

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

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

Opening date: 30 May 2017

Latest update: 20 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 in order to inform the blood safety authorities about areas with ongoing virus transmission. In 2016, 225 human cases of West Nile fever were reported in the EU Member States and 267 cases were reported in the neighbouring countries.

Update of the week

Between 12 and 19 October 2017, Turkey reported five cases and Romania reported two cases. Greece and Italy both reported one case. One of the cases reported in Turkey is in a newly affected area. All other cases were notified in areas already considered to be affected.

Turkey also reported one death due to West Nile fever.

In addition, Italy reported three equine West Nile fever cases through the Animal Disease Notification System (ADNS) of the European Commission.

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

Chikungunya - Europe - 2017

Opening date: 15 September 2017

Latest update: 20 October 2017

Since August 2017, both France and Italy have reported autochthonous transmission of chikungunya virus. In France, the Var department is affected; in Italy, the Lazio and Calabria regions reported autochthonous transmission. The two events involve strains of different origin and are therefore not related.

→Update of the week

As of 13 October 2017, the ministry of health in Italy has reported 297 chikungunya cases in the Lazio region, 170 of which are confirmed, and 54 cases in Guardavalle marina, Calabria region, where nine of these cases were confirmed. This brings the number of chikungunya cases in the country to 358.

Since the previous CDTR and as of 15 October 2017, France has not reported any additional chikungunya cases.

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

Opening date: 11 October 2017

Latest update: 20 October 2017

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

Update of the week

Update Week 2017-41 (9 to 16 October 2017)

Week 2017-41 (9 to 16 October 2017) marks the second weekly influenza report for the 2017-2018 season. Low influenza activity was reported by all 39 reporting countries. Overall, 2% of sentinel specimens were positive for influenza. Influenza viruses were detected sporadically in sentinel specimens, with equal numbers of influenza A and B type viruses being detected.

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

Opening date: 11 October 2017

Latest update: 20 October 2017

A rapidly evolving cluster of travel-associated Legionnaires' disease (TALD) 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

As of 18 October 2017, six additional cases were reported to ELDSNet since the previous report on 13 October 2017. Of those, five are travel-associated legionnaires' disease (TALD) and one is a case of legionnaires' disease in a hotel worker in a hotel in Palmanova with no previous travel-associated cases reported to ELDSNet.

Non EU Threats

Plague - Madagascar - 2017

Opening date: 15 September 2017

Latest update: 20 October 2017

Since August 2017, Madagascar has been experiencing a large outbreak of bubonic and pulmonary plague that is affecting major cities and other non-endemic areas.

On 14 September 2017, the news media reported five pulmonary plague deaths in Madagascar. These deaths occurred between 28 August and 11 September 2017. Among these deaths, one occurred in the capital. The index case took a taxi from Ankazobe to Toamasina. He died on the way and contaminated two people in the taxi; these two people died in Toamasina within 24 hours of infection. Two women who were from the same family as the two fatal cases in Toamasina were also infected. One of the women died in Antananarivo, the capital; the second woman died in a taxi in the southern part of the capital.

Update of the week

On 19 October 2017, the Madagascar ministry of health published an epidemiological bulletin reporting 911 cases and 95 deaths (CFR: 10.4%). Among these cases, 612 were pneumonic, 175 were bubonic, and 124 were unspecified. This was the last report which provided data for each type of plague. This is an increase by 350 cases and 38 deaths since the last CDTR update on 13 October 2017. As of 18 October, the UN reports 1 032 plague cases in Madagascar, 67% of which are pneumonic plague cases, including 89 deaths.

On 18 October 2017, the ministry of health of the Seychelles reported that all samples sent to Institut Pasteur in Paris tested negative. All patients that were under isolation procedures within hospital premises have been discharged. All flights between the Seychelles and Madagascar remain cancelled. Active surveillance is ongoing, and all passengers coming from Madagascar via a third country are transferred to a military academy for active surveillance.

