



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 46, 12-18 November 2017

All users

This weekly bulletin provides updates on threats monitored by ECDC.

News

10th European Antibiotic Awareness Day

On the occasion of the 10th European Antibiotic Awareness Day, the European Centre for Disease Prevention and Control (ECDC) is releasing its latest EU-wide data on antibiotic resistance, as well as its guidance on the prevention and control of carbapenem-resistant *Enterobacteriaceae* (CRE). In 2016, combined resistance to several antibiotic groups continued to increase for *Escherichia coli* and *Acinetobacter* species. This situation is of great concern as patients infected with these multidrug-resistant bacteria have very limited treatment options.

For *Escherichia coli*, combined resistance, measured as resistance to fluoroquinolones, third-generation cephalosporins and aminoglycosides, increased significantly between 2013 and 2016. Furthermore, in 2016, high percentages of *Acinetobacter* species isolates, with combined resistance to carbapenems, aminoglycosides and fluoroquinolones, were reported in southern and south-eastern Europe, as well as the Baltic countries.

Nevertheless, it is encouraging to see that long-term efforts are slowly leading to positive results and that it is still possible to reverse the trends: the latest ECDC data indicate that the overall resistance situation for *Klebsiella pneumoniae* seems to be stabilising in Europe, even though this was not always observed at national level, with some countries still showing an increase in combined resistance. Furthermore, the percentage of meticillin-resistant *Staphylococcus aureus* (MRSA) further decreased between 2013 and 2016. However, MRSA remains an issue as 10 out of 30 countries still report high percentages.

Resistance to carbapenems, an important last-line antibiotic group, continues to be reported mostly by countries with already high levels of multidrug-resistant bacteria. In these countries, the options to treat patients with carbapenem-resistant *Enterobacteriaceae* (CRE) infections are often limited to combination therapy and older antibiotics, such as colistin. The further emergence of resistance to colistin is a serious warning that options are becoming even more limited. Resistance percentages varied widely across Europe, but were generally higher in southern and south-eastern Europe than in northern Europe. For more information: <u>EAAD 2017 news release</u>

I. Executive summary EU Threats

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

Opening date: 11 October 2017

Latest update: 17 November 2017

A rapidly evolving cluster of travel-associated Legionnaires' disease (TALD) involving 26 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 10 November 2017, one additional travel-associated legionnaires' disease case has been reported by Denmark with date of onset 24 September 2017.

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

Opening date: 11 October 2017

Latest update: 17 November 2017

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

→Update of the week

Update Week 2017-45 (6 - 12 November 2017)

Intensity of influenza activity across Europe (with 42 countries reporting) remained at a low level, with sporadic detections or local spread of influenza viruses at most being reported by half of the reporting countries. Overall, 4.5% of the individuals sampled, presenting with influenza-like illness (ILI) and acute respiratory infections (ARI) to sentinel primary healthcare sites, tested positive for influenza viruses, which is a slight increase on the previous week (1%). Since week 40, types A and B are co-circulating. Of subtyped A viruses, two thirds were A(H3N2) and of B viruses ascribed to a lineage, 93% were B/Yamagata, not included in the trivalent vaccine. Additional information on global influenza activity is available from <u>WHO's biweekly global</u> updates.

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

Opening date: 30 May 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 9 and 16 November 2017, Hungary reported one human West Nile fever case in a previously affected area, with onset date end of October.

In addition, Italy reported two and Spain one equine West Nile fever case 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: 17 November 2017

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

→Update of the week

As of 10 November 2017, Italy has reported 238 confirmed and 190 probable cases of chikungunya. This represents an increase of 14 confirmed and 12 probable cases on the previous report dated 27 October. However, the latest date of onset remains 17 October 2017 (Anzio, Lazio region).

Since the previous CDTR and as of 16 November 2017, France has not reported additional chikungunya cases.

