I. Executive summary

EU Threats

Measles – Multistate (EU) – Monitoring European outbreaks
Opening date: 9 February 2011  Latest update: 10 November 2017

Measles outbreaks continue to occur in a number of EU/EEA countries with a risk of spread and sustained transmission in areas with susceptible populations.
Since 15 September 2017, ECDC has been reporting EU and global outbreaks of measles in the CDTR on a monthly basis unless new developments are taking place.

➔Update of the week

There is a decreasing trend of measles cases in Italy and Romania. Greece continues reporting a substantial number of cases, particularly in the south of the country. Updates are provided for Austria, Germany, Greece, Ireland, Italy, Romania, Spain and the UK. Updates outside EU/EEA countries are provided for Switzerland, the former Yugoslav Republic of Macedonia, Kosovo*, Serbia, Ukraine, Pakistan, Syria, Liberia, Nigeria, Ethiopia, Somalia, Uganda, South Africa, Thailand, Vietnam, Australia, the US and Venezuela.

*This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

Rubella – Multistate (EU) – Monitoring European outbreaks
Opening date: 7 March 2012  Latest update: 10 November 2017

Rubella, caused by the rubella virus and commonly known as German measles, is usually a mild and self-limiting disease which often passes unnoticed. The main reason for immunising against rubella is the high risk of congenital malformations associated with rubella infection during pregnancy. All EU Member States recommend vaccination against rubella with at least two doses of vaccine for both boys and girls. The vaccine is given at the same intervals as the measles vaccine as part of the MMR vaccine. No new outbreaks have been detected in the EU since March 2017.
ECDC reports global outbreaks of rubella in the CDTR on a monthly basis or if there is a critical event.

➔Update of the week

No new outbreaks have been detected since March 2017.
Travel-associated Legionnaires' disease - Palmanova area, Spain - 2017

A rapidly evolving cluster of travel-associated Legionnaires' disease (TALD) involving 25 cases with a travel history to the Palmanova area in Mallorca, Spain, has been reported to the European Legionnaires' Disease Surveillance Network (ELDSNet).

Update of the week
Since the previous report on 3 November 2017, one additional travel-associated legionnaires’ disease case was reported by the United Kingdom with date of onset on 23 September.

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

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

Update of the week
Update Week 2017-44 (30 October-5 November 2017)
Intensity of influenza activity in Europe remained at a low level, although detections with sporadic or local spread were reported by 40% of the reporting countries. Overall, 1% of sentinel specimens tested positive for influenza virus. Data from the 14 countries or regions reporting to the EuroMOMO project indicated that all-cause mortality was at low levels, as expected for this time of the year. Additional information on global influenza activity is available from WHO's biweekly global updates.

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

During the West Nile virus transmission season (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.

Update of the week
Between 2 and 9 November 2017, Romania reported two cases in previously affected areas, with disease onset in September and October. Italy reported two cases from Asti (Piedmont), a newly affected WNF area for humans, with onset dates in September. In addition, Romania reported one death due to West Nile fever in a previously reported case. Italy reported two equine West Nile fever cases through the Animal Disease Notification System (ADNS) of the European Commission.

Sources: TESSy and ADNS

Chikungunya - Europe - 2017

Since August 2017, both France and Italy have reported autochthonous transmission of chikungunya virus. In France, the Var department is affected while 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
Since the previous CDTR and as of 9 November 2017, Italy and France have not reported an epidemiological update.

Non EU Threats

New! Monkeypox – Nigeria – 2017

Since mid September 2017, Nigerian authorities have been following a monkeypox outbreak that is unusual in its magnitude and geographical extension.

Update of the week
As of 9 November 2017, Nigeria reports 116 suspected cases from 20 states. Of these cases, 38 cases from nine states are laboratory-confirmed with the latest case reported in week 41. To date, no deaths have been reported.
On 17 October 2017, the Ugandan Ministry of Health notified of a confirmed outbreak of Marburg virus disease in Kween District, Eastern Uganda. The outbreak was officially declared on 19 October 2017. Since 17 October 2017 and as of 3 November, two confirmed and one probable Marburg virus disease (MVD) case, have died. All cases are from Kween district in Uganda, bordering Kenya.

