTR report on 22 December 2017.

## ECDC assessment

**Chikungunya:** The detection of clusters of autochthonous chikungunya cases in areas of Europe where *Aedes albopictus* is established is not unexpected during the summer months, when environmental conditions were favourable for mosquitoes. As these diseases are endemic in large areas of the intertropical zone, introduction via viraemic traveller is possible but considering that the weather conditions are currently not favourable to mosquito activity, the risk of local transmission in the EU/EEA is considered very low.

**Dengue:** Dengue is widespread in tropical and subtropical regions.

**Zika:** Despite the decrease in intensity of Zika virus transmission after the 2016 wave, cases are still being reported in the Americas and Asia where the vectors, *Aedes* mosquitoes, are widely distributed. As neither treatment nor vaccines are available, prevention is based on personal protection measures. Pregnant women should consider postponing non-essential travel to Zika-affected areas.

Europe is vulnerable to the autochthonous transmission of arboviruses. The risk of onward transmission in Europe is linked to importation of the virus by viraemic patients in areas with competent vectors (*Aedes albopictus* in mainland Europe, primarily around the Mediterranean, and *Aedes aegypti* in Madeira). Autochthonous transmission from an imported viraemic case is possible during the summer season in the EU/EEA. Continued vigilance is needed to detect imported cases in tourists returning to the EU/EEA from affected regions.

## Actions

ECDC monitors these threats through epidemic intelligence and reports on a monthly basis. ECDC published the tenth update of its [rapid risk assessment on Zika](#) virus disease epidemic on 5 April 2017. ECDC published a [rapid risk assessment on chikungunya in France](#) on 23 August 2017 and the first [update](#) of the rapid risk assessment on chikungunya in Italy on 9 October 2017.

## Cholera – Multistate (World) – Monitoring global outbreaks

Opening date: 20 April 2006

Latest update: 26 January 2018

### Epidemiological summary

#### Americas

**Dominican Republic:** As of 30 December 2017, the Dominican Republic reports 122 cholera cases and four deaths in all 2017. This represents an increase of twelve cases since the previous CDTR update on 15 December 2017.

**Haiti:** In 2018, as of 6 January, Haiti has reported 13 838 cholera cases, including 159 deaths (CFR: 1.2%) in all ten departments, since the beginning of 2017. This represents an increase by 779 cases and nine deaths since the previous update on 15 December 2017. In 2016, Haiti reported 41 421 cholera cases including 447 deaths (CFR:1%). From 2010 to 6 January 2018, Haiti has reported 816 157 suspected cholera cases including 9 775 deaths (CFR: 1.2%).

#### Africa

**Angola:** On 21 December 2017, two suspected cholera cases with travel history to Kimpangu (DRC) were detected in Uige province. Since then, the trend in the number of cases in the region is increasing, with 411 cases and 9 deaths (CFR: 2.2%) reported as of 17 January 2018. The majority of cases are from the suburban area around Uige city, which has limited access to safe water and improved sanitation.

**Burundi:** As of 6 December 2017, Burundi has reported 167 cholera cases and no deaths. This represents an increase by 20 cases since our previous report on 17 November 2017. Six districts have reported suspected cases to date.

**Chad:** Since the beginning of the outbreak on 14 August 2017 and as of 10 December 2017, Chad reported 1 250 suspected cholera cases, including 81 deaths (CFR: 6.5%). This represents an increase by 25 cases and two deaths since the previous CDTR update on 15 December 2017.

**DR Congo:** In 2018, as of 12 January, DR Congo has reported 55 000 suspected cholera cases, including 1 190 deaths (CFR: 2.2%). This represents an increase by 5 512 cases and 175 deaths since the previous CDTR report on 15 December 2017. The outbreak continues with a downward trend compared to the previous weeks. Despite of the decreasing trend, the provinces of South Kivu, Tanganyika and specially Kinshasa are reporting an increase of cases. In early January 2018, the Kinshasa area has been affected by flooding, leading to an increase of 697 cases and 53 deaths in the capital territory during the days after the flooding event.

**Ethiopia:** In 2017, as of 3 December, Ethiopia has reported 48 617 acute watery diarrhoea (AWD) cases, including 880 deaths (CFR: 1.8%). This represents an increase by 33 cases and two deaths since the previous CDTR update on 15 December 2017. The number of new cases has decreased compared with the previous month. Nine regions have been affected by this outbreak.

