

This weekly bulletin provides updates on threats monitored by ECDC.

## NEWS

### **New *Eurosurveillance* website recently launched**

The new *Eurosurveillance* website has recently been launched with improved features for submitting authors and readers. The new features will benefit all of those who read the journal, those who have previously published and those who subscribe to *Eurosurveillance* via the new website. The new website offers social bookmarking, a refined search, article-level metrics, a citation export feature and the opportunity to download PowerPoints for figures and tables. And for those who subscribe, there is also the possibility of saving content searches and setting up specific alerts, including citation alerts and saved search alerts, so that you can be automatically notified when your work is cited or a paper covering a topic of particular interest is published. In other words, you have more control over what you see and when. The new website also looks fresher, and remains both open access and free of article processing charges and the URL is the same: [eurosurveillance.org](http://eurosurveillance.org).

One very important thing to note is that you need to register and re-subscribe to *Eurosurveillance* on the new website to take advantage of several of these features and receive the weekly table of contents. With the removal of the old website, subscribers were automatically unsubscribed and their personal information destroyed. Here is what you need to do:

- Register and subscribe on the new website ([eurosurveillance.org](http://eurosurveillance.org))
- Set up an alert to receive the weekly *Eurosurveillance* table of contents
- Set up any additional alerts and preferences according to what you want to see and when

## I. Executive summary

### EU Threats

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#### **Travel-associated Legionnaires' disease - Palmanova area, Spain - 2017**

Opening date: 11 October 2017

Latest update: 27 October 2017

A rapidly evolving cluster of travel-associated Legionnaires' disease (TALD) involving 21 cases with a travel history to the Palmanova area in Majorca, Spain, has been reported to the European Legionnaires' Disease Surveillance Network (ELDSNet).

→Update of the week

Since the previous report on 20 October 2017, the United Kingdom reported two additional cases with onset dates on 4 October. The two cases stayed in accommodations with previously known cases.

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

Opening date: 11 October 2017

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

→Update of the week

*Update Week 2017-42 (16 to 23 October 2017)*

Of the 40 countries reporting on influenza activity, 39 reported low intensity, while Malta reported medium intensity of influenza activity. Only 14 sentinel specimens tested positive for influenza, two thirds of detected viruses were type A and one third type B. Overall, 3% of sentinel specimens were positive for influenza virus. Since week 2017-40, low numbers of influenza viruses have been detected in sentinel specimens, but compared to type B viruses, the proportion of type A viruses has been increasing reaching 64% in week 2017-42.

## West Nile virus – Multistate (Europe) – Monitoring season 2017

Opening date: 30 May 2017

Latest update: 27 October 2017

During the West Nile virus transmission season, from June to November, ECDC monitors the occurrence of cases of West Nile fever in the EU Member States and neighbouring countries on a weekly basis in order to inform blood safety authorities about areas with ongoing virus transmission. In 2016, 225 human cases of West Nile fever were reported in EU Member States and 267 cases were reported in the neighbouring countries.

→Update of the week

Between 19 and 26 October 2017, Romania reported two cases, Italy reported one case and Serbia reported one case. France reported one case in a newly-affected area. All other cases were notified in areas already considered to be affected. Serbia reported one death due to West Nile fever and Romania reported three deaths. In addition, ten equine West Nile fever cases were reported through the Animal Disease Notification System (ADNS) of the European Commission. Italy reported five cases, Spain reported four and Greece reported one.

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

## Non EU Threats

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

Opening date: 27 January 2017

Latest update: 27 October 2017

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 25 October, no autochthonous dengue or Zika cases related to vector-borne transmission were detected in EU/EEA Member States. In 2017, France and Italy have reported autochthonous chikungunya cases.

→Update of the week

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

**Dengue, Africa:** In 2017, as of 17 October, Burkina Faso has reported 4 098 suspected cases including 11 deaths (CFR: 0.3%). DENV 1, 2 and 3 are circulating. On 28 September 2017, the Ministry of Health formally declared the outbreak.

**Chikungunya, Europe:**

In 2017, France and Italy have reported autochthonous chikungunya cases. These two events are two distinct events. There is epidemiological and microbiological evidence highlighting the fact that the clusters in France and in Italy are not related. As of 22 October 2017, France has reported two clusters including 17 cases. As of 13 October 2017, Italy has reported 358 chikungunya cases.

**Zika:** Since the last Zika update on 1 September 2017, the changes in the Zika map are:

**Americas:** Mexico changed to "areas with virus transmission following previous virus circulation (WHO Cat. 2)",

**Africa:** Cape Verde changed to "areas with virus transmission following previous virus circulation (WHO Cat. 2)".

## Plague - Madagascar - 2017

Opening date: 15 September 2017

Latest update: 27 October 2017

An outbreak of plague in Madagascar began in August 2017 and expanded rapidly. More than half of the cases reported are due to pneumonic plague. The number of cases and deaths exceeds the previous outbreaks and the majority of the cases have been recorded in the capital of Antananarivo and the main port of Toamasina, the largest cities in Madagascar.

→Update of the week

Since the last CDTR on 20 October, the Madagascar Ministry of Health has reported 454 new plague cases, including 11 fatal cases.

According to the [WHO](#) Regional Office for Africa, as of 20 October, there have been 1 365 cases and 106 deaths (CFR: 7.8%) due to plague in Madagascar in 2017. Among the 1 365, 915 are pneumonic, 275 bubonic, one septicaemic and 174 unspecified plague cases. Of the 1 365 plague cases, 219 cases are confirmed, 520 are probable and 626 have been classified as suspected cases. Of the 915 pneumonic plague cases, 160 have been confirmed, 375 are classified as probable and 380 as suspected cases. Due to the ongoing reclassification process in Madagascar the distribution of cases may vary.

All suspected cases on Seychelles have tested negative for plague.

## Malaria – Cape Verde- 2017

Opening date: 10 August 2017

Latest update: 27 October 2017

In July 2017, Cape Verde reported a sudden increase in malaria cases. According to WHO, Cape Verde is categorised as having a 'very limited risk of malaria transmission area', with limited local transmission from September to November, coinciding with the rainy season.