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. A decreasing trend in number of cases has been observed in recent weeks.

According to WHO, since 1 August and as of 3 November 2017, 1 947 confirmed, probable and suspected cases of plague, including 143 deaths, case fatality rate 7%, have been reported from 51 of 114 districts in the country. Of these, 1 437 (74%) were clinically classified as pulmonary plague, 295 (15%) were bubonic plague, one was septicaemic, and 211 were not yet classified. Among these cases there are 71 healthcare workers affected. To date, no cases outside of Madagascar related to this outbreak have tested positive for plague.
II. Detailed reports

Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011  Latest update: 10 November 2017

Epidemiological summary

According to national public health authorities, measles has caused 46 deaths in EU countries in 2016 and 2017. In 2016, 12 deaths occurred in Romania and one in the UK. In 2017, 33 deaths were reported from Romania (23), Italy (4), Bulgaria (1), Germany (1), Portugal (1), France (1), Greece (1) and Spain (1). All EU/EEA countries have reported measles cases in 2017, except for Latvia, Liechtenstein and Malta. Updates for non EU/EEA countries are provided for Switzerland, the former Yugoslav Republic of Macedonia, Kosovo*, Serbia, Ukraine, Pakistan, Syria, Liberia, Nigeria, Ethiopia, Somalia, Uganda, South Africa, Thailand, Vietnam, Australia, US and Venezuela.

Epidemiological summary for EU/EEA countries with updates since last month

Austria has reported one case since the previous update on 13 October 2017. In 2017, as of 25 October, Austria reported 85 cases. This exceeds the number of measles cases in 2016.

Germany has reported seven cases since the previous report on 13 October 2017. In 2017, as of 15 October, Germany reported 898 cases. During the same time period in 2016, Germany reported 273 cases.

Greece has reported 153 cases since the previous report on 13 October 2017, including one death which has been reported in an unvaccinated 11-month infant. Between 17 May and 29 October 2017, Greece reported 368 cases, with a higher incidence in southern Greece. Most cases were children 1-9 years old, followed by adults 25-44 years old, unvaccinated or incompletely vaccinated.

Ireland has reported seven cases since the previous report on 8 September 2017. In 2017, as of 28 October, Ireland has reported 16 cases. During the same period in 2016, Ireland reported 43 cases.

Italy has reported 158 cases since the previous report on 13 October 2017. In 2017, as of 31 October, Italy has reported 4 775 cases, including four deaths. Of these cases, 312 are healthcare workers. The median age is 27 years; 88% of the cases were not vaccinated and 6% received only one dose of vaccine. In 2016, Italy reported 862 cases during the year (source: TESSy).

Romania has reported 189 cases and one death since the previous report on 13 October 2017. Since 1 January 2016 and as of 3 November 2017, Romania has reported 9 728 cases, including 35 deaths. Of these, 1 969 cases were reported in 2016 and 7 759 cases were reported in 2017.

Spain has reported 159 cases in 2017 as of 27 October. In 2016, Spain reported 38 cases during the year (source: TESSy).

The UK: Media report a measles outbreak with over 30 cases in Gloucestershire, South West England, with over 20 cases in one school.

Epidemiological summary for countries outside EU/EEA since last month

Switzerland has reported 26 cases since the previous report on 15 September 2017. In 2017, as of 31 October, Switzerland has reported 102 cases. During the same period in 2016, Switzerland reported 47 cases.

The former Yugoslav Republic of Macedonia has reported eight measles cases since the previous report on 13 October 2017. As of 27 October, 19 cases, all in the area of Skopje were reported in 2017, compared to no cases in 2016.

In 2017, as of 12 October, according to media quoting the National Public Health Institute, Kosovo* has reported 94 cases.

Serbia has reported 65 cases of which 92% are unvaccinated, incompletely vaccinated or have unknown vaccine status, in 2017, as of 8 November.

Ukraine has reported 1 627 cases in 2017, as of 26 September. Most cases were reported in Ivano-Frankivsk (747 cases), Odesa (589 cases, including two deaths) and Ternopil (70 cases). In addition according to media on 9 October, 38 cases of measles were reported in the Chernivtsi oblast of these 24 in Putyla district.
Pakistan, reported in October through media, 40 hospitalised cases and 11 deaths among children due to measles in the Naushki district.

