



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 48, 23-29 November 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: 27 November 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 week 47/2014, influenza activity remained low across the WHO European Region.

Highly pathogenic avian influenza virus A(H5N8) - Multistate - 2014

Opening date: 17 November 2014

Latest update: 27 November 2014

During November 2014, Germany, the Netherlands and the UK have reported outbreaks of highly pathogenic avian influenza A (H5N8) in commercial poultry farms. Germany detected A(H5N8) in a migratory wild bird.

→Update of the week

On 20 November 2014, an outbreak of highly pathogenic avian influenza virus A(H5N8) was detected at a poultry farm in Ter Aar (municipality of Nieuwkoop) in <u>the Netherlands</u>.

On 21 November 2014, another outbreak due to A(H5N8) was identified in Kamperveen (Overijssel) in the Netherlands.

On 22 November 2014, the Federal Research Institute for Animal Health in <u>Germany</u> reported that A(H5N8) virus has been found in a wild bird in Germany in the eastern state of Mecklenburg-Vorpommern.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012 Latest update: 27 November 2014

Rubella, caused by the rubella virus and commonly known as German measles, is usually a mild and self-limiting disease and is an infection 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.

→Update of the week

No new outbreaks have been detected in the EU since the last monthly update.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 27 November 2014

Measles, a highly transmissible vaccine-preventable disease, is still endemic in many EU countries where vaccination uptake remains below the level required to interrupt the transmission cycle. ECDC monitors measles transmission and outbreaks in EU and neighbouring countries in Europe on a monthly basis through enhanced surveillance and epidemic intelligence activities. Elimination of measles requires consistent vaccination uptake above 95% with two doses of measles vaccine in all population groups, strong surveillance and effective outbreak control measures.

→Update of the week

Since the last monthly update, one new measles outbreak has been reported in Slovenia.

Non EU Threats

New! Plague outbreak - Madagascar - 2014

Opening date: 24 November 2014

Latest update: 27 November 2014

An outbreak of plague has been evolving in the country since 31 August 2014 when the first case was notified in a male child from Soamahatamana village in the district of Tsiroanomandidy. The child died on 3 September. As of the 24 November 2014, 138 cases and 47 deaths (CFR 34%) have been reported.

Ebola Virus Disease Epidemic - West Africa - 2014

Opening date: 22 March 2014

Latest update: 27 November 2014

An epidemic of Ebola virus disease (EVD) has been ongoing in West Africa since December 2013, mainly affecting Guinea, Liberia and Sierra Leone. The situation in the affected countries remains critical. On 8 August 2014, WHO declared the Ebola epidemic in West Africa a Public Health Emergency of International Concern (PHEIC).

→Update of the week

On 26 November 2014, <u>WHO</u> reported 15 935 cases, including 5 689 deaths, confirmed, probable, and suspected cases of Ebola virus disease (EVD) in six affected countries (Guinea, Liberia, Mali, Sierra Leone, Spain and the United States of America) and two previously affected countries (Nigeria and Senegal) up to the end of 23 November.

On 25 November 2014, <u>WHO</u> confirmed two additional cases of EVD in Bamako, Mali. The first case was the 23-year-old fiancée of a 25-year-old nurse who attended the Imam from Guinea (the index case in this outbreak) and the second case is part of a family of previously confirmed and deceased patients. In total, eight cases of EVD, including six deaths, have been reported in Mali.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 27 November 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. On 14 November, the Temporary Recommendations in relation to PHEIC, were extended for a further three months.

→Update of the week

During the past week, 15 new cases of wild poliovirus type 1 (WPV1) were reported: 14 in Pakistan and one in Afghanistan.

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

Opening date: 24 September 2012

Latest update: 27 November 2014

Since April 2012, 947 cases of MERS-CoV have been reported by local health authorities worldwide, including 382 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 CDTR on 21 November, four new cases have been reported from Saudi Arabia, two from Taif and two from Alkharj.

Outbreak of Enterovirus D68 - Global - 2014

Opening date: 10 September 2014

Latest update: 20 November 2014

Since mid-August 2014, local health authorities in 47 states and the District of Columbia in the USA have been notifying the Centers for Disease Control and Prevention (CDC) of laboratory-confirmed enterovirus 68 (EV-D68) infections. Since mid-September, Canada has also experienced an increase in severe respiratory illness associated with EV-D68 infections. 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 update on 21 November 2014, no new cases of respiratory illness caused by EV-D68 have been reported from the USA and Canada.