→Update of the week

Since July 2017 and as of 15 October, the Ministry of Health in Cape Verde reported 300 cases of malaria. This is an increase of 46 cases since the last official report on 24 September 2017.

## Yellow fever – South America – 2016/2017

Opening date: 16 January 2017

Latest update: 27 October 2017

[Yellow fever](#) is a mosquito-borne viral infection occurring in some of the tropical areas of Africa and South America. Brazil experienced an outbreak of yellow fever January - September 2017. Bolivia, Colombia, Ecuador, Peru and Suriname have also reported cases of yellow fever in 2017.

→Update of the week

On 17 October 2017, the [local health authorities in Itatiba](#), State of São Paulo, Brazil, reported a fatal case of yellow fever. The 76 years old man lived in the border region between Itatiba and Jundiá. To date, 13 monkeys have shown positive results for yellow fever. One of them is still under investigation as is an additional human case.

According to the latest epidemiological bulletin from the [São Paulo State Health Department](#), released on 20 October 2017, 51 people have had yellow fever in 2017 in the state, of these 22 were autochthonous cases, and 29 were imported. Of the 22 autochthonous cases, ten died, 94% of the autochthonous cases were male and the median age was 46.5 years, ranging between 2 and 69 years.

According to several [media](#) reports and [ProMed](#) postings, the city of São Paulo plans to vaccinate millions of people against yellow fever in the coming weeks. Vaccinations will be prioritised in the regions close to the parks where dead infected monkeys have been found. According to [media](#), as a precautionary measure, as of 25 October, 15 parks in São Paulo have been closed indefinitely.

## II. Detailed reports

### Travel-associated Legionnaires' disease - Palmanova area, Spain - 2017

Opening date: 11 October 2017

Latest update: 27 October 2017

#### Epidemiological summary

A Legionnaires' disease outbreak has been detected in Palmanova, Mallorca, Spain. As of 26 October, 21 travel-associated cases were reported to ELDSNet with onset dates from 11 September to 7 October 2017. An additional case of Legionnaires' disease is reported concerning an employee at a hotel not associated with any TALD case.

The cases, twelve men and nine women, are between 46 and 87 years old and were in Palmanova two to ten days before falling ill. The 21 travel-associated cases stayed in seven accommodations in Palmanova. One accommodation is associated with nine cases, two accommodations are associated with three cases each. Two hotels are associated with two cases each. Two cases stayed in hotels in Palmanova not associated with other cases. The majority of travel-associated cases are from the United Kingdom (17 cases), but cases are also from France (two cases), the Czech Republic (one case) and Denmark (one case). ELDSNet contact points and tour operators are informed and follow-up is ongoing with Spanish health authorities.

#### ECDC assessment

According to ELDSNet data, the number of reported TALD cases with an association to an accommodation site in Palmanova is about one to four cases per year.

The clustering of TALD cases in this short time period and the involvement of several accommodation sites indicate a community outbreak. The case reported in a local resident working in a hotel not previously identified among the travel-associated cases is a further indicator of this being a community outbreak in a limited geographical area of Palmanova.

#### Actions

Network members and tour operators subscribing to ELDSNet updates have been informed. ECDC continues to monitor this event through the ELDSNet surveillance scheme. ECDC published a [rapid risk assessment](#) on 23 October 2017.

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

Opening date: 11 October 2017

#### Epidemiological summary

*Update Week 2017-42 (16 to 23 October 2017)*

Of the 40 countries reporting on influenza activity, 39 reported low intensity, while Malta reported medium intensity of influenza activity. Only 14 sentinel specimens tested positive for influenza, two thirds of detected viruses were type A and one third type B. Overall, 3% of sentinel specimens were positive for influenza virus. Since week 2017-40, low numbers of influenza viruses have been detected in sentinel specimens, but compared to type B viruses, the proportion of type A viruses has been increasing reaching 64% in week 2017-42.

#### ECDC assessment

As is usual for this time of year, influenza activity is low in the European Region.

#### 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 [WHO Regional Office for Europe website](#).

### West Nile virus – Multistate (Europe) – Monitoring season 2017

Opening date: 30 May 2017

Latest update: 27 October 2017

## Epidemiological summary

Since the beginning of the 2017 transmission season and as of 26 October 2017, the EU Member States reported 197 cases: Romania (64 cases), Italy (55), Greece (48), Hungary (19), Croatia (5), Austria (4), France (1) and Bulgaria (1). Seventy-one cases were reported in neighbouring countries: Serbia (49), Turkey (5) and Israel (17).

Twenty-four deaths due to West Nile fever have been reported since the start of the transmission season: Romania (13 deaths), Greece (5), Hungary (1), Italy (1), Croatia (1), Serbia (2) and Turkey (1).

In equids, EU Member States reported 121 West Nile fever cases through ADNS: 96 in Italy, 14 in Greece, five in Spain, three in Hungary, two in Austria, and one in Portugal.

ECDC link: [ECDC West Nile fever web page](#) | [ECDC: equine West Nile fever web page](#) | [ECDC atlas](#)

Sources: [TESSy](#) and [ADNS](#).

## ECDC assessment

The current West Nile fever epidemiological situation is consistent with observations of seasonal virus transmission from previous years. In accordance with [Commission Directive 2014/110/EU](#), prospective donors should be deferred for 28 days after leaving a risk area for locally-acquired West Nile virus unless the results of an individual nucleic acid test (NAT) are negative.