Syria has reported 80 measles cases, between 3 and 23 September 2017, with most cases reported from Deir-ez-Zor (15), Damascus (7), and Aleppo (9). In 2017, as of end of September, Syria has reported 449 confirmed measles cases. Most of the cases were reported in April (92 cases).

Liberia has reported 83 cases since the previous report on 13 October 2017. In 2017, as of 22 October, Liberia has reported 1 203 suspected measles cases. Of the suspected cases, 989 were tested and 175 were positive.

Nigeria has reported 1 188 cases since the previous report on 13 October 2017. In 2017, as of 15 October, Nigeria has reported 18 960 suspected measles cases, including 109 deaths. During the same time period in 2016, 23 177 suspected cases and 100 deaths were reported.

Ethiopia has reported 3 151 measles cases in 2017, as of 3 October.

Somalia has reported around 1 000 cases since the previous report on 13 October 2017. In 2017, as of 3 November, Somalia has reported more than 18 000 suspected cases. This is four times the number of cases reported in the same period in 2015 and 2016.

Uganda has reported 552 measles cases in 2017, as of 18 September, in urban districts of Kampala (309 cases) and Wakiso (243 cases).

South Africa has reported 52 cases since the previous report on 15 September 2017. In 2017, as of 20 October, South Africa has reported 185 cases of measles. Most cases were reported from ongoing outbreaks in Gauteng province (92 cases), KwaZulu-Natal (45) and Western Cape province (31 cases).

Thailand has reported 163 cases since the previous report on 13 October 2017. In 2017, as of 25 October, Thailand has reported 2 550 cases from 73 provinces. No deaths were reported.

Vietnam has reported 229 cases, including one death in 2017, as of end of October. Of these, 45 cases have been recorded in Hanoi and 99 cases in northern regions.

Papua New Guinea has reported 57 measles cases (eight confirmed), including two deaths in 2017, as of 31 October. A measles outbreak is ongoing in neighbouring areas of Indonesia.

Australia has reported eight cases since the previous report on 13 October 2017. In 2017, as of end of October, Australia reported 79 cases compared to 77 cases in the same time period in 2016.

The US has reported one case since the previous report on 13 October 2017. In 2017, as of 7 October, 120 cases were reported from 15 states (California, Florida, Kansas, Maine, Maryland, Michigan, Minnesota, Nebraska, New Jersey, New York, Ohio, Pennsylvania, Texas, Utah, and Washington) and the District of Columbia. In 2016, 70 measles cases were reported from 16 states.

Venezuela has reported 570 cases in Bolívar state in 2017, as of 8 October. Of the 570 cases, 217 cases were confirmed, 292 are under investigation and 61 were discarded. Of the suspected cases, 77% are younger than 10 years. To date, no deaths have been reported.

ECDC links: Measles web page | ECDC Communicable Disease Threats Reports (CDTR) | ECDC rapid risk assessment ongoing outbreak of measles in Romania, risk of spread and epidemiological situation in EU/EEA countries, 3 March 2017
Sources: National Public Health Institutes | Ministries of Health | media

ECDC assessment
Measles outbreaks continue to occur in a number of EU/EEA countries. There is a risk of spread and sustained transmission in areas with susceptible populations. Vaccination with at least two doses remains the most effective measure. The progress towards elimination of measles in the WHO European Region is assessed by the European Regional Verification Commission for Measles and Rubella Elimination (RVC). At the sixth meeting of the RVC for Measles and Rubella in June 2017, of 53 countries in the WHO European Region, 33 (22 of which are in the EU/EEA) were declared to have reached the elimination goal for measles, and nine countries (four in the EU/EEA) were deemed to have interrupted endemic transmission for between 12 and 36 months, meaning they are on their way to achieving the elimination goal. However, four EU/EEA countries were judged to still have
endemic transmission: Belgium, France, Italy and Romania.

Actions
All EU/EEA countries report measles cases through TESSy on a monthly basis to ECDC; data are published every month. ECDC also monitors EU/EEA and worldwide outbreaks on a monthly basis through epidemic intelligence activities.