On 25 November 2014, Norwegian health authorities reported two cases of neurological disease associated with EV-D68 in children.

On 26 November 2014, <u>Swedish</u> health authorities reported six cases of EV-D68. All children have recovered and none had any symptoms of paralysis.

II. Detailed reports

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

Opening date: 9 October 2014

Latest update: 27 November 2014

Epidemiological summary

In week 47/2014:

Sixteen countries reported sporadic influenza activity and six countries reported increasing trends for influenza activity.
Of the 760 sentinel ILI and ARI specimens tested across 33 countries, only 20 (3%) from eight countries tested positive for influenza virus. Currently circulating viruses include A(H1N1)pdm09, A(H3N2) and influenza B viruses.
Hospitalised laboratory confirmed influenza cases remain low and stable, with two countries reporting four cases for week 47/2014. Three of the four cases were admitted to intensive care units.

Web sources: Flu News Europe | ECDC Influenza |

ECDC assessment

Although sporadic influenza virus detections are being reported in an increasing number of countries, there is no indication that the influenza season has started in the region, which is normal for this time of year.

Actions

ECDC and WHO produce the Flu News Europe bulletin weekly.

Highly pathogenic avian influenza virus A(H5N8) - Multistate - 2014

Opening date: 17 November 2014 Latest update: 27 November 2014

Epidemiological summary

On 6 November 2014, the German authorities reported an outbreak of highly pathogenic avian influenza (HPAI) virus A(H5N8) at a holding with 31 000 fattening turkeys in the north-east of Germany. On 22 November 2014, the Federal Research Institute for Animal Health in Germany confirmed that A(H5N8) virus was detected in a wild bird in the eastern state of Mecklenburg-Vorpommern.

On 16 November 2014, the UK authorities reported another outbreak of HPAI virus due to A(H5N8) in an indoor holding with 6 000 breeding ducks in North Yorkshire, England.

As of 27 November 2014, the Dutch authorities have reported outbreaks of HPAI virus due to A(H5N8) in Hekendorp, Ter Aar and Kamperveen.

Web sources: ECDC Avian Influenza | RKI | RIVM |PHE | FAO|

ECDC assessment

Highly pathogenic avian influenza virus A(H5N8) has been detected among wild birds in Asia where it has caused several outbreaks on commercial poultry farms in South Korea, Japan and China. However, this is the first time it has been detected in Europe. It remains unclear how this virus was introduced into closed indoor holdings in Europe in regions far from each other and in different poultry production sectors at the same time. The ability of this highly pathogenic avian influenza virus to sub-clinically infect wild birds increases the risk of geographical spread and subsequent outbreaks, as observed in South Korea. The ongoing monitoring and testing of wild birds and domestic poultry in the EU therefore plays an important role in the early detection of further virus occurrences.

To date, no human infections with this virus have ever been reported worldwide and the risk for zoonotic transmission to the general public in the EU/EEA countries is considered to be extremely low. However, given the evolutionary history of the virus, with HA gene evolved from the widely circulating A(H5N1) viruses, people in direct contact/handling diseased birds or poultry, or their carcasses (e.g. farmers, veterinarians and labourers involved in the culling and rendering) might be at risk of infection.

Given this potential zoonotic risk, contingency plans for the control of avian influenza in poultry and birds should be developed in collaboration with public health and occupational health authorities to ensure that persons at risk are sufficiently protected from infection. The use of appropriate personal protective equipment and vaccination with seasonal influenza vaccine are recommended, antiviral prophylaxis could be considered.

Actions

On 20 November 2014, ECDC published an updated rapid risk assessment.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 27 November 2014

Epidemiological summary

Twenty-seven EU/EEA countries reported 6 396 cases during the recent 12-month period between November 2013 and October 2014. In 21 countries, the rubella notification rate was less than one case per million population during the last 12 months.

Web sources: <u>ECDC measles and rubella monitoring | ECDC rubella factsheet | WHO epidemiological brief summary tables |</u> WHO epidemiological briefs |Progress report on measles and rubella elimination |Towards rubella elimination in Poland

ECDC assessment

As rubella is typically a mild and self-limiting disease with few complications, the rationale for eliminating rubella would be weak if it were not for the virus' teratogenic effect. When a woman is infected with the rubella virus within the first 20 weeks of pregnancy, the foetus has a 90% risk of being born with congenital rubella syndrome (CRS), which entails a range of serious incurable illnesses. The increase in the number of rubella cases reported in Romania and Poland during the last two years and the number of babies born with CRS are cause for concern. Rubella occurs predominantly in age and sex cohorts historically not included in vaccination recommendations. To achieve rubella elimination, supplemental immunisation activities in these cohorts are needed.