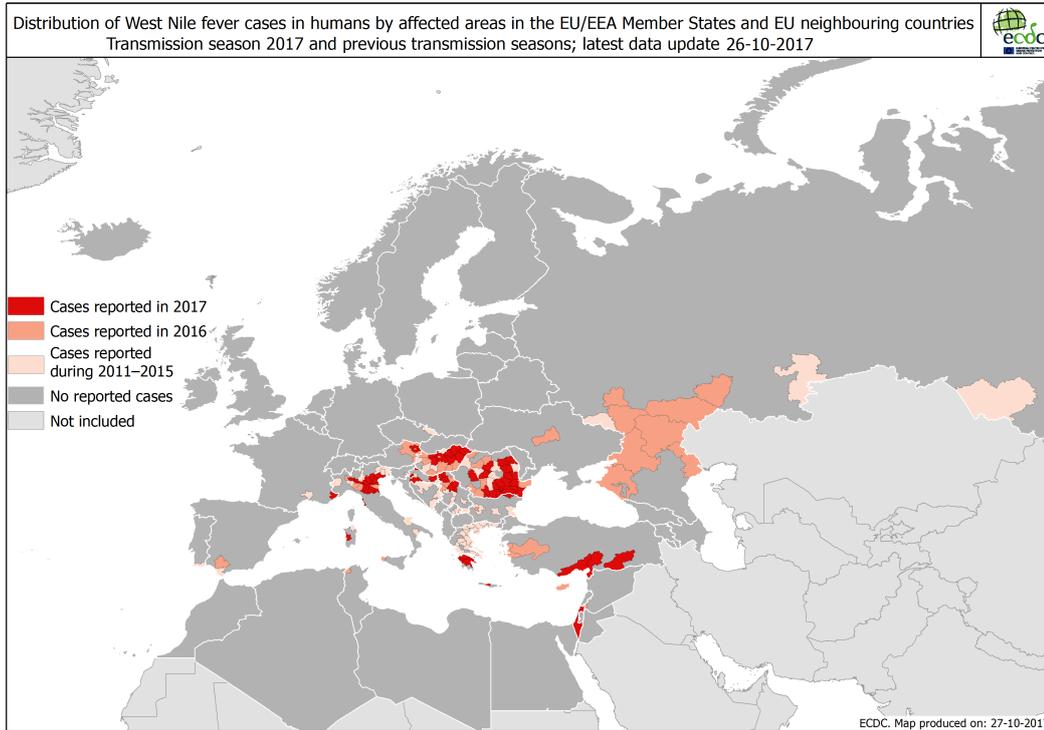
## Actions

Since 6 October 2017, ECDC has been publishing three types of West Nile fever maps: 1) human West Nile fever cases; 2) equine West Nile fever cases; 3) combined human and equine West Nile fever cases. Human cases are collected through The European Surveillance System ([TESSy](#)) and equine cases are collected through the Animal Disease Notification System ([ADNS](#)) of the European Commission. While the distribution of human cases covers EU/EEA countries and neighbouring countries, equine cases cover only EU/EEA countries.

Following a One Health approach, the new maps aim to highlight areas, at the NUTS3 level, where West Nile virus circulates in incidental hosts. Currently, deferral or testing of prospective donors applies to blood donors leaving areas with one or more autochthonous human West Nile virus cases. This set of maps aims to provide better information for European Union Member States so that they can implement preventive measures.

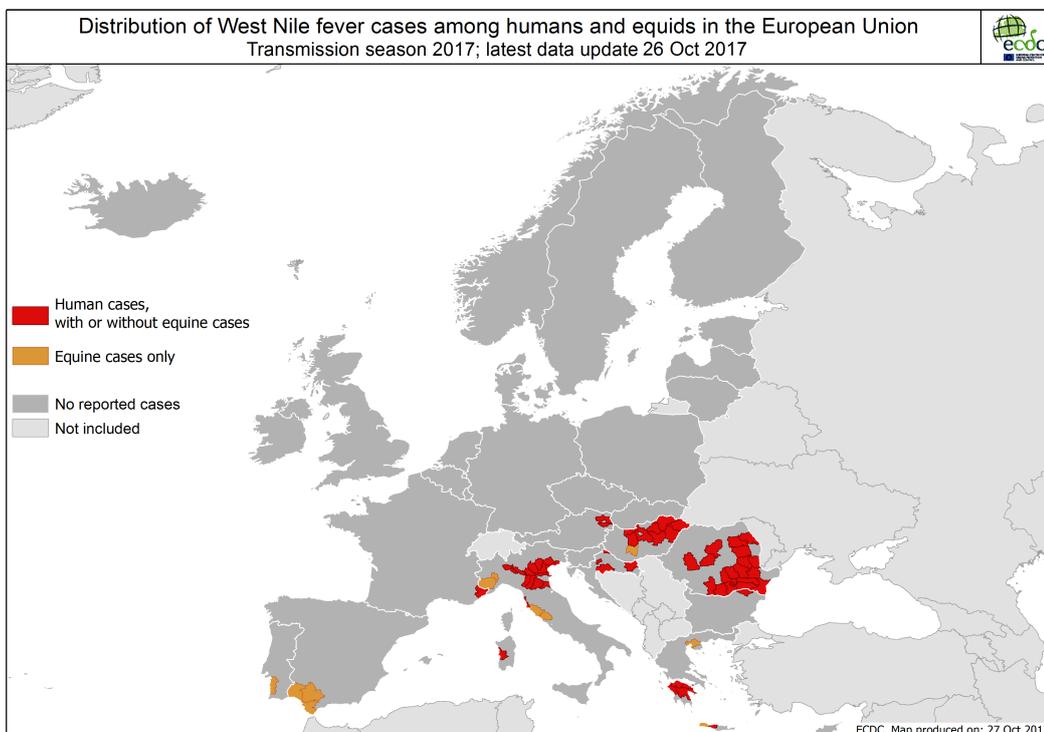
Distribution of human West Nile fever cases by affected areas as of 26 October 2017.

