COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 42, 12-18 October 2014

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Influenza – Multistate (Europe) – Monitoring 2014–2015 season

Opening date: 9 October 2014 Latest update: 9 October 2014

Following the 2009 pandemic, influenza transmission in Europe has returned to its seasonal epidemic pattern, with peak activity during winter months. ECDC monitors influenza activity in Europe during the winter season and publishes the results on its website in the weekly Flu News Europe.

➔Update of the week

In the second week of the season, influenza activity across Europe remains low, with indications of sporadic influenza activity in 15 countries in the western, central and northern parts of Europe.

West Nile virus - Multistate (Europe) - Monitoring season 2014

Opening date: 3 June 2014 Latest update: 16 October 2014

West Nile fever (WNF) is a mosquito-borne disease which causes severe neurological symptoms in a small proportion of infected people. During the June to November transmission season, ECDC monitors the situation in EU Member States and neighbouring countries in order to inform blood safety authorities of WNF-affected areas and identify significant changes in the epidemiology of the disease.

➔Update of the week

During the past week, Italy reported four new confirmed cases, three cases from the previously affected provinces of Cremona, Pavia and Piacenza, and one case from the newly affected province of Brescia. In neighbouring countries, no new cases were reported.

Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013 Latest update: 16 October 2014

An outbreak of chikungunya virus infection which has been ongoing in the Caribbean since December 2013 and spread to North, Central and South America, has now reached French Polynesia. Several EU countries are also reporting imported cases from the affected areas.

➔Update of the week

On 10 October 2014, French Polynesia reported 15 autochthonous cases of chikungunya virus infection in Tahiti. This is the first time locally-acquired cases of chikungunya virus have been detected in French Polynesia.

A more detailed overview of the chikungunya situation worldwide will be reported in the CDTR during the first week of each month.

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

Epidemic Intelligence duty email: support@ecdc.europa.eu

Non EU Threats

Ebola Virus Disease Epidemic - West Africa - 2014

Opening date: 22 March 2014 Latest update: 9 October 2014

An epidemic of Ebola virus disease (EVD) has been ongoing in West Africa since December 2013, affecting Guinea, Liberia, Sierra Leone and Nigeria. The situation in the affected countries remains critical. The increasing number of healthcare workers that have been infected by the Ebola virus is a major cause for concern. On 8 August 2014, WHO declared the Ebola epidemic in West Africa a Public Health Emergency of International Concern (PHEIC). In recent weeks, the number of medical evacuations to the EU of healthcare workers infected with the disease, or having been exposed to it, has increased. In recent weeks, cases of transmission to healthcare workers involved in caring for patients were reported by Spain (1) and the USA (2).

➔Update of the week

Since the publication of the last CDTR on 10 October 2014, the affected countries have reported 962 additional cases and 627 additional fatalities. On 14 October 2014, CDC confirmed that a second healthcare worker at Texas Health Presbyterian Hospital who provided care for the first Ebola patient diagnosed in the United States has tested positive for EVD.

Ebola Virus Disease Outbreak - the Democratic Republic of Congo - 2014

Opening date: 26 August 2014 Latest update: 9 October 2014

On 24 August 2014, an outbreak of Ebola virus disease (EVD) was declared in the Boende health zone of Equateur province in the Democratic Republic of Congo. This outbreak is the seventh outbreak of EVD in the country.

➔Update of the week

No new case has been reported during the past week. According to WHO (as of 9 October 2014), there have been 68 cases (38 confirmed, 28 probable, 2 suspected) of Ebola virus disease (EVD) reported in the Democratic Republic of the Congo, including 49 deaths. Eight deaths have been reported among healthcare workers.

Outbreak of Marburg fever – Uganda

Opening date: 6 October 2014 Latest update: 9 October 2014

On 5 October, the Ministry of Health in Uganda reported a laboratory-confirmed outbreak of Marburg fever. The index case was a healthcare worker who died on 30 September at Mengo hospital in Kampala.

➔Update of the week

No new confirmed cases of Marburg haemorrhagic fever have been reported since the detection of the index case in early October.
According to media reports, two probable cases were admitted on 14 October and are being investigated.

Outbreak of Enterovirus D68 - USA

Opening date: 10 September 2014 Latest update: 9 October 2014

Since mid-August 2014, local health authorities in more than 45 states in the USA have been notifying the Centers for Disease Control and Prevention (CDC) of laboratory-confirmed enterovirus 68 (EV-D68) infections. Canada has also experienced an increase in severe respiratory illness associated with EV-D68 infections during the same time period. All patients presented with respiratory symptoms. Several others, particularly those with pre-existing asthma, were admitted to paediatric intensive care units. Health authorities are also investigating reports of paralysis or muscle weakness and other polio-like symptoms in a small number of children, some of whom tested positive for EV-D68 in both the USA and Canada. It is not yet clear whether EV-D68 is associated with paralysis in these children.

➔Update of the week

Since the last CDTR on 10 October 2014, the US CDC has reported that from mid-August to 16 October 2014, CDC or state public health laboratories have confirmed 796 case in 46 states and the District of Columbia with respiratory illness caused by EV-D68. This is an increase of 132 cases.

Canada has also experienced an increase in severe respiratory illness associated with EV-D68 cases during the same time. The province of Alberta has reported 93 cases between 1 July and 10 October 2014. Additionally in Canada, Ontario, British Columbia, Manitoba and Saskatchewan have reported EV-D68 cases, but the numbers are not publicly available.