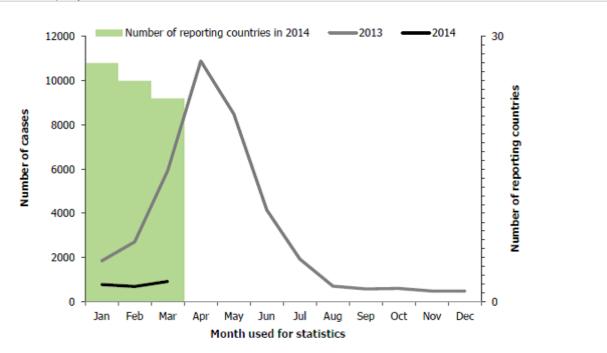
Actions

ECDC closely monitors rubella transmission in Europe by analysing the cases reported to the European Surveillance System and through its epidemic intelligence activities on a monthly basis. Twenty-four EU and two EEA countries contribute to the enhanced rubella surveillance. The purpose of the enhanced rubella monitoring is to provide regular and timely updates on the rubella situation in Europe in support of effective disease control, increased public awareness and the achievement of the 2015 rubella and congenital rubella elimination target.

An ECDC report is available online: <u>Survey on rubella, rubella in pregnancy and congenital rubella surveillance systems in EU/EEA</u> <u>countries</u>

ECDC

Number of rubella cases in 2013 and 2014 and number of European countries reporting in 2014, by month



Note: Belgium and France do not have rubella surveillance with national coverage. Of the countries that have rubella surveillance with national coverage, only Italy did not report data for all months in 2013

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 27 November 2014

Epidemiological summary

EU Member States

Slovenia

Media report that a measles outbreak was declared in Slovenia on 27 November.

Rest of the world

USA

<u>CDC</u> reports that the USA is experiencing a record number of measles cases in 2014. From 1 January to 31 October, there have been 603 confirmed measles cases in 22 states reported to CDC's National Center for Immunization and Respiratory Diseases (NCIRD). This is the highest number of cases reported since measles elimination was documented in the USA in 2000.

On 13 November, <u>WHO</u> published a statement warning that progress towards the global elimination of measles has stalled. The number of deaths from measles increased from an estimated 122 000 in 2012 to 145 700 in 2013, according to new data published in the WHO Weekly Epidemiological Report and the Centers for Disease Control and Prevention's (CDC) Morbidity and Mortality Weekly Report. The estimated number of measles deaths in 2013 represents a 75% decline in mortality since 2000, significantly below the target of a 95% reduction in deaths between 2000 and 2015.

Web sources: <u>ECDC measles and rubella monitoring</u> | <u>ECDC/Euronews documentary</u> | <u>MedISys Measles page</u> | <u>EUVAC-net ECDC</u> | <u>ECDC measles factsheet</u>

ECDC assessment

During 2014, seven EU Member States have reported measles outbreaks. The target year for measles elimination in Europe is 2015. The current situation suggests that endemic measles transmission continues in many EU Member States and the prospect of achieving the 2015 objective is not obtainable.

New! Plague outbreak - Madagascar - 2014

Opening date: 24 November 2014

Latest update: 27 November 2014

Epidemiological summary

An outbreak of plague has been evolving in the country since 31 August 2014 when the first case was notified by the Ministry of Health in a male child from Soamahatamana village in the district of Tsiroanomandidy. The child died on 3 September. In September 2014, 25 cases were reported, including 14 fatalities (56%) in four districts, three regions. They include seven pulmonary forms (28%).

According to WHO, as of 16 November 2014, 119 cases and 40 deaths (CFR 34%) have been reported in the country. Only 2% of reported cases are of the pneumonic form. Sixteen districts of seven regions are affected. Two cases including one death have been reported in the capital, Antananarivo, from two densely populated neighbourhoods.

According to the media, quoting the Institute Pasteur in Madagascar, as of 24 November, 138 cases including 47 deaths (CFR 34%) have been reported since January 2014.