Sources: [UN](#)

II. Detailed reports

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

Opening date: 30 May 2017

Latest update: 20 October 2017

Epidemiological summary

Since the beginning of the 2017 transmission season and as of 19 October 2017, the EU Member States reported 193 cases: Romania (62 cases), Italy (54), Greece (48), Hungary (19), Croatia (5), Austria (4) and Bulgaria (1). Sixty-eight cases were reported in neighbouring countries: Serbia (46), Turkey (5) and Israel (17). Twenty deaths due to West Nile fever have been reported since the start of the transmission season: Romania (10 deaths), Greece (5), Hungary (1), Italy (1), Croatia (1), Serbia (1), Turkey (1).

In equids, EU Member States reported 111 West Nile fever cases through ADNS: 91 in Italy, 13 in Greece, three in Hungary, two in Austria, one in Spain, 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 reports on this threat on a weekly basis during the West Nile season.

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.

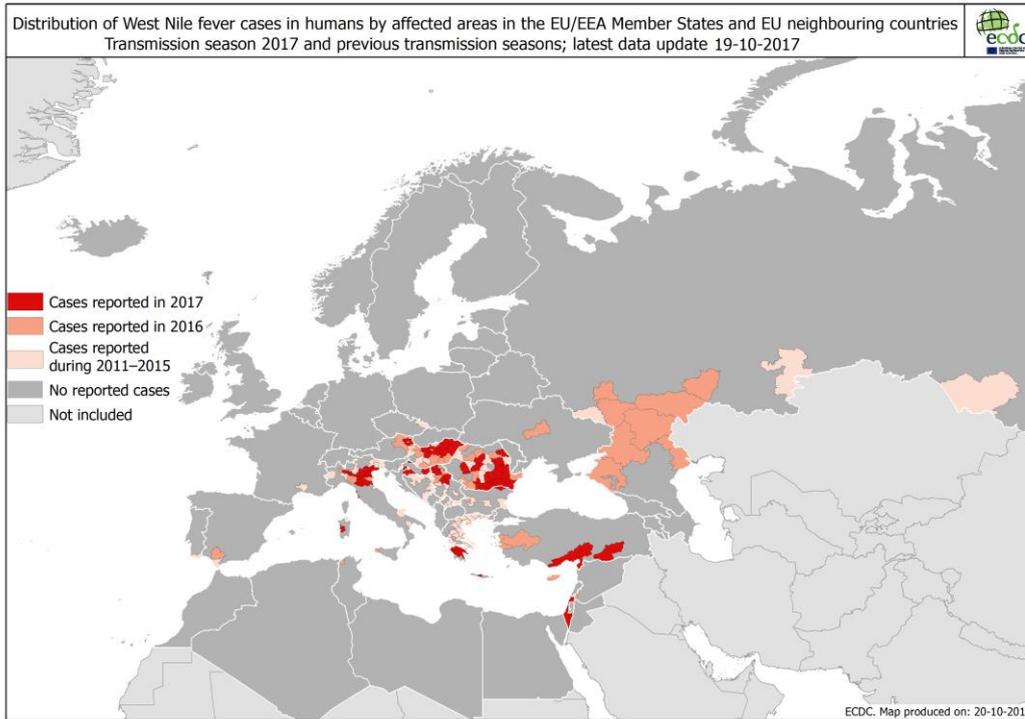
Actions

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.