Non EU Threats

New! Yellow fever - Nigeria - 2017

Opening date: 14 November 2017

Latest update: 17 November 2017

Nigeria has reported its first yellow fever outbreak since 2002. Yellow fever is a mosquito-borne viral infection occurring in some of the tropical areas of Africa and South America. The last major outbreaks notified in Africa were in Angola and the Democratic Republic of the Congo in 2016.

→Update of the week Since 12 September 2017 and as of 7 November 2017, Nigeria has reported 179 cases, including 24 deaths.

Plague - Madagascar - 2017

Opening date: 15 September 2017

Latest update: 17 November 2017

An outbreak of plague in Madagascar began in August 2017 and has expanded rapidly. More than half of the cases reported were due to pneumonic plague. The number of cases and deaths exceeds those in 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

According to <u>WHO</u>, since 1 August and as of 10 November 2017, 2 119 confirmed, probable and suspected cases of plague, including 171 deaths (case fatality rate 8%) have been reported from 55 of 114 districts in the country. Of these, 1 618 (76%) were clinically classified as pulmonary plague, 324 (15%) were bubonic plague, one was septicaemic, and 176 were not yet classified. Among these cases there are 82 healthcare workers affected. This is an increase of 172 cases and 28 deaths since ECDC's last CDTR report released on 10 November 2017. As of 15 November 2017, only 12 people are hospitalised for plague. To date, no cases outside of Madagascar related to this outbreak have tested positive for plague. The trend in the number of new cases of plague has been declining for more than a month, indicating that measures taken to contain the outbreak have been effective. The decline in case reports suggests that the epidemic phase of the outbreak is ending. However, it is critical to sustain ongoing operations to minimise bubonic plague infections and human-to-human transmission of pneumonic plague.

Monkeypox – Nigeria – 2017

Opening date: 6 November 2017

Latest update: 17 November 2017

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

→Update of the week Since last week's CDTR, no additional cases of monkeypox have been reported in Nigeria.

Marburg virus disease - Uganda - 2017

Opening date: 9 November 2017 Latest update: 17 November 2017

On 17 October 2017, the Ugandan Ministry of Health gave notification 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 15 November, two confirmed cases and one probable case of Marburg virus disease (MVD) have died. All cases are from Kween district in Uganda, bordering Kenya.

→ Update of the week

Since the previous CDTR, the Ugandan Ministry of Health has not reported additional cases.

Malaria – Cape Verde – 2017

Opening date: 10 August 2017

Latest update: 17 November 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 12 November, Cape Verde reported 405 autochthonous cases of malaria. This is an increase of seven cases since the previous report on 31 October 2017.

Cholera – Multistate (World) – Monitoring global outbreaks

Opening date: 20 April 2006

Latest update: 17 November 2017

Several countries in Africa, Asia and the Americas are reporting <u>cholera</u> outbreaks. The current situation in Yemen, Somalia, Ethiopia, South Sudan and the Democratic Republic of the Congo is of particular concern as cholera outbreaks are occurring during a large-scale humanitarian crisis.

→Update of the week

Since the beginning of 2017, the Gulf of Aden and the Horn of Africa region have been the most affected areas. Major increases in cholera cases are reported by Yemen with 132 855 cases and 59 deaths, DR Congo with 10 688 cases and 209 deaths, Ethiopia with 2 443 cases and 21 deaths and Nigeria with 1 800 new cases and eight deaths since the previous CDTR report on 13 October 2017.

Haiti has reported an increase by 1 299 cases and 16 deaths since the last CDTR report on 13 October 2017. However, the 12 167 cases reported this year remain lower than in 2016 when Haiti reported 41 421 cases during the whole year.