Web sources: WHO | Media |

ECDC assessment

Cases of bubonic and pneumonic plague are not unexpected events in Madagascar. However, the recent occurrence of cases in the capital demonstrates a risk of a rapid spread of the disease due to the city's high population density, the poor sanitation and garbage collection system and the weakness of the healthcare system.

Based on information currently available to ECDC, the risk of contracting plague for EU travellers to the affected area in Madagascar is considered to be unchanged and very low. The risk to visitors is very limited if they limit the risk of contact with rats and fleas.

Actions ECDC is preparing a rapid risk assessment.

Ebola Virus Disease Epidemic - West Africa - 2014

Opening date: 22 March 2014

Latest update: 27 November 2014

Epidemiological summary

Distribution of cases

Countries with widespread and intense transmission:

- Guinea: 2 134 cases and 1 260 deaths (as of 23 November 2014), this is an increase of 87 cases since 18 November
- Liberia: 7 168 cases and 3 016 deaths (as of 22 November 2014), this is an increase of 86 cases since 17 November
- Sierra Leone: 6 599 cases and 1 398 deaths (as of 23 November 2014), this is an increase of 409 cases since 18 November

Countries with an initial case or cases, or with localised transmission:

- United States: four cases including one death.

Spain: one case, no deaths. The case is the result of secondary transmission in Spain to a nurse who cared for an EVD patient who had been evacuated from Liberia. The nurse was isolated on 6 October 2014. This case tested negative for Ebola for a second time on 21 October 2014. Spain can be declared free of EVD after 42 days of the second negative test on 2 December.
 Mali: eight cases, six deaths.

- Nigeria: 20 cases and eight deaths. Nigeria was declared Ebola free on 19 October 2014.
- Senegal: one confirmed imported case. Senegal was declared Ebola free on 17 October 2014.

Situation in specific West African countries

According to WHO, in the three countries with widespread and intense transmission, reported case incidence seems stable in

Guinea, stable or declining in Liberia, but still increasing in Sierra Leone, All administrative districts in Liberia and Sierra Leone have reported at least one confirmed or probable case of EVD since the start of the epidemic. Cases and deaths continue to be under-reported.

In Mali, there have been eight cases: seven confirmed and one probable case, including six deaths. To date, all seven cases in Bamako can be linked to contact with an Imam who developed symptoms on 17 October in his native village of Kourémalé, Guinea, and arrived in Bamako on 25 October for treatment at the Pasteur Clinic. All identified contacts connected with this initial case have now completed a 21-day follow-up. Among the cases in Bamako, two are healthcare workers (HCWs) who cared for the imported case from Guinea. According to WHO, as of 24 November 2014, 285 of 288 contacts linked with the current outbreak in Bamako have been followed up.

Situation among healthcare workers

As of 23 November, 592 healthcare workers have been reported to be infected with EVD, 340 of whom have died.

Situation outside of West Africa

USA

No new autochthonous EVD cases have been reported since 23 October. The latest autochthonous reported case concerns a medical aid worker who volunteered in Guinea and recently returned to the United States. He was hospitalised in New York City and was discharged healthy on 11 November 2014.

Spain

No new cases have been reported since 6 October when a healthcare worker was infected while caring for an Ebola-infected patient in Madrid. She recovered and tested negative for EVD on 19 October. A second negative test was obtained on 21 October. All 83 contacts of the HCW have completed a 21-day follow-up. Spain will be declared free of EVD on 30 November; 42 days after the date of the second negative test, if no new cases are reported.

Medical evacuations and repatriations from EVD-affected countries

Twenty-two individuals have been evacuated or repatriated from the EVD-affected countries. As of 27 November, there have been 11 medical evacuations of confirmed EVD-infected patients to Europe (three to Germany, three to Spain, two to France, one to the UK, one to Norway and one to Italy). Two persons exposed to Ebola have been repatriated to the Netherlands and tested negative. One individual was evacuated to Switzerland and was confirmed not to have EVD in September.

The most recent case is an Italian doctor who was medically evacuated from Sierra Leone on 24 November. According to the Italian Ministry of Health, he was working in the Medical Centre of the NGO Emergency in Sierra Leone when he was diagnosed with EVD. The patient, a 50-year-old Sicilian man, was transported to the National Institute for Infectious Diseases (INMI) Lazzaro Spallanzani in Rome and was hospitalised in a high isolation unit to receive the appropriate treatment.