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
Epidemic Intelligence duty email: support@ecdc.europa.eu

Middle East respiratory syndrome – coronavirus (MERS CoV) – Multistate

Opening date: 24 September 2012 Latest update: 9 October 2014

Since April 2012, 897 cases of MERS-CoV have been reported by local health authorities worldwide, including 357 deaths. To date, all cases have either occurred in the Middle East, have direct links to a primary case infected in the Middle East, or have returned from this area. The source of the virus remains unknown, but the pattern of transmission and virological studies points towards dromedary camels in the Middle East being a reservoir from which humans sporadically become infected through zoonotic transmission. Human-to-human transmission is amplified among household contacts and in healthcare settings.

➔Update of the week

Since the last MERS-CoV update in the CDTR on 10 October 2014, four additional cases of MERS-CoV infection have been reported in Saudi Arabia.

On 12 October, the health authorities in Qatar reported a case of MERS-CoV in a 71-year-old man with recent travel history to Al Ahsa in Saudi Arabia. The case was transported in an ambulance from Saudi Arabia to Qatar, and contact tracing has been initiated. This is the first case reported by Qatar since November 2013.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 16 October 2014

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission stops and the world is polio-free.

Polio was declared a public health emergency of international concern (PHEIC) on 5 May 2014 due to concerns regarding the increased circulation and the international spread of wild poliovirus during 2014.

➔Update of the week

During the past week, 21 new wild poliovirus type 1 (WPV1) cases have been reported, two in Afghanistan and 19 in Pakistan.

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
Epidemic Intelligence duty email: support@ecdc.europa.eu

II. Detailed reports

Influenza – Multistate (Europe) – Monitoring 2014–2015 season

Opening date: 9 October 2014 Latest update: 9 October 2014

Epidemiological summary

Over the last two weeks, a total of 7 (1%) influenza viruses were detected in 697 specimens tested in the sentinel system; all were positive for influenza A virus, 6 were A(H3N2), and one was unsubtyped.
Three patients were admitted to intensive care in the United Kingdom; influenza A was detected.
Primary care data were reported by 34 countries, virological data were provided by 28 countries, and hospital data by one country.
All-cause mortality has been within the normal range for the reporting countries during the past weeks (see http://www.euromomo.eu).

Web sources: Flu News Europe | ECDC Influenza |

ECDC assessment

Influenza activity in the European region is typically low for the time of year.

Actions

ECDC, together with WHO, produces Flu News Europe, which is updated weekly.

West Nile virus - Multistate (Europe) - Monitoring season 2014

Opening date: 3 June 2014 Latest update: 16 October 2014

Epidemiological summary

As of 17 October 2014, 73 human cases of West Nile fever have been reported in the EU, and 120 cases have been reported in neighbouring countries since the beginning of the 2014 transmission season.

EU Member States
Italy has reported 24 cases from the following provinces: Bologna (4), Parma (1), Cremona (3), Modena (2), Reggio nell'Emilia (1), Verona (1), Pavia (5), Mantova (2), Lodi (2), Piacenza (2) and Brescia (1). Romania has reported 22 cases in the districts of Mures (2), Olt (5), Constanta (1), Ialomita (1), Bucuresti (1), Dambovita (1), Dolj (3), Galati (1), Giurgiu (1), Teleorman (2), Sibiu (1), Braila (1), Iasi (1) and Valcea (1). Hungary has recorded 11 cases in the following areas: Budapest (4), Csongrad county (2), Pest County (1), Jasz-Nagykun-Szolnok county (1), Bekes county (1), Hajdu-Bihar county (1) and Bacs-Kiskun county (1). Austria reported an autochthonous case of West Nile fever in Vienna. In Greece, 15 human cases have been notified since the start of the 2014 transmission season in the following prefectures: Attiki (2), Ileia (6), Rodopi (4) and Xanthi (3).

Neighbouring countries
Thirteen cases have been reported by Bosnia and Herzegovina, in Republika Srpska, in the following municipalities: Banja Luka (4), Trebinje (1), Novi Grad (1), Kljuc (1), Krupa na Uni (1), Mrkonjic Grad (1), Gornji Ribnik (1), Teslic (1), Laktasi (1) and Prijedor (1). Serbia has reported 69 cases of West Nile fever in the following regions: City of Belgrade (33), Juzno-backi district (5), Nisavski (1), Kolubarski (4), Sremski (6), Juzno-banatski (15), Podunavski (3), Raski (1) and Sumadijski (1). Russia has reported 29 cases in the following oblasts: Saratovskaya (9), Samarskaya (6), Volgogradskaya (5), Astrakhanskaya (3), Belgorodskaya (1), Altayskiy Kray (1), Chelyabinskaya (1) and Voronezhskaya (3). Israel has recorded nine cases of West Nile fever in the following areas: Central district (1), Tel Aviv district (3), Haifa district (2), Jerusalem (1) and Northern district (2).