New measles cases per week of reporting, week 2008-1 to 2017-44, Romania

Data source: National Institute of Public Health Romania and TESSy (ECDC)

Rubella – Multistate (EU) – Monitoring European outbreaks
Opening date: 7 March 2012 Latest update: 10 November 2017

Epidemiological summary
No new outbreaks have been detected in the EU since March 2017.

Web sources: ECDC measles and rubella monitoring | ECDC rubella factsheet | WHO epidemiological brief summary tables | WHO epidemiological briefs | Progress report on measles and rubella elimination

ECDC assessment
The World Health Organization (WHO) has targeted the elimination of measles and rubella in the 53 Member States of the WHO European Region. The progress towards elimination of rubella in the WHO European Region is assessed by the European Regional Verification Commission for Measles and Rubella Elimination (RVC). Member States of the WHO European Region are making steady progress towards the elimination of rubella. At the sixth meeting of the RVC for Measles and Rubella in June 2017, of 53 countries in the WHO European Region, 33 (21 of which are in the EU/EEA) were declared to have reached the elimination goal for rubella, and four countries (two in the EU/EEA) were deemed to have interrupted endemic transmission for between 12 and 36 months, meaning they are on their way to achieving the elimination goal. However, seven EU/EEA countries were judged to still have endemic transmission: Belgium, Denmark, France, Germany, Italy, Poland and Romania.

Web source: European Regional Verification Commission for Measles and Rubella Elimination (RVC) (2017)
**Actions**

ECDC closely monitors rubella transmission in Europe by analysing the cases reported to The European Surveillance System and through its epidemic intelligence activities. Twenty-eight EU/EEA countries contribute to the enhanced rubella surveillance. The purpose of the enhanced rubella surveillance is to provide regular and timely updates on the rubella situation in Europe in support of effective disease control, increased public awareness, and achieving the target of rubella and congenital rubella elimination.

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

Opening date: 11 October 2017  
Latest update: 10 November 2017

**Epidemiological summary**

A Legionnaires’ disease outbreak has been detected in Palmanova, Mallorca, Spain. As of 9 November, 25 travel-associated cases were reported to ELDSNet, with onset dates from 11 September to 17 October 2017. The cases, 14 men and 11 women, are between 46 and 87 years old and were in Palmanova two to 10 days before falling ill. An additional case of Legionnaires’ disease is reported in an employee at a hotel not associated with TALD cases. The 25 cases stayed in ten accommodations in Palmanova. One accommodation is associated with ten cases, and two accommodations are associated with three and four cases respectively. Two hotels are associated with two cases each. Four cases stayed in hotels in Palmanova not associated with other cases. The majority of travel-associated cases are from the United Kingdom (20 cases), but cases are also from France (two cases), the Czech Republic (one case), Denmark (one case) and Sweden (one case). ELDSNet contact points and tour operators are informed, and the Spanish health authorities are currently conducting follow-ups.

**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 that this is 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  
Latest update: 10 November 2017

**Epidemiological summary**

2017/2018 season overview

Since week 2017-40, small numbers of influenza viruses have been detected in sentinel and non-sentinel specimens. Most of the viruses subtyped or assigned to a lineage in both sentinel or non-sentinel surveillance systems were identified as A(H3N2) or B/Yamagata viruses. For the northern hemisphere season the A(H3N2) vaccine component is the same as that used in 2015/2016 and only the quadrivalent vaccine contains a B/Yamagata component. Both were recommended to be changed for the trivalent vaccine to be used in the next southern hemisphere season.

**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: 10 November 2017

Epidemiological summary

Since the beginning of the 2017 transmission season and as of 9 November 2017, EU Member States reported 202 cases: Romania (66 cases), Italy (57), Greece (48), Hungary (20), Croatia (5), Austria (4), France (1) and Bulgaria (1). Eighty-two cases were reported in neighbouring countries: Serbia (49), Turkey (5) and Israel (28).

Twenty-six deaths due to West Nile fever have been reported since the start of the transmission season: Romania (14 deaths), Greece (5), Hungary (2), Italy (1), Croatia (1), Serbia (2) and Turkey (1).