II. Detailed reports

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

Opening date: 11 October 2017

Latest update: 17 November 2017

Epidemiological summary

A Legionnaires' disease outbreak has been detected in Palmanova, Mallorca, Spain. As of 16 November 2017, 26 travel-associated cases had been reported to ELDSNet, with onset dates from 11 September to 17 October 2017. The cases, 14 men and 12 women, are between 46 and 87 years of age and were in Palmanova two to ten days before illness onset. An additional case of Legionnaires' disease has been reported in an employee at a hotel not associated with the TALD cases. The 26 cases stayed at ten accommodation sites in Palmanova. One accommodation is associated with ten cases, and two accommodations are associated with three and four cases respectively. Two hotels are associated cases are from the United Kingdom (20 cases), but cases are also reported from France (two cases), the Czech Republic (one case), Denmark (two cases) and Sweden (one case). ELDSNet contact points and tour operators have been informed and the Spanish health authorities are currently conducting follow-up.

ECDC assessment

According to ELDSNet data, the number of reported TALD cases associated with 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 indicates 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 <u>rapid risk assessment</u> on 23 October 2017.

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

Opening date: 11 October 2017

Latest update: 17 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.

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 <u>Flu News Europe</u> <u>website</u>. Risk assessments for the season are available on the <u>ECDC</u> website and on the <u>World Health Organization's Regional</u> <u>Office for Europe</u> website.

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

Opening date: 30 May 2017

Epidemiological summary

Since the beginning of the 2017 transmission season and as of 16 November 2017, EU Member States reported 203 cases:

4/14

Romania (66 cases), Italy (57), Greece (48), Hungary (21), 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 126 West Nile fever cases through ADNS: 100 in Italy, 14 in Greece, six 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 link: <u>ECDC West Nile fever web page</u> | <u>ECDC: equine West Nile fever web page</u> | <u>ECDC atlas</u> Sources: <u>TESSy</u> and <u>ADNS</u>

ECDC assessment

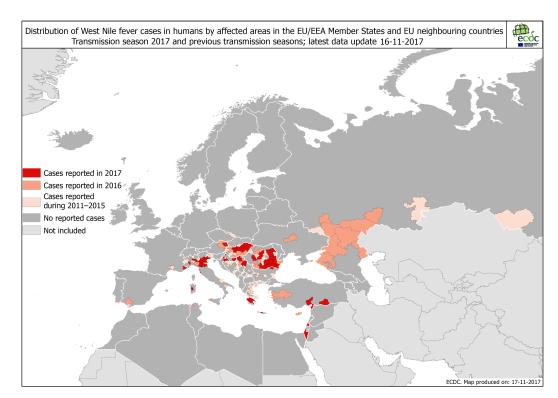
The current West Nile fever epidemiological situation is consistent with observations of seasonal virus transmission from previous years. As expected at this time of the year, the weekly number of reported cases has started to decrease. In accordance with <u>Commission Directive 2014/110/EU</u>, prospective 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 (<u>TESSy</u>) and equine cases are collected through the Animal Disease Notification System (<u>ADNS</u>) 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.

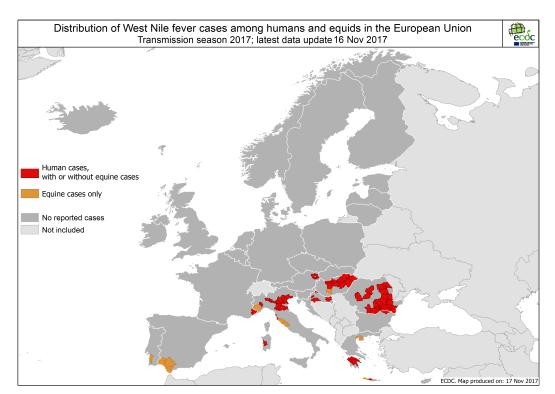
Distribution of human West Nile fever cases by affected areas as of 16 November 2017.