Web sources: ECDC West Nile fever | ECDC West Nile fever risk assessment tool | West Nile fever maps | WHO fact sheet

ECDC assessment

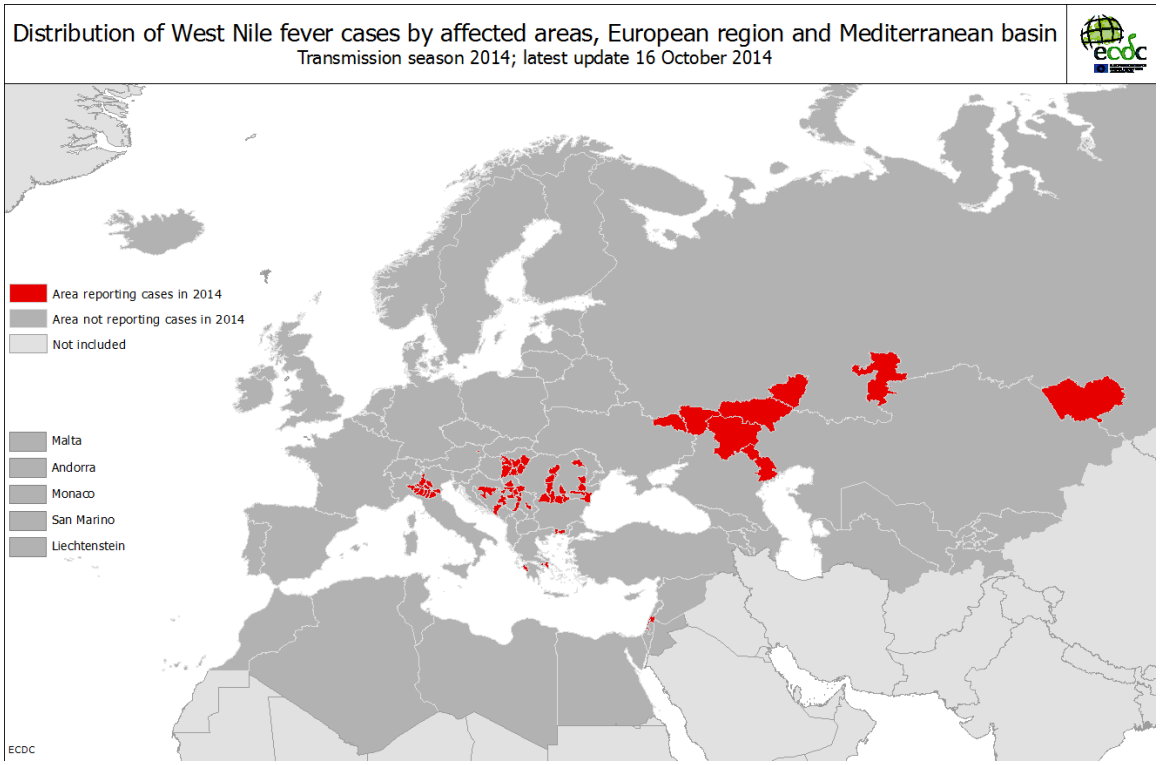
West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures is considered important for ensuring blood safety by the national health authorities when human cases of West Nile fever occur. According to the EU blood directive, efforts should be made to defer blood donations from affected areas with ongoing virus transmission.

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
Epidemic Intelligence duty email: support@ecdc.europa.eu

Actions

Since week 23, ECDC has been producing weekly West Nile fever (WNF) risk maps during the transmission season to inform blood safety authorities regarding WNF affected areas.

ECDC



Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013 Latest update: 16 October 2014

Epidemiological summary

On 10 October 2014, French Polynesia reported 15 autochthonous cases of chikungunya virus infection in Tahiti. According to media reports, quoting the Department of Health, there were 59 confirmed autochthonous cases of chikungunya fever, with an additional 200 suspected cases currently under investigation (as of 15 October 2014). This marks the first time local transmission of chikungunya virus has been detected in French Polynesia.

Local health authorities have implemented vector control measures in the affected areas, and surveillance has been reinforced. The first chikungunya outbreak in the Pacific region was reported in New Caledonia in February 2011, followed by outbreaks in Papua New Guinea and Micronesia (island of Yap). So far in 2014, chikungunya outbreaks have also been reported in Samoa, Tonga and Tokelau islands.

Web sources: PAHO update| ECDC Chikungunya | CDC Factsheet | Medisys page |

ECDC assessment

With the beginning of the rainy season in Polynesia and related favourable conditions for the mosquito vector, which is endemic in the region where it also transmits dengue virus, additional cases are expected. In addition, the co-circulation of other flaviviruses such as dengue and Zika virus in Polynesia since October 2013 could make the diagnosis of chikungunya more difficult.

Continued vigilance is needed to detect imported cases of chikungunya in tourists returning to the EU from these regions. This requires awareness among clinicians, travel clinics and blood safety authorities.

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
Epidemic Intelligence duty email: support@ecdc.europa.eu

Actions

ECDC published an updated Rapid Risk Assessment on 27 June 2014.

ECDC monitors the global chikungunya situation on a monthly basis.

Ebola Virus Disease Epidemic - West Africa - 2014

Opening date: 22 March 2014 Latest update: 9 October 2014

Epidemiological summary

Since December 2013 (and as of 14 October 2014), WHO reports 8 997 cases, including 4 493 deaths, in seven affected countries:
Guinea: 1 472 cases and 843 deaths through 12 October 2014
Liberia: 4 249 cases and 2458 deaths through 11 October 2014
Sierra Leone: 3 252 cases and 1183 deaths through 12 October 2014
Nigeria: 20 cases and 8 deaths, with last confirmed case in Lagos on 5 September 2014 (37 days ago as of 12 October) and in Rivers State on 1 September 2014 (41 days ago as of 12 October)
Senegal: 1 case, no deaths, confirmed on 28 August 2014 (45 days ago as of 12 October). All contacts have completed the 21 days of follow-up
Spain: 1 case (secondary transmission to nurse caring for an evacuated patient)
USA: 3 cases including one death (the first case was imported from Liberia and caused two secondary transmissions to nurses who cared for him)

WHO reports that 427 health-care workers have become infected with EVD and 236 of them have died (as of 12 October 2014).