ECDC



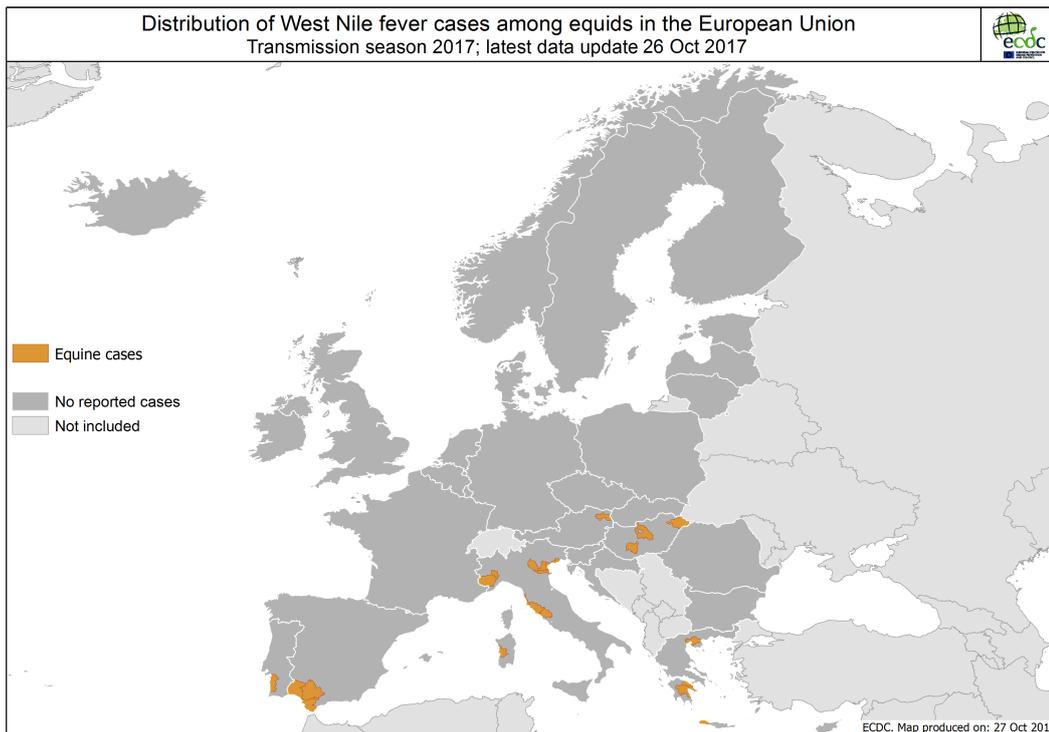
Distribution of West Nile fever cases among humans and equids in the EU as of 26 October 2017.

TESSy and ADNS



Distribution of West Nile fever cases among equids in the EU as of 26 October 2017.

ADNS



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

Opening date: 27 January 2017

Latest update: 27 October 2017

### Epidemiological summary

#### Europe

**Chikungunya:** In 2017, France and Italy have reported autochthonous chikungunya cases. These two events are two distinct events. There is epidemiological and microbiological evidence highlighting the fact that the clusters in France and in Italy are not related. As of 22 October 2017, France has reported two clusters including 17 cases. For additional information for the outbreak in France, please refer to the [Rapid Risk Assessment](#) and the [epi update](#). As of 13 October 2017, Italy has reported 358 cases of chikungunya. For additional information on the outbreak in Italy, please refer to the [first update](#) of the risk assessment on the clusters of autochthonous chikungunya cases in Italy on 9 October 2017.

**Dengue:** In 2017, as of 25 October, no autochthonous dengue cases were detected in EU/EEA Member States.

**Zika:** No mosquito-borne Zika virus transmission has been reported in EU/EEA Member States in 2016 and 2017. In 2017, as of 17 October, 13 countries (Austria, Belgium, the Czech Republic, Denmark, Finland, France, Greece, Ireland, the Netherlands, Norway, Spain, Sweden and the United Kingdom) have reported 140 travel-associated Zika virus infections through The European Surveillance System ([TESSy](#)). The most recent cases with known place of infection had onset of symptoms in week 27, 31 and 38 and travel history to Ecuador, Haiti and Cuba, respectively. In 2017, as of 17 October, six EU/EEA Member States reported 16 Zika cases among pregnant women.

#### Americas and the Caribbean

**Chikungunya:** In 2017, as of 13 October, [PAHO](#) has reported more than 183 000 suspected and confirmed chikungunya cases in the Americas and Caribbean region. This is an increase of 11 000 cases since the last monthly update on 1 September. Brazil represents 94% of the 183 000 cases reported in Americas since the beginning of the year. In 2016, as of 30 September, PAHO reported more than 303 000 cases.

**Dengue:** In 2017, as of 6 October, [PAHO](#) has reported more than 460 000 suspected and confirmed dengue cases, including 246 deaths. This is an increase by 90 000 cases since the previous report on 1 September 2017. Most cases are reported by Brazil (219 040), Peru (72 702), Nicaragua (50 508) and Mexico (44 897). In 2016, as of 27 September, PAHO reported over 2.4 million confirmed and probable cases, including 836 deaths in the Americas and Caribbean region during the same period.

**Zika:** On 12 October 2017, the [Florida Department of Health](#) reported the first locally-acquired case of Zika virus infection in

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2017. According to the health authorities, the case is part of a couple who travelled to Cuba, and one partner developed Zika symptoms shortly after returning home. Evidence suggests that the other partner was infected through a mosquito bite in Manatee County, Florida. However, according to the health authorities, there is no evidence of ongoing transmission of Zika virus.

On 6 October 2017, the state of Texas reported one locally-acquired case of Zika virus infection in Cameron County. According to [media](#) quoting the Cameron County Department of Health and Human Services, the case is a resident of Laguna Heights and likely contracted the virus few months ago.

As of 20 August 2017, [Mexico](#) reported the first two cases of Zika virus infection in Queretaro State. As of 15 October 2017, 17 cases have been reported. In 2017, as of 15 October, Mexico reported 2 063 cases of Zika virus infection compared to 5 189 cases reported in the same period of 2016. The most affected states are Nayarit, Tamaulipas and San Luis Potosí, reporting 393, 474 and 358 cases, respectively.

As of 17 October 2017, 52 cases of Zika virus infection with travel history to Cuba have been reported to TESSy. Of these, 20 cases have been reported in the last three months. The most recent case has date of onset in week 38 of 2017.