**Kenya:** In 2017, as of 31 December, Kenya has reported 4 278 cases, including 79 deaths (CFR 1.9%) for the entire 2017. This represents an increase by 199 cases and three deaths since our previous report on 15 December 2017.

**Malawi:** In 2018, as of 14 January, Malawi is reporting 261 cases and four deaths. This represents an increase by 209 cases and four deaths since the previous CDTR update on 17 November 2017. Six districts are reporting cases.

**Mozambique:** In 2017, as of 15 December, WHO is reporting a cholera outbreak in Mozambique with 1 252 cases and one death. This represents an increase by 167 cases since the previous CDTR update on 15 December 2017. According to WHO, the outbreak

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is confined to the Memba, Erati and Nacoroa districts.

**Nigeria:** In 2017, as of 10 December, Nigeria has reported 9 079 suspected cholera cases, including 145 deaths (CFR: 1.6%). This represents an increase of 66 cases since the previous CDTR report on 15 December 2017. On 21 December 2017, the Borno State Government declared the [end of the cholera outbreak](#) in the state, after fourteen consecutive days without new cholera cases in the region. Last case reported in Borno state had a date of onset on 5 December 2017. A cumulative number of 5 365 cases, including 61 deaths (CFR: 1.1%) were reported in Borno state during this outbreak. However, an outbreak of cholera is still ongoing in other regions of Nigeria.

**Somalia:** In 2017, as of 31 December, WHO is reporting 79 172 suspected cases of cholera and 1 159 (CFR:1.5%) deaths for the entire 2017. This represents an increase by 1 389 cases and no deaths since the last update on 17 November 2017.

**South Sudan:** Since the beginning of the outbreak in June 2016 and as of 29 December 2017, South Sudan has reported 20 438 suspected cases, including 436 deaths (CFR: 2.1%). Cholera transmission has continued to decline nationally and continues in only two counties (Juba and Budi).

**Tanzania:** In 2018, as of 14 January, Tanzania has reported 4 803 cholera cases including 100 deaths (CFR: 2.1%). This represents an increase by 495 cases and 23 deaths since the previous CDTR update on 15 December 2017.

**Zambia:** Since 4 October 2017 and as of 20 January 2018, Zambia is reporting an outbreak of 3 334 cholera cases including 70 deaths (CFR:2.1%). This represents an increase by 2 787 cases and 55 deaths since the previous CDTR update on 15 December 2017. The outbreak is no longer localised in Lusaka City, affecting other country regions. However, Lusaka city accounts for the majority of the cases.

**Zimbabwe:** In 2018, as of 23 January, a cholera outbreak is reported in Chegutu town according to a media article. Twenty-two suspected cases including four deaths have been detected in the village. According to the same media article quoting authorities from Zimbabwe, the victims did not have a recent travel history to neighbouring countries.

## Asia

**India:** As of 1 January 2018, media reports two deaths and approximately 24 cholera cases in a construction site in Bengaluru. An additional five cholera cases were reported in Kazakhstan, among tourist returning from India, according to [other media sources](#).

**Malaysia:** On 16 December 2017, the Ministry of Health in Brunei declared an outbreak of cholera cases in the Malaysian district of Papar, in Sabah. The number of cases and deaths remains uncertain.

**Yemen:** Since the beginning of the outbreak in April 2017 and as of 21 January 2018, Yemen has reported 1 043 426 suspected cholera cases and 2 247 deaths (CFR: 0.2%). This represents an increase by 59 940 cases and 22 deaths since the previous update on 15 December 2017. Some of the most affected governorates are Amanat Al Asima, Al Hudaydah, Hajjah, Amran and Dhamar.

## ECDC assessment

There has been an unusual increase in the number of cholera cases in the Horn of Africa and in the Gulf of Aden in recent years. More recently, cholera outbreaks have been notified in the southern part of Africa (Zimbabwe, Zambia, Mozambique and Angola). Despite the large number of travellers from the EU/EEA visiting countries from this part of Africa, very few cases are reported each year among returning EU/EEA travellers.

According to the World Health Organization, vaccination should be considered for travellers at higher risk, such as emergency/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 their hands with soap, eating thoroughly cooked food, and avoiding consumption of raw seafood products.

## Actions

ECDC continues to monitor cholera outbreaks globally through its epidemic intelligence activities in order to identify significant changes in epidemiology and to facilitate the proper updates to public health authorities. Reports are published on a monthly basis.



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