United States: On 15 October US CDC confirmed that a second health care worker at the Texas Health Presbyterian Hospital who provided care for the first Ebola patient diagnosed in the United States has tested positive for EVD. The US CDC confirmed that the latest case travelled by air on 13 October and that she had reported a slight increase in body temperature to 37.5C on the same day. CDC is reaching out to the 132 passengers of the flight.

Spain: No new cases have been reported since 6 October in Spain when a healthworker who participated in the medical care of an medically evacuated confirmed EVD patient, tested positive. She is currently admitted to La Paz-Carlos III Hospital. Competent authorities in Spain are carrying out an investigation to elucidate how the HCW may have become infected. As of 10 October 2014, a total of 72 people, including 13 high risk contacts, are under active monitoring. All high risk contacts are currently under quarantine.

UK has started to screen passengers arriving to Heathrow airport from Liberia, Sierra Leone and Guinea, and that the entry screening will be expanded to Gatwick airport and the Eurostar train connections to Brussels and Paris. Media quoting the French Minister of Health report that France will start the entry screening of passengers arriving to Paris on the daily Air France flights from Conakry.

As os 13 October ten medical evacuations and repatriations to Europe have taken place of confirmed EVD cases: three to Germany, two to Spain, two to The Netherlands, one to the UK, one to France and one to Norway.

Web sources: ECDC Ebola page | ECDC Ebola and Marburg fact sheet | WHO Ebola Factsheet | Spanish MoH | CDC | WHO Roadmap | Media

ECDC assessment

This is the largest ever documented epidemic of EVD in terms of numbers and geographical spread. The epidemic has not yet reached its peak and is currently in a phase of rapid spread.

The evolving epidemic of EVD over the last weeks increases the likelihood that EU residents and travellers to the EVD-affected countries will be exposed to infected or ill persons. The risk of infection for residents and visitors in the affected countries through exposure in the community is considered low if they adhere to the recommended precautions. Residents and visitors to the affected areas run a risk of exposure to EVD in healthcare facilities. The level of this risk is related to how well the infection control measures are being implemented in these settings and the nature of the care required.
As the epidemic is still evolving and more international staff are deployed to the affected countries to support the epidemic control, the risk of importation of EVD cases to the EU is increasing. The risk of Ebola virus spreading from an EVD patient who arrives in the EU as result of a planned medical evacuation is considered to be low when appropriate measures are strictly

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
Epidemic Intelligence duty email: support@ecdc.europa.eu

adhered to, but cannot be excluded in exceptional circumstances. The transmission of Ebola from a patient to a healthcare worker in Spain illustrates the connection between the epidemic in West Africa and the risk for the EU and further stresses the need to control the epidemic in West Africa.
If a symptomatic case of EVD presents in an EU Member State, secondary transmission to caregivers in the family and in healthcare facilities cannot be excluded. The highest risk is at an early stage of the disease, before the risk of EVD has been recognised, and at the late stage of the disease when patients have very high viral loads and undergo invasive therapeutic procedures.

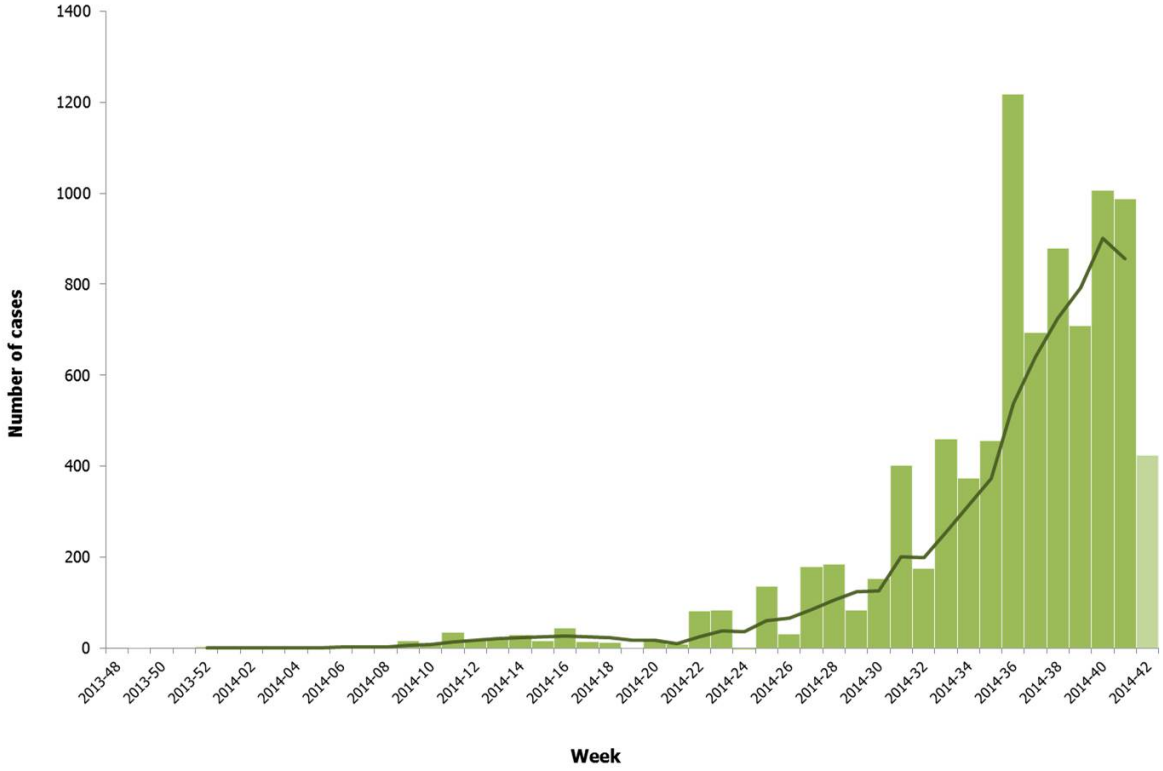
Actions

On 15 October, ECDC published an updated rapid risk assessment.
On 10 September, ECDC published an EU case definition.
An epidemiological update is published weekly on the EVD ECDC page.
On 13 October, ECDC published a document entitled "Infection prevention and control measures for Ebola virus disease: Entry and exit screening measures".