European Centre for Disease Prevention and Control (ECDC) Postal address: ECDC 171 83 Stockholm, Sweden Visiting address: Tomtebodavägen 11a, Solna, Sweden www.ecdc.europa.eu ECDC

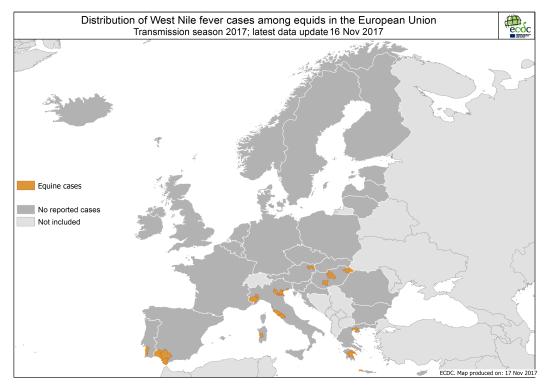
TESSy and ADNS

Distribution of West Nile fever cases among humans and equids in the EU as of 16 November 2017.



Distribution of West Nile fever cases among equids in the EU as of 16 November 2017.

ADNS



Chikungunya - Europe - 2017

Opening date: 15 September 2017

Latest update: 17 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 13 November 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 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 on 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 10 November 2017, Italy has reported 428 cases of chikungunya. Of these, 359 cases have been reported in the Lazio region, 184 of which are confirmed, and 61 were reported in Guardavalle marina, Calabria region (50 of the 61 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 <u>cluster of autochthonous chikungunya cases in France</u> | Rapid risk assessment on <u>clusters</u> <u>of autochthonous chikungunya cases in Italy</u>

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 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 <u>rapid risk assessment on the cluster of autochthonous chikungunya cases in France</u> on 24 August 2017 and a <u>rapid risk assessment on the clusters of autochthonous chikungunya cases in Italy</u> on 14 September 2017. ECDC published the first update of the <u>risk assessment on the clusters of autochthonous chikungunya cases in Italy</u> on 9 October 2017. ECDC continues to monitor this threat, however will not report unless there is a change in the epidemiology.

New! Yellow fever - Nigeria - 2017

Opening date: 14 November 2017

Latest update: 17 November 2017

Epidemiological summary

As of 7 November 2017, Nigeria has reported 179 cases, including 24 deaths. This is an increase of 13 cases and 14 deaths since 26 October. Samples have been collected from 98 patients, 38 tested positive for yellow fever and one was inconclusive based on testing in Nigeria. Confirmatory testing on the positive samples at the Pasteur Institute in Dakar showed that 15 were

7/14

positive, 12 were negative and nine results are pending. Seven of Nigeria's 36 states have reported suspected cases, three states have reported confirmed cases (Kwara, Kogi, and Zamfara). The first yellow fever case was confirmed on 12 September 2017 in a seven-year-old girl in Kwara State in the western part of Nigeria.

A vaccination campaign was carried out in October 2017 targeting 874 000 people.

Sources: <u>WHO | GAVI | NathNac | Nigerian CDC</u>

ECDC assessment

This outbreak is unusual as the last outbreak in this country was reported in 2002 and resulted in 20 cases, including 11 deaths. The current geographical extension of the outbreak and the low vaccination coverage are of concern. According to GAVI, in 2012, WHO and UNICEF estimated that only 25% of the six million children born each year received yellow fever vaccines as part of a routine infant package. The risk for EU travellers is very low and according to NathNac, the vaccination is recommended for all travellers over nine months of age.

Actions

ECDC is monitoring this threat through epidemic intelligence.

Plague - Madagascar - 2017

Opening date: 15 September 2017 Latest update: 17 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 10 November 2017, 2 119 confirmed, probable and suspected cases of plague, including 171 deaths (case fatality rate 8%) have been reported from 55 of 114 districts in the country. Of these, 1 618 (76%) were clinically classified as pulmonary plague, 324 (15%) were bubonic plague, one was septicaemic, and 176 were not yet classified. At least 82 healthcare workers have contracted plague since the beginning of the outbreak. Of the 1 618 clinical cases of pneumonic plague, 365 (23%) have been confirmed, 573 (35%) are probable and 680 (42%) remain suspected.