Figures

First epi-curve: Distribution of reported cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia, Nigeria, Mali and Senegal, weeks 48/2013 to 48*/2014

* In week 45/2014, WHO carried out retrospective correction in the data resulting in reporting 299 fewer cases which resulted in a negative value for new cases in week 45 which is not plotted.

** According to WHO, the marked increase in the cumulative total number of cases in week 43 is due to a more comprehensive assessment of patient databases leading to 3 792 additional reported cases. However, these cases have occurred throughout the epidemic period.

Second epi-curve: Distribution of cases of EVD by week of reporting in the three countries with widespread and intense transmission, as of week 48* 2014

* The marked increase in the number of cases reported in Sierra Leone (week 44) and Liberia (week 43) results from a more comprehensive assessment of patient databases. The additional 3 792 cases have occurred throughout the epidemic period. ** In week 45/2014, WHO reported -476 cases in Sierra Leone due to retrospective corrections. § In week 44/2014, WHO reported zero cases for Liberia.

Web sources: ECDC Ebola page | ECDC Ebola and Marburg fact sheet | WHO Ebola Factsheet | Spanish MoH | CDC | WHO Roadmap | Mali MoH | Italian Ministry of Health |

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 continues to spread. The evolving epidemic of EVD over recent 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 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

An epidemiological update is published weekly on the <u>EVD ECDC page</u>. On 18 November, ECDC published an updated <u>rapid risk assessment</u>.

On 10 September, ECDC published an EU case definition.

On 22 September ECDC published assessment and planning for medical evacuation by air to the EU of patients with Ebola virus disease and people exposed to Ebola virus.

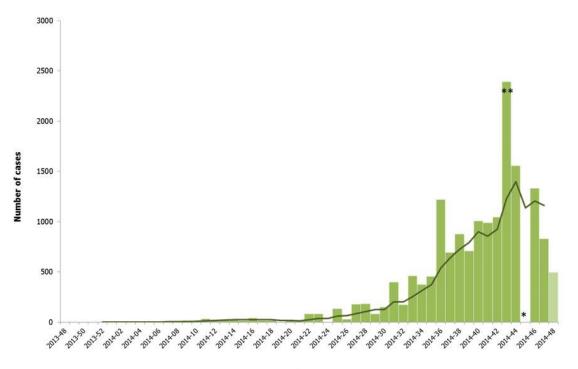
On 6 October ECDC published <u>risk of transmission of Ebola virus via donated blood and other substances of human origin in the</u> <u>EU</u>.

On 13 October, ECDC published Infection prevention and control measures for Ebola virus disease: Entry and exit screening measures.

On 22 October ECDC published <u>Assessing and planning medical evacuation flights to Europe for patients with Ebola virus disease</u> and people exposed to Ebola virus.

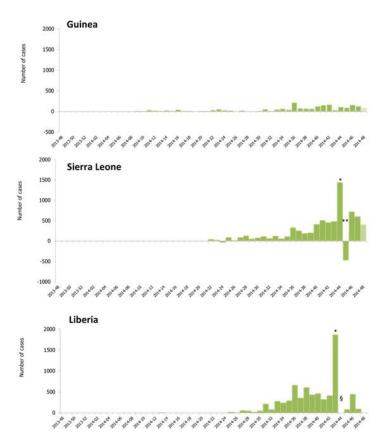
On 23 October ECDC published <u>Public health management of persons having had contact with Ebola virus disease cases in the EU</u>. On 29 October, ECDC published a training tool on the <u>safe use of PPE</u> and <u>options for preparing for gatherings in the EU</u> Distribution of reported cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia, Mali, Nigeria and Senegal, weeks 48/2013 to 48*/2014