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
Epidemic Intelligence duty email: support@ecdc.europa.eu

Distribution of reported cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia, Nigeria and Senegal, weeks 48/2013 to 42*/2014

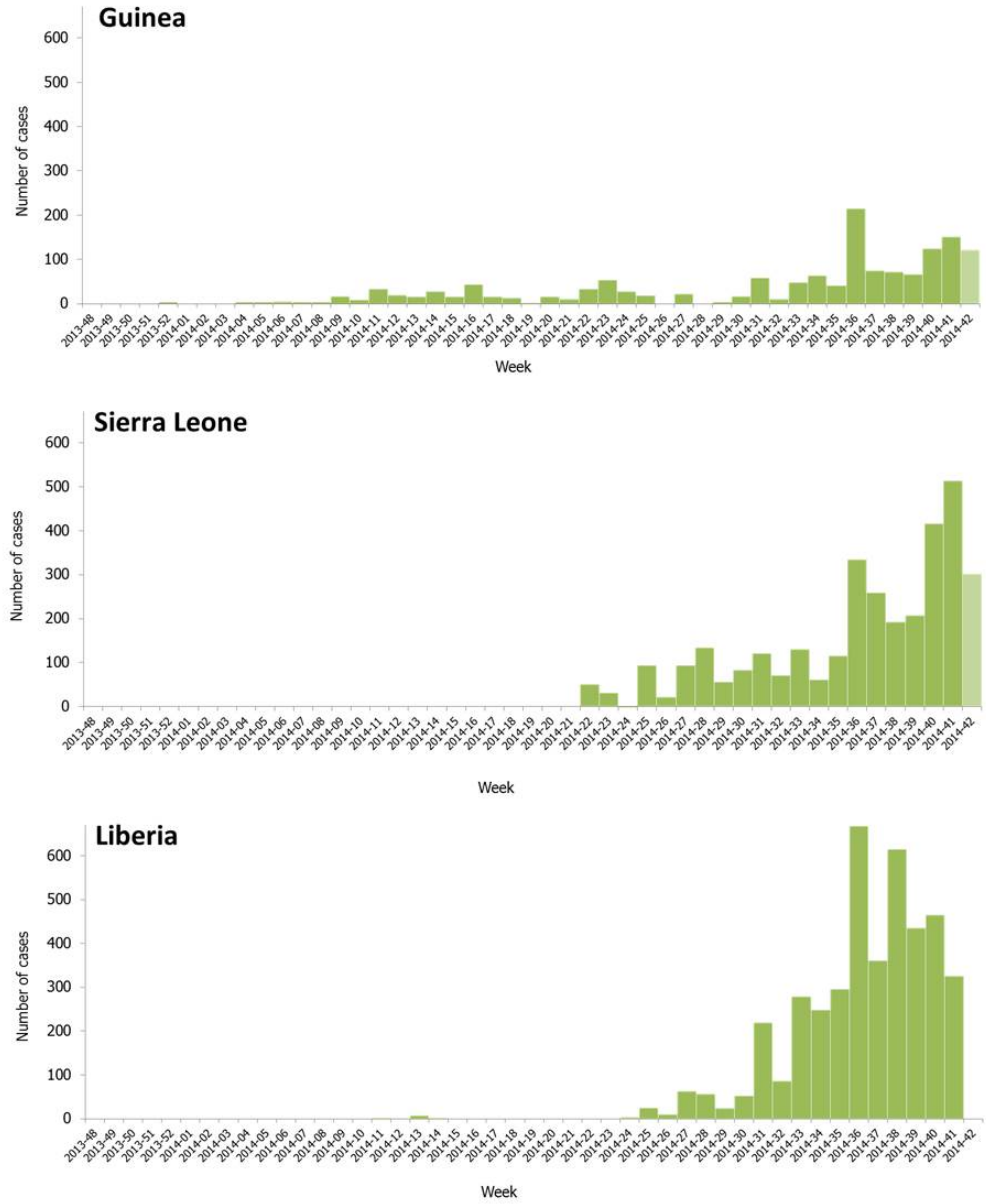
Source: Adapted from WHO; *Data for week 42 are incomplete



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
Epidemic Intelligence duty email: support@ecdc.europa.eu

Distribution of cases of EVD by week of reporting in the three countries with widespread and intense transmission, as of week 42* 2014