Twenty-five 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% of all recorded cases. About 95% (6 729) of 7 122 contacts identified thus far have completed their seven-day follow up and a course of prophylactic antibiotics. Nine contacts developed symptoms and became suspected cases. On 10 November 2017, 218 out of 243 (90%) 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 have been discharged and sent home, including the index case, and passive surveillance and antibiotic prophylaxis was discontinued for all contacts of the case.

According to local media, Mauritius, another neighbouring country, identified two suspected plague cases 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 remains high. The risk of international spread is mitigated by the short incubation period of pneumonic plague, implementation of exit screening measures, advice to travellers to Madagascar and the scaling up of preparedness and operational readiness activities in

neighbouring Indian Ocean islands and other southern and east African countries. The overall global risk is considered to be low. 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 <u>rapid risk assessment</u> on 9 October 2017 and an <u>update</u> on 13 October 2017. ECDC has published the following 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

- <u>Guidance for healthcare workers on the use of personal protective equipment in the management of bubonic and pneumonic</u> <u>plague patients</u>

- 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

Monkeypox – Nigeria – 2017

Opening date: 6 November 2017

Latest update: 17 November 2017

Epidemiological summary

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

As of 15 November 2017, Nigeria has reported 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 eight states, Akwa-Ibom, Bayelsa, Delta, Edo, Ekiti, Enugu, Lagos, Rivers, and FCT.

Source: MoH | WHO AFRO | WHO

ECDC assessment

According to the Nigerian Ministry of Health, there has been a significant reduction in the 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 of European citizens visiting or living in Nigeria contracting monkeypox is very low if the preventive measures listed below are taken into account.

- avoid contact with animals that could be infected
- avoid contact with materials that have 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 is monitoring this event through epidemic intelligence and will report when there is additional information.

Marburg virus disease - Uganda - 2017

Opening date: 9 November 2017

Latest update: 17 November 2017

Epidemiological summary

Since 17 October 2017 and as of 15 November, two confirmed and one probable case of Marburg virus disease (MVD) have died. All cases are from Kween district in Uganda, bordering Kenya. The 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 has been reported to have travelled to Kampala, the capital city of Uganda. To date, no cases have been identified outside Uganda and none of the contacts has developed symptoms.

Kenyan authorities have activated a contingency plan. All contacts are expected to complete 21 days of follow-up on 16 November 2017.

The Ugandan authorities, together with WHO, UNICEF and NGOs have implemented a response plan. Enhanced surveillance activities will continue until 7 December 2017.

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

2007 - Four cases, including two deaths in Ibanda District, Western Uganda;

2008 – Two unrelated cases in travellers returning to the Netherlands and USA, respectively after visiting caves in Western Uganda;

2012 – Fifteen cases, including four deaths in Ibanda and Kabale districts, Western Uganda; and

2014 - One case in a healthcare professional from Mpigi District, Central Uganda.

Source: ECDC factsheet ECDC links: WHO | MoH

ECDC assessment

The affected area borders Kenya and is 300 km northeast of Kampala on the northern slopes of Mount Elgon National Park, which hosts 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. Therefore, there is a high risk at national and regional level. Tourists to Mount Elgon including the caves and surrounding areas should be informed, appropriate advice given and precautions taken.

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

The risk for importation into the 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, wear gloves and protective clothing, including masks.

Actions

ECDC continues to monitor this threat, however will not report unless there is a change in the epidemiology.

Malaria – Cape Verde – 2017

Opening date: 10 August 2017

Latest update: 17 November 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. Since July 2017 and as of 12 November, Cape Verde reported 405 autochthonous cases of malaria. 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, bite avoidance is recommended. Travellers should also be made aware of the risk. Travellers to the city of Praia who are at a 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 'type A' (very limited risk of malaria transmission). The most recent major outbreaks were reported in 1999 (140 cases) and 2001 (95 cases). In the past ten years,

10/14

autochthonous cases in Praia have not exceeded 30 per year.