From 13 August to 8 October 2017, [Argentina](#) has reported 138 additional locally-acquired cases of Zika virus infection in Salta (133) and Chaco (5) Provinces. This brings the number of locally-acquired confirmed cases in 2017 to 250. The provinces that report cases are: Salta Province (189), Chaco Province (45) and Formosa Province (16).

## Asia

**Chikungunya:** Chikungunya fever cases are reported from Pakistan and India.

In 2017, as of 1 October, [media](#), quoting health authorities in Sindh provinces, reported 4 329 chikungunya cases in Sindh, Pakistan. Karachi is the most affected city with 3 462 cases. In 2016, 495 chikungunya cases have been notified. Additionally, as of 13 October 2017, 147 confirmed cases of chikungunya were reported in [Swabi district](#) in Pakistan.

In 2017, as of 15 October, [India](#) has reported over 41 000 chikungunya suspected cases, compared with 64 057 suspected cases during the entire year 2016 and 27 553 in 2015. Among the 41 000 cases, 12 000 are reported from 10 August to 15 October.

**Dengue:** In 2017, the most affected countries in Asia are Sri Lanka, Vietnam and India. Sri Lanka, Laos, Vietnam and China have reported more dengue cases than the previous year during the same period, while the Philippines, Malaysia, Cambodia and Singapore have reported less cases.

In 2017, as of 17 October, [Sri Lanka](#) has reported around 161 000 suspected dengue cases, including 350 [deaths](#). This is an increase of 17 000 cases since the previous report on 1 September. The highest numbers of dengue cases, 10 590 were reported during week 2017-29 (17-23 July) and a decreasing [trend](#) is observed with 815 cases reported during week 2017-41 (9-15 October). In 2016, Sri Lanka reported approximately 55 000 cases during the entire year. All four virus types of dengue have been seen in Sri Lanka. The current [outbreak](#) is predominantly due to DENV 2, which is not the usual type that circulates in Sri Lanka.

In 2017, as of 29 September, [Laos](#) has reported 9 247 dengue cases, with a declining trend in the past four weeks. In 2016, as of 7 October, 4 137 cases were reported.

In 2017, as of 5 October, [Vietnam](#) has reported more than 143 000 dengue cases, including 30 deaths. This is an increase by 53 000 cases since the previous report on 1 September. There is a consistent downward trend for the past seven weeks. In [2016](#), as of 30 September, more than 79 000 cases of dengue including 27 deaths, were reported.

In 2017, as of 2 September, the [Philippines](#) has reported more than 76 000 cases, an increase by 32 000 cases since the previous report on 1 September. Among the 76 000 cases, 413 deaths were reported. In 2016, during the same period around 140 000 cases were reported.

In 2017 as of 7 October, [Myanmar](#) has reported over 26 000 cases, and increase of 11 000 cases since the previous report on 1 September.

In 2017, as of 16 October, [Thailand](#) has reported more than 24 000 dengue cases, including two deaths. This is an increase by 6 000 cases since the previous report on 1 September.

In 2017, as of 15 October, [India](#) has reported more than 87 000 dengue cases, including 151 deaths, compared with 129 166 cases, including 245 deaths, during the entire year 2016. Among the 87 000 cases, 51 000 are reported from 20 August to 15 October.

In 2017, as of 31 August, [China](#) has reported 1 477 dengue cases, which is higher compared to the same period in 2016 (850 cases).

In 2017, as of 15 October, [Taiwan](#) reported nine local dengue cases.

In 2017, as of 3 October, [Cambodia](#) has reported 2 534 suspected dengue cases in 2017, which is lower than during the same period in 2014–2016.

In 2017, as of 17 October, [Malaysia](#) has reported over 73 000, compared with almost 88 000 cases during the same period in 2016.

In 2017, as of 30 September, [Singapore](#) has reported 2 116 dengue cases in 2017, which is lower than during the same period in 2013–2016.

Between July 2017 and mid-October, [Pakistan](#) has reported more than 87 000 suspected dengue cases in the province of Khyber Pakhtunkhwa, including 56 deaths. Of the 87 000 suspected cases almost 19 000 are laboratory-confirmed. The capital of the province, Peshawar, is most affected, reporting over 90% of the cases reported in the province. DENV 2 has been identified as the circulating strain.

In 2017, as of 1 September, [Nepal](#) has reported at least 34 dengue cases in Kathmandu. Additionally, more than 40 dengue cases were reported from Lalbandi, Sarlahi district during the last two weeks of August.

#### **Zika:**

In 2017, as of 24 October, [Singapore](#) has reported 66 cases of Zika virus infection. This represents an increase of three cases compared to the previous update as of 24 August.

In 2017, [Australia](#) has reported two cases of Zika virus infection with travel history to Thailand for the surveillance period from 10 July to 7 October.

On 19 September 2017, the [Taiwan](#) Centers for Disease Control reported one case of Zika virus infection with travel history to Manila, the Philippines.

On 20 September 2017, [media](#) quoting the local health authorities in Vietnam, reports one case of Zika virus infection in Vinh Long Province.

#### **Australia and the Pacific**

**Chikungunya:** No outbreaks detected.

#### **Dengue:**

In 2017, as of 10 October, [Australia](#) reported 801 laboratory-confirmed dengue cases in 2017, which is fewer cases than during the same time period in 2012–2016. The number of cases refer to both imported and non-imported cases. In Australia, non-imported cases only occur only in Queensland.

Between 11 and 24 September 2017, [French Polynesia](#) reported 30 dengue cases, of which 20 were confirmed as DENV 1 infection.

In 2017, as of 3 October, [New Caledonia](#) reported 4 401 dengue cases. The circulating serotypes are of type DENV 1, DENV 2 and DENV 3. The weekly number of cases is decreasing.

In 2017, As of 10 October, [Palau](#) has reported 472 dengue cases, including five deaths. The outbreak is now declining. In 2016, 53 cases were recorded.

In 2017, as of 18 September 2017, [American Samoa](#) has reported through media 201 confirmed cases, DENV 2 has been identified as the circulating strain.