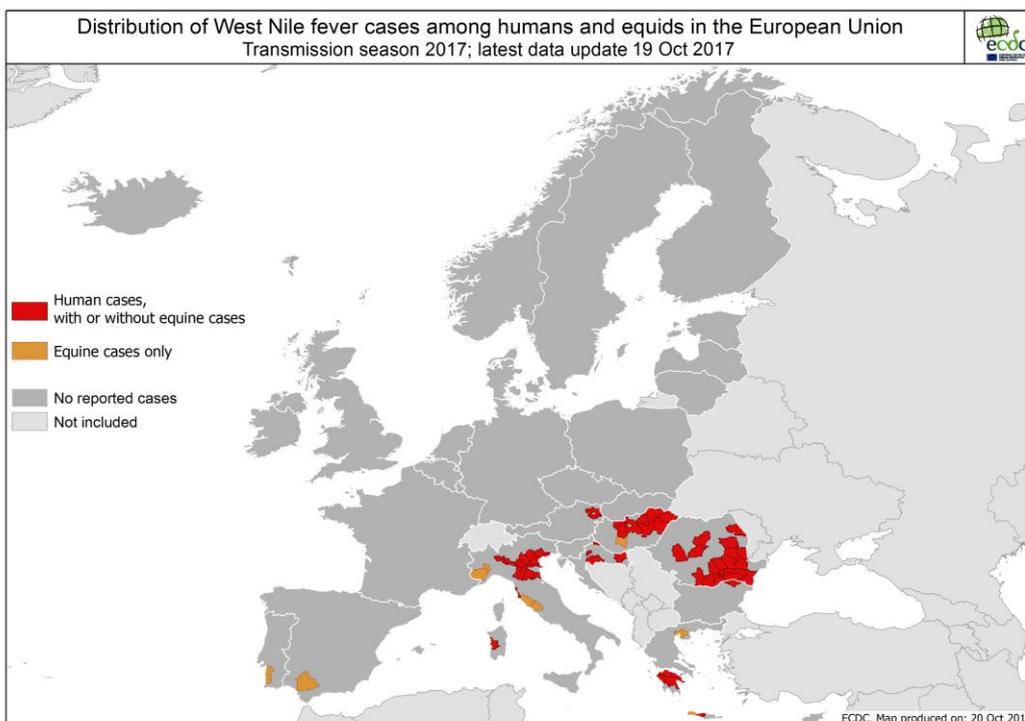
Distribution of human West Nile fever cases by affected areas as of 19 October 2017.

ECDC



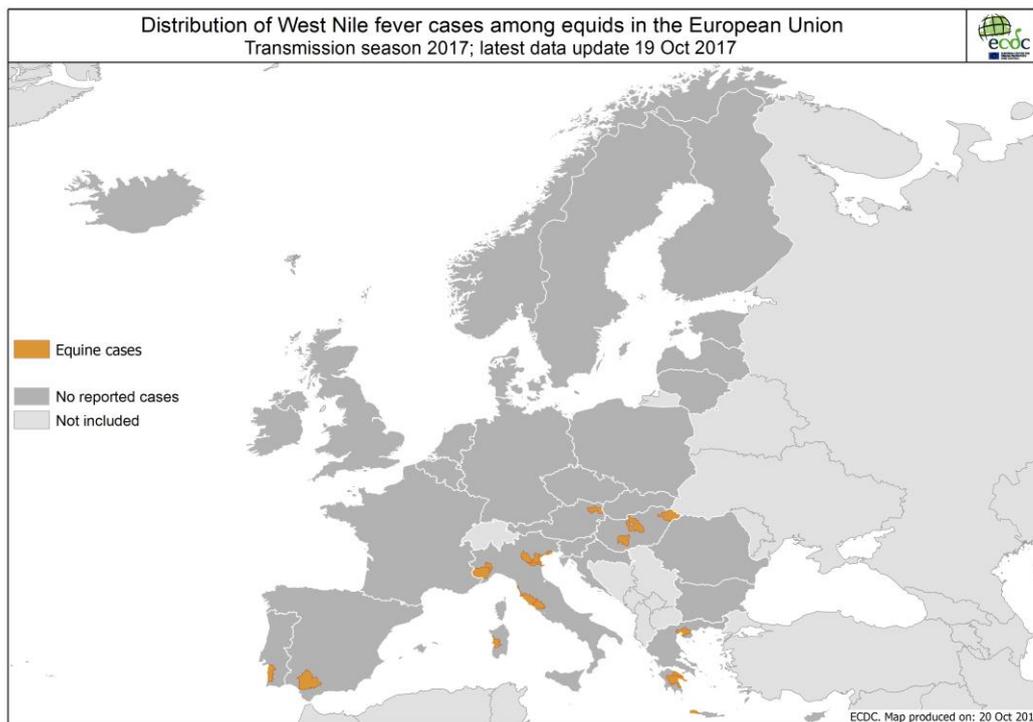
Distribution of West Nile fever cases among humans and equids in the EU as of 19 October 2017.

TESSy and ADNS



Distribution of West Nile fever cases among equids in the EU as of 19 October 2017.