ECDC link: ECDC malaria page

Sources: Cape Verde Ministry of Health | WHO| NaTHNaC | Portugal

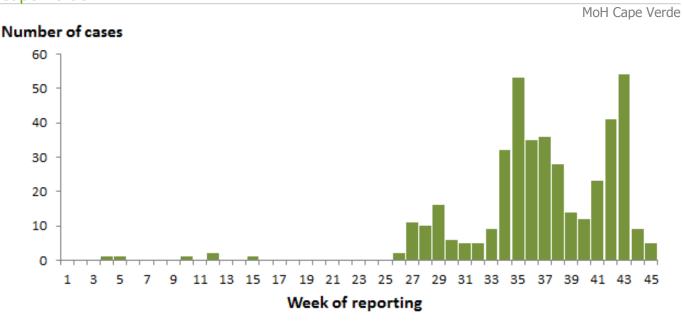
ECDC assessment

The increase of autochthonous malaria cases in Cape Verde during the rainy season, between August and November, is of concern. Despite the fact that the case numbers have been declining since the beginning of November, malaria transmission continues to occur. Therefore, EU Member States should consider reinforcing 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 45 - 2017, Cape Verde



Cholera – Multistate (World) – Monitoring global outbreaks

Opening date: 20 April 2006

Latest update: 17 November 2017

Epidemiological summary

Americas

<u>Haiti</u>: As of 4 November 2017, Haiti had reported 12 167 cholera cases, including 138 deaths (CFR: 1.1%) in all ten departments. This represents an increase of 1 299 cases since the previous update on 13 October 2017. In 2016, Haiti reported 41 421 cholera cases including 447 deaths (CFR:1%).

Africa

Nigeria: As of 2 November 2017, Nigeria had reported 8 852 suspected cholera cases, including 157 deaths (CFR: 1.8%). This outbreak is affecting the Kwara, Kebbi, Kano, Kaduna, Oyo, Zamfara, Lagos and Borno states.

DR Congo: In 2017, as of 3 November 2017, DR Congo had reported 42 334 suspected cholera cases, including 838 deaths (CFR: 2%). This represents an increase of 10 688 cases and 209 deaths since the previous CDTR report on 13 October 2017. In the recent weeks the majority of cases were reported in North Kivu, South Kivu, Tanganyika, Haut Lomami and Kongo Central.

Burundi: As of 30 October 2017, Burundi had reported 147 cholera cases and no deaths. This represents an increase of 109 cases since the previous report on 13 October 2017. Seven districts have reported suspected cases to date.

Kenya: As of 4 November 2017, Kenya had reported 3 518 cases, including 66 deaths (CFR 1.8%). Seven counties are reporting active outbreaks: Nairobi, Kajiado, Garissa, Embu, Kirinyaga, Muranga and Turkana. This represents an increase of 522 cases and eleven deaths since the previous CDTR report on 13 October 2017.

<u>South Sudan</u>: Since the beginning of the outbreak in June 2016 and as of 15 October 2017, South Sudan has reported 21 097 suspected cases, including 418 deaths (CFR: 2%). Of these, 1 585 cases were confirmed. This represents an increase of 529 cases and 40 deaths since the previous CDTR report on 13 October 2017. Cholera transmission has continued to decline nationally and now remains in only three counties (Juba, Budi and Fangak).

Ethiopia: As of 24 October 2017, Ethiopia ha reported 47 711 acute watery diarrhoea (AWD) cases, including 877 deaths (CFR: 1.8%). This represents an increase of 2 443 cases and 21 deaths since the previous update on 13 October 2017. Seven regions have active transmission.

<u>Chad</u>: Since the beginning of the outbreak on 14 August 2017 and as of 22 October 2017, Chad has reported 895 cholera suspected cholera cases, including 65 deaths (CFR: 7.3%). This represents an increase of 450 cases and nine deaths since the previous update on 13 October 2017. Cases have been reported from Koukou (290) and Goz Beida (71) health districts in the Sila Region, as well as from Am Timan Health District (529) and Amdjoudoul (5) in the Salamat Region.