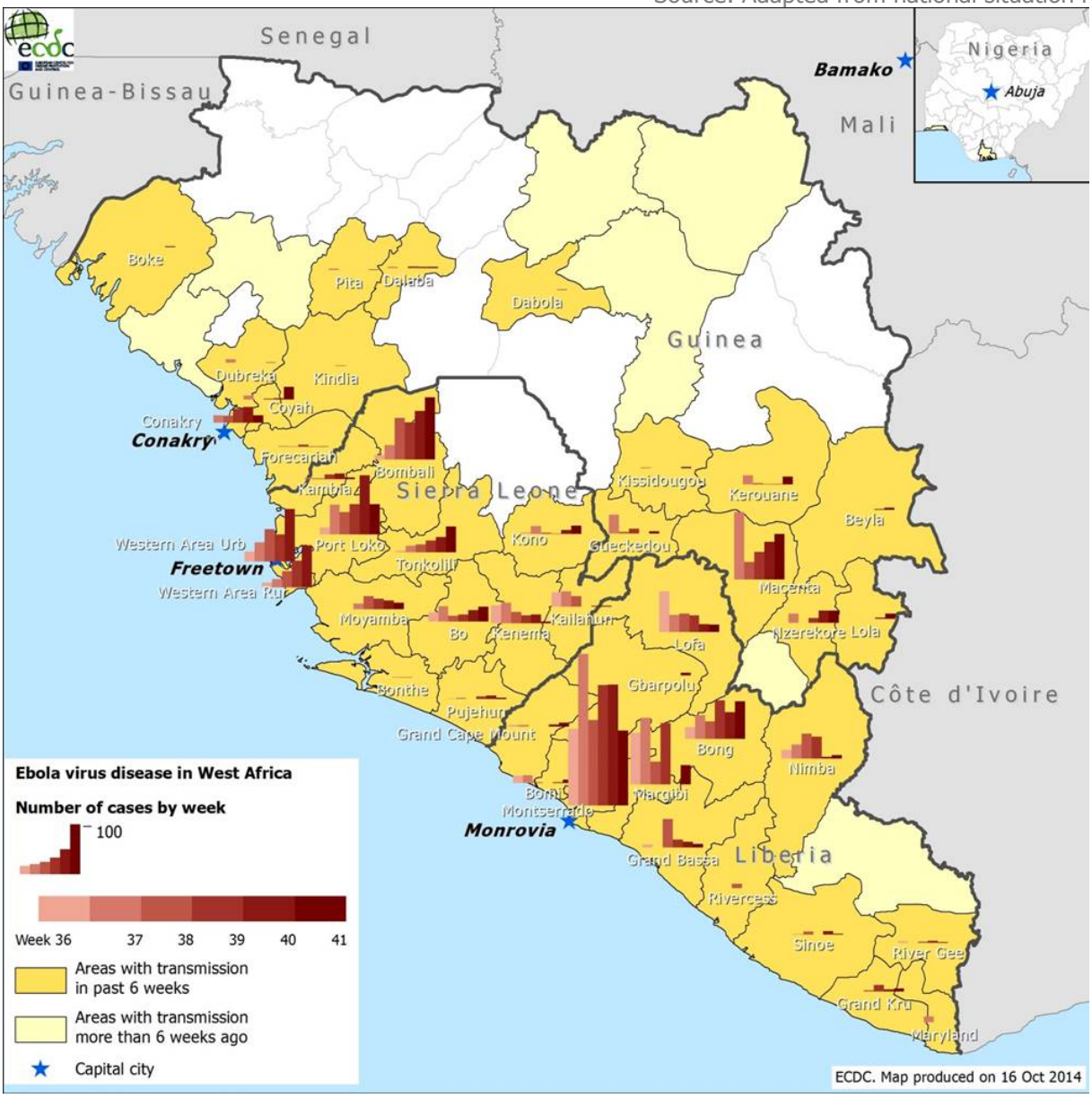
Source: Adapted from WHO figures; *Data for week 42 are incomplete



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
Epidemic Intelligence duty email: support@ecdc.europa.eu

Distribution of cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia and Nigeria (as of week 41/2014)

Source: Adapted from national situation reports



Ebola Virus Disease Outbreak - the Democratic Republic of Congo - 2014

Opening date: 26 August 2014 Latest update: 9 October 2014

Epidemiological summary

On 26 August 2014, the Ministry of Health in the Democratic Republic of the Congo (DRC) notified the World Health Organization Regional Office for Africa (WHO/AFRO) of an outbreak of EVD in Equateur Province. Between 28 July and 9 October 2014, there have been 68 cases (38 confirmed, 28 probable, 2 suspected) of Ebola virus disease (EVD) reported in the Democratic Republic of the Congo, including 49 deaths. Eight deaths have been reported among healthcare workers. Eight healthcare workers have died. Eight-hundred-and-sixteen contacts (out of 1 121) have completed the 21-day follow-up, and 305 contacts are still being monitored. The index case was a pregnant woman from Ikanamongo Village who butchered a bush animal given to her by her hunter husband. She fell ill with symptoms of EVD and died on 11 August at a private clinic in Isaka Village.

A team of national and international specialists has been deployed to work with the local response teams. There are two treatment centres in the affected area run by Médecins sans Frontières (MSF): one 10-bed unit in Boende, and one 40-bed unit in Lokolia.

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
Epidemic Intelligence duty email: support@ecdc.europa.eu

The species causing this outbreak is *Zaïre ebolavirus*. The strain was found to be 99% homologous to Kikwit 1995 strain and therefore different from the *Zaïre ebolavirus* strain circulating in West Africa.

Web Sources: WHO AFRO | ECDC Ebola factsheet | OCHA

ECDC assessment

The outbreak in DRC is unrelated to the ongoing outbreak in West Africa.