ADNS



Chikungunya - Europe - 2017

Opening date: 15 September 2017

Latest update: 20 October 2017

Epidemiological summary

The two events described below in France and in Italy are two distinct events. There is epidemiological and microbiological evidence highlighting the fact that the clusters in France and in Italy are not related.

On 11 August 2017, France reported through the EWRS an outbreak of autochthonous chikungunya cases in the Var department, southern France. As of 15 October 2017, France has reported two clusters including 17 cases. The first cluster, in Cannet-des-Maures, includes eleven cases (eight confirmed, two probable and one suspected). The second cluster, in Taradeau includes five confirmed cases and one probable case. Taradeau commune is 13 kilometres away from Cannet-des-Maures. There is an epidemiological link between the cases in Taradeau and Cannet-des-Maures, indicating that the two clusters are related. As stated in the Eurosurveillance article '[Preliminary report of an autochthonous chikungunya outbreak in France, July to September 2017](#)' published 28 September 2017, the virus circulating in France belongs to an East Central South African (ECSA) sub-lineage that includes isolates from the Central African region (e.g. Gabon, Republic of Congo). The virus isolated from the index patient is carrying the E1-A226V mutation. Full genome analysis is ongoing and the sequence will be submitted to GenBank.

As of 13 October 2017, Italy has reported 358 cases of chikungunya. Of these, 297 cases have been reported in the Lazio region, 170 of which are confirmed, and 54 were reported in Guardavalle marina, Calabria region, of which nine are confirmed cases. In addition, three confirmed cases with a travel history to Anzio have been reported in Emilia-Romagna (1), Marche (1) and France (1). One confirmed case with travel history to Rome was reported in Germany. Furthermore, three probable cases with travel history to Guardavalle marina were reported in Emilia-Romagna. As stated in the Eurosurveillance article '[Detection of a chikungunya outbreak in Central Italy, August to September 2017](#)' published 28 September, the virus circulating in Italy belongs to the East Central South African (ECSA) lineage and does not carry the E1-A226V mutation. The outbreak sequence is available in GenBank.

Sources: [Lazio Region](#) | [MoH Italy](#) | [ISS](#) | [France ARS PACA](#)

ECDC links: Rapid risk assessment on [cluster of autochthonous chikungunya cases in France](#) | Rapid risk assessment on [clusters of autochthonous chikungunya cases in Italy](#)

ECDC assessment

The two outbreaks in France and Italy are unrelated and result from separate introductions of the virus, probably from Africa and Asia, respectively. Having concurrent, distinct outbreaks of chikungunya in France and Italy highlights that the environmental conditions in 2017 are favourable for the local transmission of introduced chikungunya virus strains.

In France, response measures, including vector control, have been implemented. The fact that the strain harbours the E 1-A226V mutation may explain the relatively larger number of autochthonous cases observed this year compared to the 2010 outbreak in the same region (i.e. two cases reported in 2010). The conclusions of the latest ECDC rapid risk assessment published on 24 August 2017 ('Cluster of autochthonous chikungunya cases in France') remain valid.

In Italy, this is the first known transmission of chikungunya in central and southern Italy. In the absence of herd immunity, most of the inhabitants should be considered as susceptible to chikungunya virus disease. The likelihood of further spread within Italy is still moderate, with suitable but less favourable conditions for vector activity in the coming weeks. In the areas already affected, more cases can be expected to be identified in the near future. There is a low likelihood of the virus being introduced to other EU countries. There is an equally low likelihood of subsequent local transmission in other EU countries where *Aedes albopictus* is present and active.

Actions

ECDC has published a [rapid risk assessment on the cluster of autochthonous chikungunya cases in France](#) on 24 August 2017 and a [rapid risk assessment on the clusters of autochthonous chikungunya cases in Italy](#) on 14 September 2017. ECDC published the first update of the [risk assessment on the clusters of autochthonous chikungunya cases in Italy](#) on 9 October 2017.