In equids, EU Member States reported 123 West Nile fever cases through ADNS: 98 in Italy, 14 in Greece, five in Spain, three in Hungary, two in Austria, and one in Portugal.

In 2016, 225 human cases of West Nile fever were reported in EU Member States, and 267 cases were reported in the neighbouring countries.


ECDC assessment

The current West Nile fever epidemiological situation is consistent with observations of seasonal virus transmission from previous years. As expected at this time of the year, the weekly number of reported cases has started to decrease. In accordance with [Commission Directive 2014/110/EU](https://ecdc.europa.eu/en/cdtr), 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 9 November 2017.

Distribution of West Nile fever cases among humans and equids in the EU as of 9 November 2017.

Distribution of West Nile fever cases among equids in the EU as of 9 November 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 27 October 2017, France has reported two clusters including 17 cases. The first cluster, in Cannet-des-Maures, includes eleven cases (nine confirmed and two probable). The second cluster, in Taradeau, includes six confirmed cases. 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 27 October 2017, Italy has reported 402 cases of chikungunya. Of these, 331 cases have been reported in the Lazio region, 175 of which are confirmed, and 63 were reported in Guardavalle marina, Calabria region (45 of the 63 cases are confirmed). 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, four probable cases with travel history to Guardavalle marina (3) and Rome (1) were reported in Emilia-Romagna. As stated in an Eurosurveillance article entitled 'Detection of a chikungunya outbreak in Central Italy, August to September 2017' (published 28 September 2017), 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 MoH
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.

10/14
In France, response measures, including vector control, have been implemented. The fact that the strain harbours the E1-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. 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](http://www.ecdc.europa.eu) on 24 August 2017 and a [rapid risk assessment on the clusters of autochthonous chikungunya cases in Italy](http://www.ecdc.europa.eu) on 14 September 2017. ECDC published the first update of the [risk assessment on the clusters of autochthonous chikungunya cases in Italy](http://www.ecdc.europa.eu) on 9 October 2017.

**New! Monkeypox – Nigeria – 2017**

**Opening date: 6 November 2017**

**Latest update: 10 November 2017**

**Epidemiological summary**

The first case of monkeypox in Nigeria related to this outbreak was reported mid September 2017.

As of 9 November 2017, Nigeria reports 116 suspected cases from 20 states. To date, no deaths have been reported. The cases are reported in 20 out of 36 states plus the Federal Capital Territory (FCT). The states affected are: Abia, Akwa-Ibom, Bayelsa, Benue, Cross River, Delta, Ekiti, Edo, Enugu, Imo, Kano, Katsina, Kwara, Kogi, Lagos, Ondo, Nasarawa, Niger, Oyo and Rivers.

Among the 116 cases, 38 are laboratory-confirmed from nine states, Akwa Ibom, Bayelsa, Delta, Edo, Enugu, Imo, Kano, Lagos, Ondo and FCT.

**Source:** [MoH](http://www.ecdc.europa.eu) | [WHO AFRO](http://www.ecdc.europa.eu) | [WHO](http://www.ecdc.europa.eu)

**ECDC assessment**

According to the Nigerian ministry of health, there has been a significant reduction of number of cases reported over the past two weeks.

Prior to this outbreak Nigeria reported two cases in 1971 and one case in 1978. Therefore, the current outbreak is unusual in its magnitude and geographical extension. The risk for European citizens visiting or living in Nigeria for contracting monkeypox is very low if preventive measures listed below are taken into account.

- avoid contact with animals that could be infected
- avoid contact with materials that has been in contact with a sick animal.
- avoid contact with people affected by monkeypox
- practice hand hygiene after contact with infected animals or humans.

**Actions**

ECDC monitors this event through epidemic intelligence.

**New! Marburg virus disease - Uganda - 2017**

**Opening date: 9 November 2017**

**Latest update: 10 November 2017**

**Epidemiological summary**

Since 17 October 2017 and as of 3 November, two confirmed and one probable Marburg virus disease (MVD) case, have died. All cases are from Kween district in Uganda, bordering Kenya. These three cases were from the same family. One of the confirmed
cases travelled to Kenya prior to his death. On 4 November, a contact of this case developed symptoms and was hospitalised. In addition, another contact of this case have been reported to have travelled to Kampala, the capital city of Uganda. To date, no cases have been identified outside Uganda. Kenyan authorities have activated a contingency plan. To date, the number of contacts followed-up is 115 from Kween District and 16 from Kapchorwa District. None of the contacts has developed symptoms. The Ugandan authorities together with WHO, UNICEF and NGOs have implemented a response plan.