The epidemiological features of this outbreak are consistent with previous EVD outbreaks caused *Zaïre ebolavirus*. 852 contacts have now completed the 21-day follow-up. Of 269 contacts currently being monitored, all (100%) were seen on 9 October, the last date for which data has been reported. It is possible that more cases will be identified in the coming weeks, as active case-finding and contact monitoring is in place, and given the duration of the incubation period (up to three weeks). However, control measures currently implemented with the support of international partners are expected to prevent the further spread of the disease. The latest case in the outbreak was confirmed on 4 October.

Actions

ECDC is monitoring this event through epidemic intelligence and has published a rapid risk assessment.

Outbreak of Marburg fever – Uganda

Opening date: 6 October 2014 Latest update: 9 October 2014

Epidemiological summary

On 5 October, the Ministry of Health in Uganda reported the death of a healthcare worker who had died on 30 September of Marburg fever. The 30-year-old male patient was recently recruited as a radiographer at Mengo hospital in Kampala, Uganda. No new confirmed cases of Marburg haemorrhagic fever have been reported since the detection of the index case. One probable case was admitted to the Mulago isolation unit in Kampala on 14 October 2014. On the same day, a second probable case was admitted to Mpigi health centre. The probable case admitted to hospital in Kampala reportedly has a history of being admitted to the same ward in Mengo hospital as the index case. His last date of possible contact with the index case was 28 September 2014. He is reported to have developed fever, headache, general body weakness and dizziness around 11 October 2014. The probable case admitted to Mpigi health centre on 14 October 2014 is reported to have tested negative for malaria, brucellosis and typhoid.

As of 13 October, 123 contacts of the index case are under surveillance.

Source : CDC | media | MoH Uganda

ECDC assessment

Ugandan authorities have reported several outbreaks since the virus was identified in 1967: in 2007 (4 cases), in 2008 (2 cases) and in 2012 (20 cases including nine deaths). The last outbreak (reported in 2012) affected four districts in Uganda (Kabale, Ibanda, Mbarara, and Kampala). The response to the current outbreak is led by the Ministry of Health, the US Centers for Disease Control and Prevention, Médecins Sans Frontières, and UNICEF.

Outbreak of Enterovirus D68 - USA

Opening date: 10 September 2014 Latest update: 9 October 2014

Epidemiological summary

In August 2014, hospitals in Missouri and Illinois were the first to document an increase of severe respiratory illness in children. Most of the cases were later found to be caused by EV-D68 infection. Almost all confirmed cases have been among children, and many of the children have a medical history of asthma and wheezing. As of 16 October 2014, 46 state health departments in the USA have reported an increase in respiratory illness in children. This increase can be caused by many different viruses that are common during this time of year. EV-D68 appears to be the predominant type of enterovirus this year and may be contributing to the increases in severe respiratory illnesses. According to US CDC, EV-D68 has been detected in specimens from seven patients who died and had samples submitted for testing.

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
Epidemic Intelligence duty email: support@ecdc.europa.eu

On 26 September 2014, the US CDC issued a National Health Advisory with a case definition to investigate the possible linkage of the clusters of acute neurologic disease to the EV-D68 outbreak. On 3 October 2014, two reports were published by the US CDC on clusters of neurologic illness, including acute flaccid paralysis (AFP) with possible association with EV-D68: Between 8 August and 15 September 2014, a cluster of nine children at Children's Hospital Colorado, Denver, developed symptoms of neurological illness characterised by extremity weakness and/or cranial nerve dysfunction. All had a preceding febrile illness 3–16 days prior to onset of neurologic illness.

Between January 2012 and May 2014, 23 cases of AFP, mainly children, with anterior myelitis of unknown etiology were detected by active surveillance in California. EV-D68 was identified in upper respiratory tract specimens of two patients out of 23.

As of 15 October, CDC has verified reports of 37 cases in 16 states that meet the National Health Advisory case definition. A dozen additional reports are under investigation. It is not yet clear how many tested positive for EV-D68.

According to health authorities in British Columbia there have been two cases of AFP, both with upper respiratory specimens positive for EV-D68. In both cases serious and prolonged duration of paralytic findings was observed. In Alberta, four paralysis cases were investigated, two of which were positive for EV-D68 by upper respiratory specimen. In Ontario, nine paralysis cases are under investigation to determine if there might be a connection to EV-D68.

Sporadic cases of EV-D68 were documented in several EU/EEA countries in recent years. In 2014, EV-D68 was detected in at least four EU/EEA countries, but no epidemic clusters of severe disease have been reported. To date, EU/EEA countries have not reported a growing number of acute respiratory infections or an increased number of hospital admissions.

Web sources: MMWR | CDC | Kansas Health institute | Illinois Department of Health | CDC Q&A | Public Health Canada | Alberta health services

ECDC assessment

EV-D68 is a potential cause of respiratory tract infections, mainly among children. It can be found in respiratory secretions such as saliva, nasal mucus or sputum. The virus spreads from person to person when an infected person coughs, sneezes or touches contaminated surfaces. There are no available vaccines or specific treatments for EV-D68 and clinical care is symptomatic treatment.

EV-D68 has rarely been reported outside North America, and the number of cases are likely to be underestimated in the United States and Canada due to the absence of a mandatory surveillance system. This year, the magnitude of the outbreak in the United States exceeds previous years, and the transmission of the virus outside North America, including the EU/EEA, remains a possibility. However, the probability that EV-D68 cases will be laboratory-confirmed in EU/EEA countries is low because most EU Member States do not routinely screen for EV-D68, and the disease is not notifiable. EU/EEA countries need to remain vigilant and consider strengthening respiratory sample screening for enteroviruses and enterovirus typing. More systematic testing of severe respiratory illness cases for EV-D68 could be considered in EU/EEA countries to better document the circulation of this virus.