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

Opening date: 11 October 2017

Latest update: 20 October 2017

Epidemiological summary

Update Week 2017-41 (9 to 16 October 2017)

Week 2017-41 (9 to 16 October 2017) is the second weekly influenza report for the 2017-2018 season. Low influenza activity was reported by all 39 reporting countries. Overall, 2% of sentinel specimens were positive for influenza. Influenza viruses were detected sporadically in sentinel specimens, with equal numbers of influenza A and B type viruses being detected.

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](#).

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

Opening date: 11 October 2017

Latest update: 20 October 2017

Epidemiological summary

A legionnaires' disease outbreak has been detected in Palmanova, Mallorca, Spain. As of 18 October 2017, 18 travel-associated cases were reported to ELDSNet with onset dates from 11 September to 7 October 2017. One non-travel associated legionnaires' disease case has been detected in a worker of a hotel that was not previously related to this cluster.

The 18 cases stayed in six accommodations in Palmanova, one of which is associated with nine cases and two others are associated with three cases each. Three cases stayed in hotels in Palmanova not associated with other cases.

The majority of travel-associated cases are reported from the United Kingdom (14 cases), but cases are also reported from France (two cases), the Czech Republic (one case) and Denmark (one case).

ECDC assessment

The additional 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.

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. This shows that the number of cases currently being observed is very unusual.

ECDC's ongoing monitoring of the situation is based on the continued timely reporting of TALD cases by the EU Member States through the ELDSNet surveillance scheme.

There are a number of options that EU Member States may want to consider:

- Inform travellers & minus; particularly those over 50 years of age, smokers and immunocompromised persons & minus; to seek medical advice if they experience severe respiratory infection symptoms up to two weeks after travelling in order to ensure early and appropriate diagnosis and treatment.
- Remind clinicians to consider Legionnaires' disease in patients presenting with pneumonia and a history of travel in the two weeks prior to disease onset.

Actions

Network members and tour operators subscribing to ELDSNet updates have been informed. ECDC is monitoring this event and is preparing a rapid risk assessment to be circulated to the European Commission and the Member States on 20 October 2017.

Plague - Madagascar - 2017

Opening date: 15 September 2017

Latest update: 20 October 2017

Epidemiological summary

Since the last CDTR update on 13 October, the Madagascar ministry of health has reported 350 new plague cases, including an additional 38 fatal cases. As of 19 October 2018, the Madagascar ministry of health has reported 911 plague cases, including 95 deaths (CFR: 10.4%) in Madagascar. As of 18 October, the UN reports 1 032 plague cases in Madagascar, 67% of which are pneumonic plague cases, including 89 deaths.

On 29 September 2017, the Malagasy health authorities confirmed a fatal case of pneumonic plague in a basketball coach from the Seychelles participating in the Indian Ocean Club basketball championship (Coupe des clubs Champions de l'Océan Indien de Basketball, 23 September to 1 October, Madagascar). The case died in a hospital in Madagascar on 27 September. The source of transmission for this case remains unknown.

On 11 October, the ministry of health of the Seychelles reported one case in a returning traveller from Madagascar. The case, a 34-year-old man, returned to the Seychelles on 6 October, with onset of symptoms on 9 October. The case was confirmed on 10 October. On 12 October, the Ministry of Health acknowledged a new case without epidemiological link to the first case. This second case, in a person who is not a citizen of the Seychelles and without epidemiological link to the first case, had onset of symptoms on 10 October. The rapid test for plague was weakly positive. Since then, up to thirteen people were placed under isolation procedures within hospital premises. On 18 October 2017, all patients were laboratory tested as negative in definitive blood tests carried out at the Institut Pasteur in Paris, France. All patients that were under isolation procedures within hospital premises were discharged. To date, all flights between the Seychelles and Madagascar remain cancelled. Active surveillance is ongoing, and all passengers coming from Madagascar via a third country are transferred to a military academy for active surveillance.

ECDC links: [Plague factsheet](#)

Sources: [MoH Madagascar](#), [MoH Seychelles](#), [media](#), [UN](#)

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 of 13 districts in order to reduce the risk of epidemic propagation.