Uganda has previous experience in managing recurring Ebola and Marburg virus disease outbreaks. MVD cases have historically been reported among miners and travellers who visited caves inhabited by bat colonies in Uganda. Marburg virus disease outbreaks have been documented during:

- 2007 – 4 cases, including 2 deaths in Ibanda District, Western Uganda;
- 2008 – 2 unrelated cases in travellers returning to the Netherlands and USA, respectively after visiting caves in Western Uganda;
- 2012 – 15 cases, including 4 deaths in Ibanda and Kabale districts, Western Uganda; and
- 2014 – 1 case in healthcare professional from Mpiigi District, Central Uganda.

ECDC assessment

The affected area is bordering Kenya and is 300 km northeast of Kampala on the northern slopes of Mount Elgon National Park, which hosts the colonies of cave-dwelling fruit bats, known to transmit the Marburg virus. The caves where the bats live and the national park are a tourist attraction. According to WHO, the close proximity of the affected area to the Kenyan border, and cross-border movement between the affected district and Kenya and the potential transmission of the virus between colonies and to humans, increases the risk of cross-border spread.

Due to the above there is a high risk at national and regional level. Tourism to Mount Elgon including the caves and surrounding areas should be noted and appropriate advice given and precautions taken.

The risk associated with the event at the global level is low.

The risk for importation in EU is very low. EU travellers to Uganda and in particular to the Mount Elgon bat caves, should be made aware of the situation and should avoid contact with sick humans, sick or dead animals, avoid exposure to fruit bats and contact with non-human primates, and, to the extent possible, to wear gloves and protecting clothing, including masks.

Actions

ECDC is monitoring this event through epidemic intelligence.

Plague - Madagascar - 2017

Opening date: 15 September 2017 Latest update: 10 November 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 1 August and as of 3 November 2017, 1,947 confirmed, probable and suspected cases of plague, including 143 deaths, case fatality rate 7%, have been reported from 51 of 114 districts in the country. Of these, 1,437 (74%) were clinically classified as pulmonary plague, 295 (15%) were bubonic plague, one was septicemic, and 211 were not yet classified. At least 71 healthcare workers have contracted plague since the beginning of the outbreak. Of the 1,437 clinical cases of pneumonic plague, 364 (25%) have been confirmed, 555 (39%) are probable and 518 (36%) remain suspected.

Twenty-three strains of *Yersinia pestis* have been isolated and are sensitive to antibiotics recommended by the National Program for the Control of Plague. Overall, 16 of 22 (73%) regions in Madagascar have been affected. Analamanga Region where the capital city of Antananarivo is located, has been the most affected, with 72% (1,405) of all recorded cases. About 88% (6,066) of 6,908 contacts identified thus far have completed their 7-day follow up and a course of prophylactic antibiotics. Nine contacts developed symptoms and became suspected cases. On 3 November 2017, 513 out of 550 (93%) contacts under follow-up were reached and provided with prophylactic antibiotics.
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 the WHO Collaborating Centre for plague at the Institute Pasteur in Paris, France. Over 320 contact persons of the index case completed follow-up and monitoring on 13 October 2017, including 41 passengers and seven crew members from the flight to the Seychelles, 12 close family members, and 18 staff and patients from the health centre visited by the index case. 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 were discharged home, including the index case, and passive surveillance and antibiotic prophylaxis was discontinued for all contacts of the case.

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 has published the below documents:
- Case definition and algorithm for initial assessment and management of cases related to the outbreak of plague in Madagascar
- Information leaflet for travellers to Madagascar
- Guidance for healthcare workers on the use of personal protective equipment in the management of bubonic and pneumonic plague patients
- Guidance for the management of suspected pneumonic plague cases identified on aircraft and ships
- Guidance for the management of suspected bubonic plague cases identified on aircraft and ships
The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.