In the coming weeks, the USA may report an increasing number of laboratory-confirmed cases due to a change in laboratory testing practices. This will not necessarily imply a real increase in the number of cases.

A connection between EV-D68 and the observed neurological illness in the USA and Canada has not yet been proven.

Actions

ECDC published a first update of the rapid risk assessment on 15 October 2014.

Middle East respiratory syndrome – coronavirus (MERS CoV) – Multistate

Opening date: 24 September 2012 Latest update: 9 October 2014

Epidemiological summary

Since April 2012 and as of 16 October 2014, 897 cases of MERS-CoV have been reported by local health authorities worldwide,

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
Epidemic Intelligence duty email: support@ecdc.europa.eu

including 357 deaths. The distribution is as follows:

Confirmed cases and deaths by region:
Middle East
Saudi Arabia: 763 cases/324 deaths
United Arab Emirates: 73 cases/9 deaths
Qatar: 8 cases/4 deaths
Jordan: 18 cases/5 deaths
Oman: 2 cases/2 deaths
Kuwait: 3 cases/1 death
Egypt: 1 case/0 deaths
Yemen: 1 case/1 death
Lebanon: 1 case/0 deaths
Iran: 5 cases/2 deaths

Europe
UK: 4 cases/3 deaths
Germany: 2 cases/1 death
France: 2 cases/1 death
Italy: 1 case/0 deaths
Greece: 1 case/1 death
Netherlands: 2 cases/0 deaths
Austria: 1 case/0 deaths

Africa
Tunisia: 3 cases/1 death
Algeria: 2 cases/1 death

Asia
Malaysia: 1 case/1 death
Philippines: 1 case/0 deaths

Americas
United States of America: 2 cases/0 deaths

Web sources: ECDC's latest rapid risk assessment | ECDC novel coronavirus webpage | WHO | WHO MERS updates | WHO travel health update | WHO Euro MERS updates | CDC MERS | Saudi Arabia MoH | ECDC factsheet for professionals

ECDC assessment

The source of MERS-CoV infection and the mode of transmission have not been identified. Dromedary camels are a host species for the virus, and many of the primary cases in MERS-CoV clusters have reported direct or indirect camel exposure. Almost all of the recently reported secondary cases, many of whom are asymptomatic or have only mild symptoms, have been acquired in healthcare settings. There is therefore a continued risk of cases presenting in Europe following exposure in the Middle East. International surveillance for MERS-CoV cases is essential.

The risk of secondary transmission in the EU remains low and can be reduced further through screening for exposure among patients presenting with respiratory symptoms (and their contacts) and strict implementation of infection prevention and control measures for patients under investigation.

Actions

ECDC published an epidemiological update on 1 October 2014.
The last rapid risk assessment was updated on 16 October 2014.
ECDC is closely monitoring the situation in collaboration with WHO and EU Member States.
ECDC published a factsheet for health professionals regarding MERS-CoV on 20 August 2014.

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
Epidemic Intelligence duty email: support@ecdc.europa.eu

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 16 October 2014

Epidemiological summary

During the past week, 21 new cases of WPV1 have been reported to WHO.

Worldwide, 243 cases have been reported to WHO so far in 2014, compared with 293 for the same time period in 2013. In 2014, nine countries have reported cases: Pakistan (206 cases), Afghanistan (12 cases), Nigeria (6 cases), Equatorial Guinea (5 cases), Somalia (5 cases), Cameroon (5 cases), Iraq (2 cases), Syria (1 case), and Ethiopia (1 case).

The number of cases of paralysis caused by wild poliovirus in 2014 is the highest number of cases on record by October in Pakistan in any year since 2009.
More than 6 months has passed since a case of wild poliovirus was reported in Syria or Iraq.

After the declaration of a PHEIC, WHO issued a set of Temporary Recommendations that call for the vaccination of all residents in, and long-term visitors to, countries with polio transmission prior to international travel.

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet |Temporary Recommendations to Reduce International Spread of Poliovirus

ECDC assessment

Europe is polio-free. The last polio cases within the current EU borders were reported from Bulgaria in 2001. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

The confirmed circulation of WPV in several countries and the documented exportation of WPV to other countries support the fact that there is a potential risk for WPV being re-introduced to the EU/EEA. The highest risk of large poliomyelitis outbreaks occurs in areas with clusters of unvaccinated populations and in people living in poor sanitary conditions, or a combination of the two.

References: ECDC latest RRA | Rapid Risk Assessment on suspected polio cases in Syria and the risk to the EU/EEA | Wild-type poliovirus 1 transmission in Israel - what is the risk to the EU/EEA? | WHO statement on the meeting of the International Health Regulations Emergency Committee concerning the international spread of wild poliovirus, 5 May 2014

Actions

ECDC follows reports of polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identify events that increase the risk of wild poliovirus being re-introduced to the EU.

Following the declaration of polio as a PHEIC, ECDC updated its risk assessment. ECDC has also prepared a background document with travel recommendations for the EU.

On 4 September 2014, ECDC published a news item regarding the WHO IHR Emergency Committee decision to add Equatorial Guinea as a wild poliovirus-exporting country and the renewal of the WHO PHEIC recommendations.

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
Epidemic Intelligence duty email: support@ecdc.europa.eu

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

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

Epidemic Intelligence duty email: support@ecdc.europa.eu