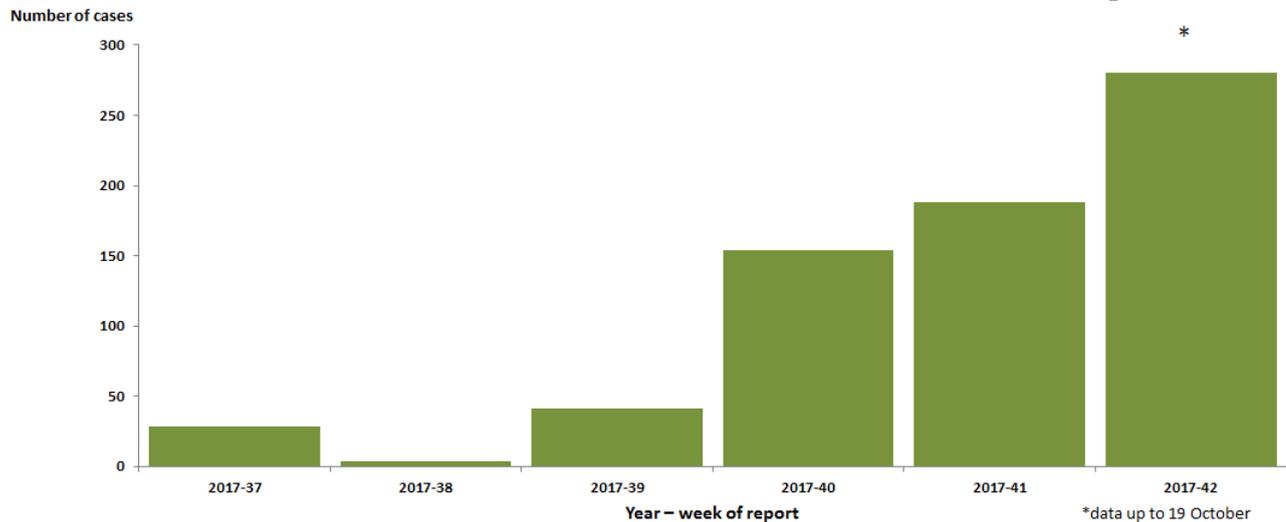
According to WHO, prophylactic treatment is only recommended for persons who have been in close contact with plague cases, or who have experienced other high-risk exposure such as flea bites or direct contact with bodily fluids or tissue from infected animals.

Actions

ECDC published a [rapid risk assessment](#) on 9 October 2017 and an [update](#) on 13 October 2017. ECDC raised its PHE level to 'PHE Level 1' on 13 October 2017 and is currently preparing documentation on country preparedness and response.