Source: Adapted from WHO; *Data for week 48 are incomplete



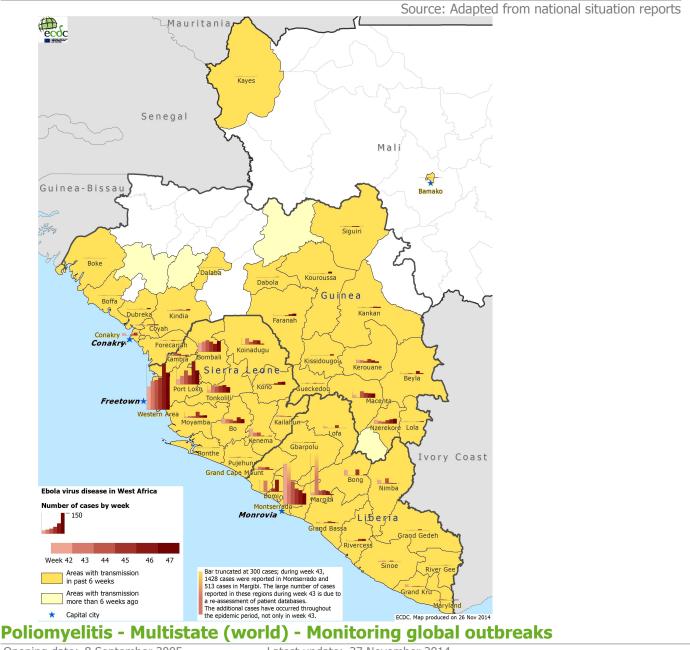
Week

Distribution of cases of EVD by week of reporting in the three countries with widespread and intense transmission, as of week 48* 2014



Source: Adapted from WHO; *Data for week 48 are incomplete

Distribution of cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia and Mali (as of week 47/2014)



Opening date: 8 September 2005

Latest update: 27 November 2014

Epidemiological summary

Worldwide in 2014, 306 cases have been reported to WHO so far, compared with 347 for the same time period in 2013. In 2014, nine countries have reported cases: Pakistan (260 cases), Afghanistan (21 cases), Nigeria (6 cases), Equatorial Guinea (5 cases), Somalia (5 cases), Cameroon (5 cases), Iraq (2 cases), Syria (1 case), and Ethiopia (1 case).

In response to the outbreak of circulating vaccine-derived poliovirus (cVDPV) in South Sudan, over 19 000 children were vaccinated last week in Bentiu Poc, where the two cases were reported. Outbreak response plans are in place to hold three rounds of supplementary immunisation activities (SIAs) in high-risk areas to stop transmission of the virus. In the north of Madagascar, SIAs are planned for December in response to the outbreak of cVDPV.

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.

12/18

On 14 November, after a third meeting on PHEIC, WHO recommended the extension of the Temporary Recommendations for an additional three months.

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

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 | WHO statement on the third meeting of the International Health Regulations Emergency Committee regarding the international spread of wild poliovirus, 14 November 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 <u>risk assessment</u>. ECDC has also prepared a background document with travel recommendations for the EU.

On 4 September 2014, <u>ECDC</u> 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.

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

Opening date: 24 September 2012

Latest update: 27 November 2014

Epidemiological summary

Since April 2012 and as of 27 November 2014, 947 cases of MERS-CoV have been reported by local health authorities worldwide, including 382 deaths. The distribution is as follows:

Confirmed cases and deaths by region: Middle East

Saudi Arabia: 811 cases/348 deaths United Arab Emirates: 73 cases/9 deaths Qatar: 9 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

Turkey: 1 case/1 death 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: <u>ECDC's latest rapid risk assessment</u> | <u>ECDC novel coronavirus webpage</u> | <u>WHO</u> | <u>WHO MERS updates</u> | <u>WHO</u> <u>travel health update</u> | <u>WHO Euro MERS updates</u> | <u>CDC MERS</u> | <u>Saudi Arabia MoH</u> | <u>ECDC factsheet for professionals</u>

ECDC assessment

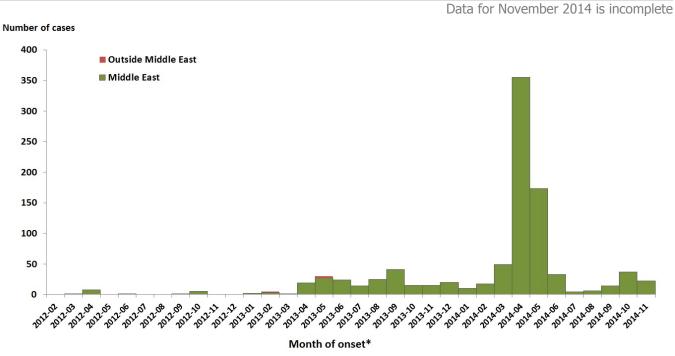
The source of MERS-CoV infection and the mode of transmission have not been identified. Dromedary camels are a host species for the virus, and many of the primary cases in MERS-CoV clusters have reported direct or indirect camel exposure. Almost all of the recently reported secondary cases, many of whom 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