**Zika:** No outbreaks detected.

#### **Africa**

**Chikungunya:** No outbreaks detected.

#### **Dengue:**

In 2017, as of 29 August, [Ivory Coast](#) has reported 1 231 suspected dengue cases, of which 311 are confirmed. Two deaths have

been reported. Three of the four dengue virus (DENV) subtypes have been identified: DENV 2 (181 cases), DENV 3 (78 cases) and DENV 1 (13 cases). Most of the cases (97%) occurred in Abidjan.

Between mid-December 2015 and as of 10 September 2017, [Seychelles](#) has reported 3 878 suspected dengue cases including three deaths. DENV 2 is predominating. The outbreak peaked in week 2016-24 (13-19 June). A second smaller peak was observed between 15 May and 11 June 2017.

In 2017, as of 2 October, [La Réunion](#) has reported 75 locally-acquired dengue cases, which presents currently a low activity.

In 2017, as of 17 October, [Burkina Faso](#) has reported 4 098 suspected cases including 11 deaths (CFR: 0.3%). DENV 1, 2 and 3 is circulating. On 28 September 2017, the Ministry of Health formally declared the outbreak. Cases are currently reported in 12 of the country's 13 health regions, with 65% of cases reported in the central region, particularly in the city of Ouagadougou.

In 2017, as of 1 October, [Mali](#) reported 262 cases of dengue fever of which 25 confirmed.

In 2017, as of 19 October, [Egypt](#) reported 101 suspected dengue cases of dengue fever in the Red Sea governorate. Nine of the 101 cases are confirmed.

#### **Zika:**

According to the TESSy data as of 17 October 2017, one case of Zika virus infection with travel history to Nigeria has been reported in week 27 of 2017.

### ECDC assessment

**Chikungunya:** Outbreaks are still ongoing in the Americas and in Asia.

In France and Italy, the report of a cluster of autochthonous chikungunya cases in areas of Europe where *Aedes albopictus* is established is not unexpected during the summer months, when environmental conditions are favourable for mosquitoes. The risk of new clusters of local transmission emerging in the EU is currently considered moderate for chikungunya and dengue, as these diseases are endemic in large areas of the intertropical zone, repeated introductions occur through viraemic travellers returning from these areas, and weather conditions are currently suitable for *Aedes albopictus* activity in areas where it is established.

**Dengue:** Dengue is widely spread in tropical and subtropical regions.

**Zika:** Despite the decrease in intensity of Zika virus transmission after the 2016 wave, cases are still 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.

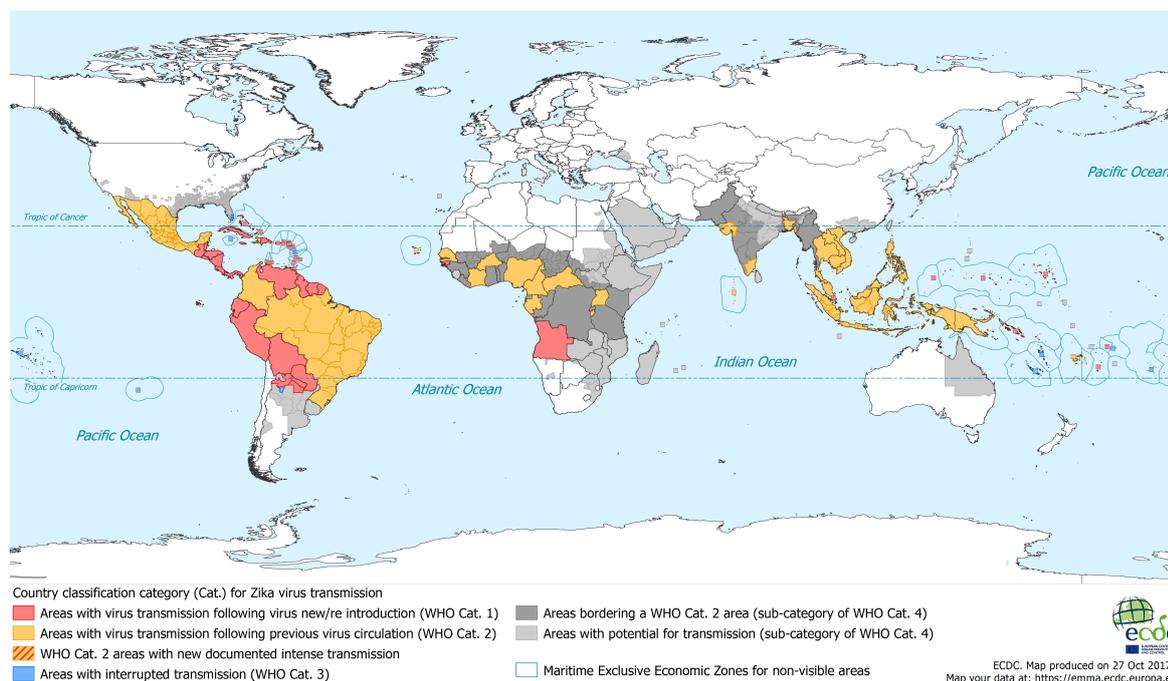
Europe is vulnerable to the autochthonous transmission of arboviruses. The risk of onward transmission in Europe is linked to importation of the virus by viraemic patients in areas with competent vectors (*Aedes albopictus* in mainland Europe, primarily around the Mediterranean, and *Aedes aegypti* on 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 4 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.

## Countries and territories with reported confirmed autochthonous vector-borne transmission worldwide of Zika virus infection as of 27 October 2017

ECDC



## Plague - Madagascar - 2017

Opening date: 15 September 2017

Latest update: 27 October 2017

### Epidemiological summary

The outbreak began in August 2017 with the death from pneumonic plague of a 31-year-old man who had been travelling in a crowded minibus taxi toward the capital city of Antananarivo in the central highlands. The outbreak was initially recognised on 11 September by local authorities.