Pneumonic plague cases by week of report, week 2017-37 to 2017- 42, Madagascar

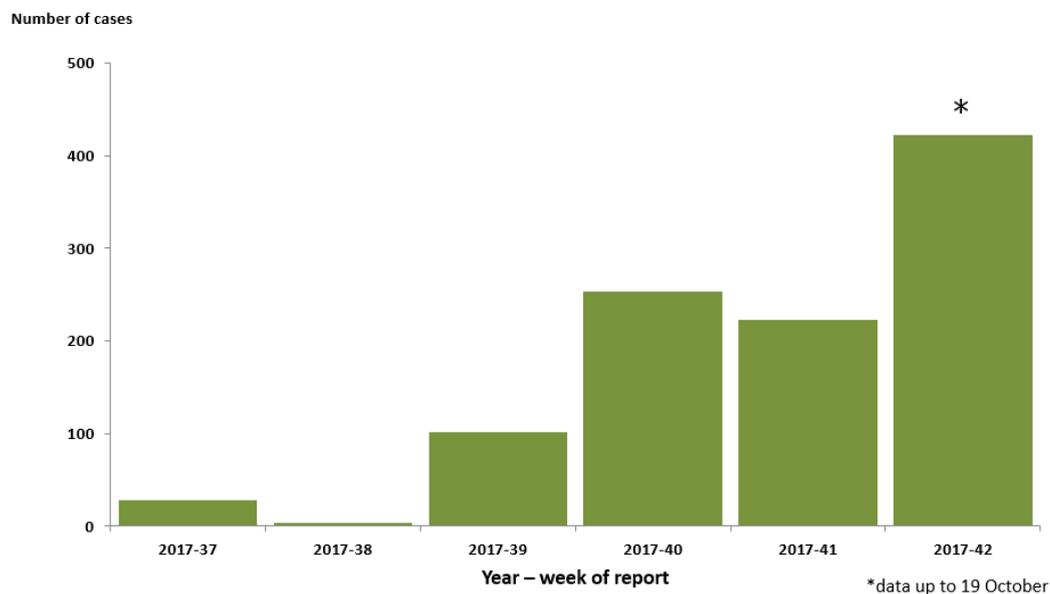
Data source: Madagascar MoH and WHO



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

Plague cases by week of report, week 2017-37 to 2017- 42, Madagascar

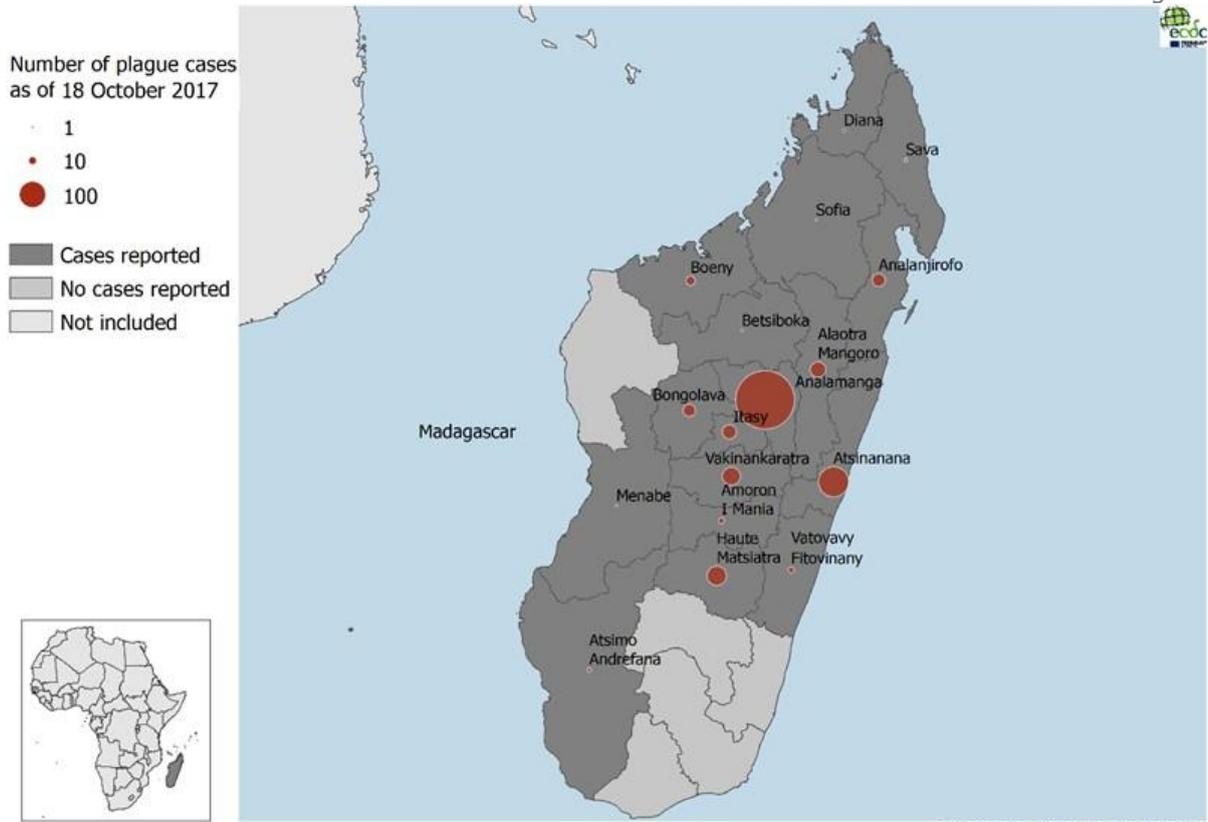
Data source: Madagascar MoH and WHO



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

Plague cases from 1 August 2017 to 18 October 2017 in Madagascar

Data source: Madagascar MoH



ECDC. Map produced on: 20 Oct 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.