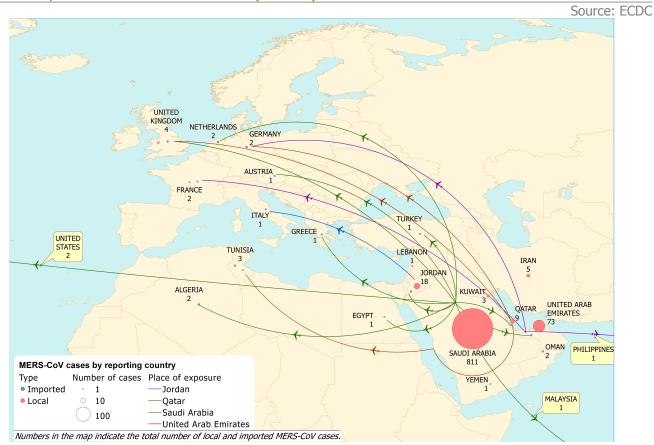
ECDC published an <u>epidemiological update</u> on 6 November 2014. The last <u>rapid risk assessment</u> was updated on 16 October 2014. ECDC is closely monitoring the situation in collaboration with WHO and EU Member States. ECDC published a factsheet for health professionals regarding MERS-CoV on 20 August 2014.

Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 - 27 November 2014 (n=947)



 $\ensuremath{^*}$ Where the month of onset is unknown, the month of reporting has been used

Geographical distribution of confirmed MERS-CoV cases and place of probable infection, worldwide, as of 27 November 2014 (n=947)



Outbreak of Enterovirus D68 - Global - 2014

Opening date: 10 September 2014 Latest update: 20 November 2014

Epidemiological summary

Hospitals in Missouri and Illinois were the first to document an increase of severe respiratory illness in children in the USA in mid-August 2014. As of 20 November, the US CDC has reported 1 121 confirmed cases in 47 states and the District of Columbia caused by EV-D68 infection. Almost all confirmed cases have been diagnosed among children, most of them with a medical history of asthma and wheezing. EV-D68 has been detected in specimens from 12 patients who died. On 26 September 2014, the US CDC issued a National Health Advisory with a case definition to investigate the possible linkage of clusters of acute neurologic disease to the EV-D68 outbreak.

The current outbreak in Canada began on 15 September 2014, when Alberta Health Services reported 18 cases of EV-D68 among hospitalised patients under the age of 18 years. As of 4 November 2014, 214 specimens have tested positive for EV-D68. One fatality in a young man with severe asthma was linked to EV-D68. Health authorities in Canada are also investigating possible links to EV-D68 in cases of paralysis in children.

Sporadic cases of EV-D68 have been documented in several EU/EEA countries in recent years.

On 12 November 2014, the media reported in <u>Finland</u> that EV-D68 has been confirmed in five hospitalised children in Turku. There have been ten reported cases in Turku this autumn, but no other cases have been reported in any other part of the country.

On 7 November, <u>Eurosurveillance</u> published an article about one case of acute flaccid paralysis following enterovirus-D68associated pneumonia in France.

On 18 November, the United Kingdom notified ECDC through the Early Warning and Response System (EWRS) about a case of neurological disease associated with EV-D68. The travel history and further clinical history of the patient are currently being investigated. All bacteriological and virological investigation showed negative results but EV-D68 was identified in an endo-tracheal tube sample. According to further investigations the sample has 98% similarity with one of the clades currently circulating the United States of America.

On 23 October 2014, an article describing the EV-D68 situation in the Netherlands was published in Eurosurveillance.

On 25 November 2014, <u>Norwegian</u> health authorities reported two cases of neurological disease associated with EV-D68 in children.

On 26 November 2014, <u>Swedish</u> health authorities reported six cases with EV-D68. All children have recovered and none had any symptoms of paralysis.

Web sources: <u>MMWR</u> | <u>CDC</u> | <u>Kansas Health institute</u> | <u>Illinois Department of Health</u> | <u>CDC Q&A</u> | <u>Public Health Canada</u> | <u>Alberta</u> <u>health services</u> | <u>Norway</u> | <u>Sweden</u>

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 likelihood of cases of disease due to EV-D68 being laboratory-confirmed in EU/EEA countries is low because most countries 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.

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 <u>rapid risk assessment</u> on 25 November 2014, and continues to monitor the evolution of the situation.

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