<u>Uganda</u>: As of 17 October 2017, Uganda had reported 168 cases including three deaths (CFR:1.8%) in Kasese district. This represents an increase of 28 cases since the previous update on 13 October 2017. Cases are confined to five sub-counties: Bwera, Isango, Munkunyu, MLTC and Nyakiyumbu.

<u>Malawi</u>: As of 22 October 2017, Malawi had reported 52 cases and no deaths. Of these, three cases have been confirmed. This represents an increase of sixteen cases since the previous update on 13 October 2017.

Zambia: Since 4 October 2017 (and as of 9 November 2017), Zambia has been reporting an outbreak of 135 cholera cases including three deaths (CFR:2.2%). Of these, 95 cases are confirmed. Fifteen townships of Lusaka district have been affected.

Angola: Since the beginning of the outbreak on December 2016 (and as of 22 October 2017), Angola has reported 375 suspected cholera cases including twenty-one deaths (CFR: 5.6%). From week 1 to 42 in 2017, cases were reported from Cabinda (219), Zaire (151), Luanda (3) and Maquela de Zombo (2). Only one new case (from Maquela de Zombo) was reported in week 42. No new cases have been reported in Luanda since week 4, in Soyo Zaire since week 26, and in Cabinda since week 28.

Tanzania: As of 5 November 2017, Tanzania had reported 3 348 cholera cases including 52 deaths (CFR: 1.6%). Zanzibar Island has continued to report zero cholera cases and deaths for the past 16 weeks, with the last case reported on 11 July 2017.

Mozambique: As of 31 October 2017, local media had been reporting a cholera outbreak in Mozambique with 342 cases and one death (CFR: 0.3%). According to the same media sources the outbreak is confined to the Memba district on the northeast coast of Nampula province, in northern Mozambique.

<u>Somalia</u>: As of 26 October 2017, the Ministry of Health of Somalia had reported 54 suspected cases of cholera and no deaths for week 41. No related deaths have been reported in the past few weeks. So far in 2017 (as of 26 October), 77 783 cases, including 1 159 deaths (CFR: 1.5%) have been reported.

Asia

Yemen: Since the beginning of the outbreak in April 2017 and as of 8 November 2017, Yemen has reported 913 741 suspected cholera cases and 2 196 deaths (CFR: 0.2%). This represents an increase of 132 855 cases and 59 deaths since the previous update on 13 October 2017. The outbreak has spread across 22 of the 23 governorates and 305 of 333 districts. The five most affected governorates are Amanat Al Asima, Al Hudaydah, Hajjah, Amran and Dhamar.

<u>Philippines</u>: According to Taiwanese media quoting the Taiwanese Centers for Disease Control (CDC), a national tourist coming from the Philippines was diagnosed with cholera in late October 2017. Two other tourists travelling with the same group are developing compatible symptoms and will be tested for cholera soon.

ECDC assessment

There has been an unusual increase in the number of cases of cholera in the Horn of Africa and the Gulf of Aden in recent years. Despite the large number of travellers from the EU/EEA who visit countries in the Horn of Africa and the Gulf of Aden every year, particularly Ethiopia, Kenya and Tanzania, only very few cases are reported among returning EU/EEA travellers. The risk of cholera infection in travellers visiting these countries remains low, even though the likelihood of sporadic importation of cases may increase in the EU/EEA.

According to the World Health Organization, vaccination should be considered for travellers at higher risk, such as emergency/relief workers who are likely to be directly exposed. Vaccination is generally not recommended for other travellers.

Travellers to cholera-endemic areas should seek advice from travel health clinics to assess their personal risk and apply precautionary sanitary and hygiene measures to prevent infection. These can include drinking bottled water or water treated with chlorine, carefully washing fruit and vegetables with bottled or chlorinated water before consumption, regularly washing their hands with soap, eating thoroughly cooked food, and avoiding consumption of raw seafood products.

Actions

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

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