Since the last CDTR update on 20 October, the Madagascar Ministry of Health has reported 454 new plague cases, including 11 fatal cases. Between 1 August and 20 October 2017, WHO has reported 1 365 plague cases, including 106 deaths (CFR: 7.8%). Pneumonic plague accounts for 915 cases, bubonic plague for 275 cases, septicaemic plague for one case and 174 cases are unspecified. Among cases, 219 cases are confirmed, 520 are probable and 626 have been classified as suspected. Regarding the 915 pneumonic plague cases, 160 have been confirmed, 375 are probable and 380 have been classified as suspected cases.

At least 54 healthcare workers have contracted plague since the beginning of the outbreak. The district of Antananarivo

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Renivohitra, where the capital city of Antananarivo is located, is the most affected, accounting for 41.4% of all reported cases. The current pulmonary plague outbreak has affected major urban centres including the capital Antananarivo with three million inhabitants, and the port city of Toamasina with around 275 000 inhabitants on the east coast. In addition, sporadic cases of pneumonic plague without apparent epidemiological links with the initial cluster have been reported in several regions across the country. Overall, 40 out of 114 districts in 14 of 22 regions in the country have been affected by pulmonary plague.

On 10 October, the Ministry of Health of the Seychelles issued a statement about a case of plague in a returning traveller from Madagascar. The case was isolated and received antibiotic treatment. As of 17 October 2017, ten laboratory specimens have been collected from suspected and probable cases. All tested negative by PCR at WHO Collaborating Centre for plague at the Institute Pasteur in Paris, France. Over 320 contact persons of the index case, including 41 passengers and seven crew from the flight, 12 close family members, and 18 staff and patients from the health centre visited by the index case, completed follow-up and monitoring on 13 October 2017. All were provided with a prophylactic course of antibiotics to prevent the disease. Overall, 1 223 contacts were registered and followed-up. All contacts that were isolated in the hospital have been discharged home, including the index case, and passive surveillance and antibiotic prophylaxis has been discontinued to all his contacts. Mauritius, another neighbouring country, identified two suspected plague cases according to local media that tested negative. To date, no cases outside of Madagascar related to this outbreak have been confirmed for plague.

**ECDC links:** [Plague factsheet](#)

**Sources:** [WHO Africa](#), [MoH Seychelles](#), [media](#),

### ECDC assessment

While plague outbreaks in Madagascar are not unexpected, the high proportion of pneumonic plague cases is of concern. The current outbreak is the largest in the last decade in Madagascar. The risk of further transmission in the country is considered very high until public health prevention and control measures are fully implemented with the support of the World Health Organization (WHO) and international partners working in the country. The risk of regional spread in the Indian Ocean region is considered moderate.

The risk to travellers from the EU or for importation to the EU is considered low. WHO considers the risk for international spread of plague to be very low and advises against any restrictions to travel and trade with Madagascar based on the information to date. There is no restriction of movement in and out of Antananarivo, where cases have occurred, in accordance with the recommendations of the Malagasy authorities. However, Malagasy authorities are placing sanitary controls on the entry and exit from different cities in order to reduce the risk of epidemic propagation.

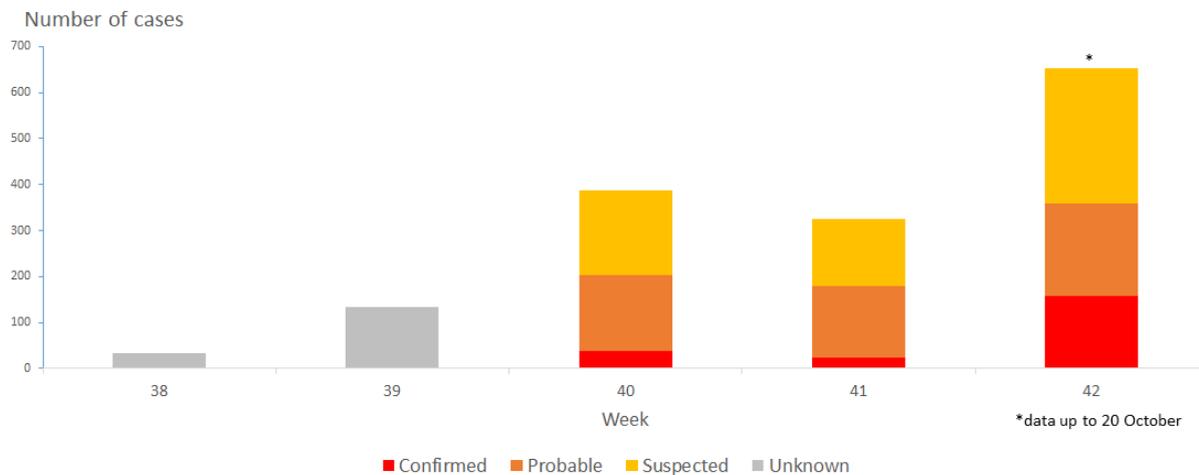
According to WHO, prophylactic treatment is only recommended for persons who have been in close contact with plague cases, or who have experienced other high-risk exposure such as flea bites or direct contact with bodily fluids or tissue from infected animals.

### Actions

ECDC published a [rapid risk assessment](#) on 9 October 2017 and an [update](#) on 13 October 2017. ECDC is preparing an epidemiological update.

## Distribution of plague cases per reporting week, Madagascar, weeks 2017-38 to 2017-42

Data source: WHO



Please note that there is still uncertainty on the correct numbers due to case reclassification and reporting delays

## Malaria – Cape Verde- 2017

Opening date: 10 August 2017

Latest update: 27 October 2017

### Epidemiological summary

In July 2017, Cape Verde reported a sudden increase in the number of malaria cases. According to WHO, Cape Verde is categorised as a 'very limited risk of malaria transmission area', with limited local transmission from September to November, coinciding with the rainy season. As of 15 October 2017, 300 cases are reported. The epicentre of the outbreak is located in the capital city of Praia in Santiago Island.

The UK National Travel Health Network and Centre (NaTHNaC) updated the travel recommendation on 5 September, stating that there was a 'very low' risk of malaria on the Island of Santiago (Sao Tiago), except in the city of Praia where the risk had risen to 'low'. For all travellers, awareness of risk and bite avoidance is recommended. Travellers to the city of Praia who are at higher risk of malaria (such as long-term travellers, or those who are at risk of severe complications from malaria, e.g. pregnant women, infants and young children, the elderly, and travellers who do not have a functioning spleen) should consider taking chemoprophylaxis with atovaquone-proguanil, doxycycline or mefloquine.

**Background:** According to WHO, the risk of malaria for Cape Verde is considered as type A, very limited risk of malaria transmission. The most recent major outbreaks were reported in 1999 with 140 cases and 2001 with 95 cases. In the past ten years, autochthonous cases in Praia have not exceeded 30 per year.

**ECDC link:** [ECDC malaria page](#)

**Sources:** [Cape Verde Ministry of Health](#) | [WHO](#) | [NaTHNaC](#) | [Portugal](#) | [media](#) | [media](#)

### ECDC assessment

The increase of autochthonous malaria cases in Cape Verde during the rainy season, between August and November, is of concern. More cases are likely to be reported in the coming weeks. EU Member States should consider to reinforce malaria prevention measures for travellers.

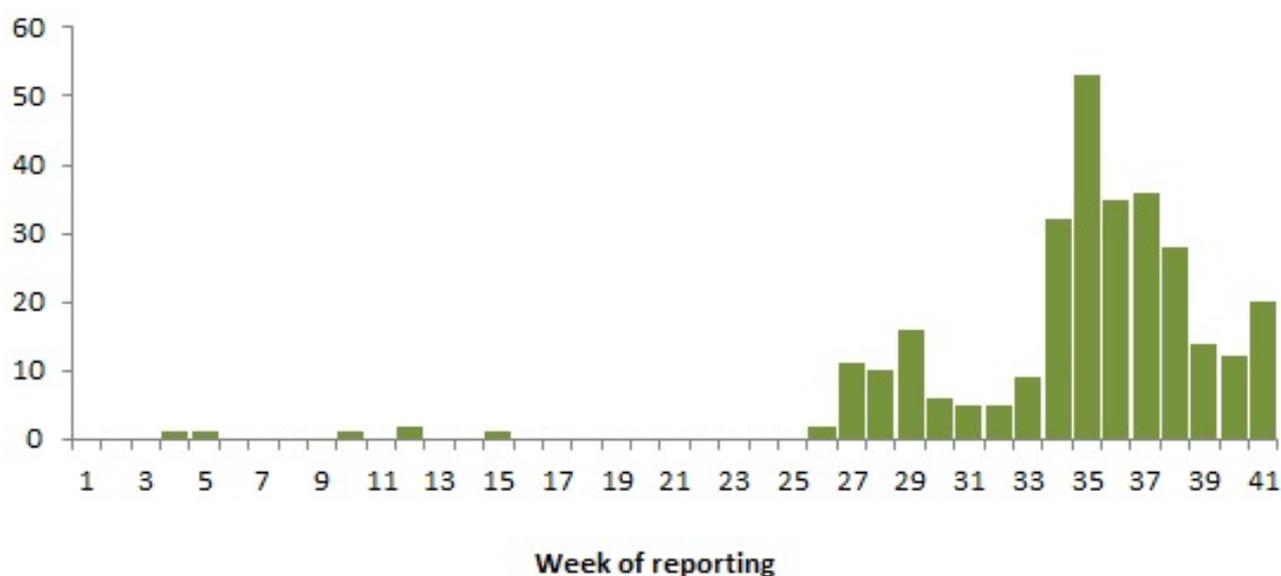
### Actions

ECDC is monitoring this event through epidemic intelligence.

## Number of autochthonous malaria cases by week of reporting as of week 41 - 2017, Cape Verde

MoH Cape Verde

### Number of cases



## Yellow fever – South America – 2016/2017

Opening date: 16 January 2017

Latest update: 27 October 2017

### Epidemiological summary

The latest available epidemiological situation on country level in Brazil and rest of South America.

**Brazil:** Between 6 January and 10 July 2017, Brazil has reported 1 316 cases of yellow fever (519 suspected and 797 confirmed), including 311 deaths (37 among suspected and 274 among confirmed cases). The case-fatality rate is 23.6% overall and 34.5% among confirmed cases. Nine states have reported confirmed autochthonous transmission: Distrito Federal, Espírito Santo, Goiás, Mato Grosso, Minas Gerais, Pará, Rio de Janeiro, São Paulo and Tocantins. Eight states have reported suspected autochthonous transmission: Amapá, Bahia, Maranhão, Mato Grosso do Sul, Paraná, Rio Grande do Sul, Rondônia and Santa Catarina.

14/17

***Other countries in South America:*** From the beginning of 2017 to 28 May, five other countries have reported suspected and/or confirmed cases of yellow fever: Peru (20), Colombia (6), Bolivia (2), Ecuador (2) and Suriname (1).

**Sources:** [Brazil MoH](#) | [PAHO](#) | [WHO vaccination recommendations](#) | [Brazil MoH notification](#)

### ECDC assessment

In Brazil, the decrease of the vector activity and the ongoing vaccination campaign has resulted in a reduction in the monthly number of reported yellow fever cases. However the outbreak should be carefully monitored, as the establishment of an urban cycle of yellow fever would have the potential to quickly affect a large number of people.

In Europe, *Aedes aegypti*, the primary vector of yellow fever in urban settings, is present in Madeira. 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 low.

### Actions

ECDC updated its [rapid risk assessment](#) on 13 April 2017. ECDC [map for travel advice](#) produced in July 2017, remains valid however can be revised to reflect the latest international vaccination recommendations.

Distribution of confirmed human cases of yellow fever in Brazil by week of reporting from 6 January to 7 July 2017

ECDC



Confirmed cases of locally-acquired yellow fever, as of 07 July 2017

-  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: 13 Jul 2017  
 ECDC map maker: <https://emma.ecdc.europa.eu>

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