COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 6, 7-13 February 2016

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Influenza - Multistate (Europe) - Monitoring 2015-2016 season

Opening date: 2 October 2015 Latest update: 5 February 2016

Influenza transmission in Europe shows a clear seasonal pattern, with peak activity during winter months. ECDC monitors influenza activity in Europe during the winter season and publishes its report weekly on the Flu News Europe website.

➔Update of the week

During week 5, 25 of the 50 Member States and regions that reported epidemiological data from surveillance for influenza-like illness (ILI) and acute respiratory infection (ARI) indicated increasing rates. Thirthy-eight countries reported influenza virus detections in specimens from sentinel sources, indicating increased influenza activity in the WHO European Region as a whole. In the past week, countries also reported increasing numbers of cases of severe acute respiratory infection (SARI), as well as a high percentage of influenza-positive specimens.

Belarus, Greece and Ireland indicated high-intensity influenza activity; Finland, the Russian Federation and Ukraine reported very high activity, as in the previous week. Influenza A(H1N1)pdm09 viruses predominated, accounting for 87% of subtyped sentinel surveillance detections of influenza virus. An increase in cases of severe disease, mainly in people aged 15–64 years, was seen again this week, with most of them associated with A(H1N1)pdm09.

The early influenza vaccine effectiveness (VE) results from I-MOVE multicentre case-control study for 2015-2016 are reported in Eurosurveillance.

Non EU Threats

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Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015 Latest update: 11 February 2016

Zika virus infections are spreading in previously unaffected areas of the world. Since the beginning of 2014, autochthonous Zika cases have been reported in the Pacific region. In addition, autochthonous transmission of Zika virus has been reported in Brazil since April 2015. Since then, Zika virus infections have spread to 36 countries or territories. Possible links between Zika virus infection in pregnancy and microcephaly of the foetus have been under investigation since October 2015, when the Brazilian Ministry of Health reported an unusual increase in cases of microcephaly following the Zika virus outbreak in the north-eastern states. French Polynesia reported an increase in cases of central nervous system malformations during 2014–2015 following the Zika virus infection outbreak from September 2013 to March 2014. Investigations of a link between Zika virus infection and Guillain–Barré syndrome (GBS) are ongoing in Brazil and French Polynesia. On 1 February 2016, WHO declared a Public Health Emergency of International Concern (PHEIC), following the first meeting of the Emergency Committee convened by the Director-General under the IHR 2005, regarding clusters of microcephaly cases and other neurologic disorders in some areas affected by Zika virus.
Considering the growing body of evidence of adverse pregnancy outcomes associated with Zika virus infection, ECDC recommends that pregnant women postpone non-essential travel to Zika affected areas.

➔Update of the week

Since last week, no new additional countries or territories have reported laboratory-confirmed autochthonous transmission. As of 12 February 2016, 36 countries or territories have reported autochthonous cases of Zika virus infection in the past nine months.

Slovenia: A case of congenital CNS malformation and microcephaly caused by transplacental Zika virus infections was reported by Slovenian scientists in The New England Journal of Medicine on 10 February 2016. The woman developed Zika-like infection during her first trimester of pregnancy while residing in Brazil. The pregnancy was terminated after ultrasonography revealed CNS malformations. Tissue samples from the aborted foetus showed unequivocal evidence of Zika virus infection in the central nervous system.
This is the first documented case of congenital malformation in the EU that is associated with Zika virus infection acquired in a Zika-affected area. Several similar cases have been reported from Brazil and one from Hawaii, and cases like these are not unexpected as the epidemic of Zika virus continues to spread in the Americas and the Caribbean.

French Polynesia: According to the WHO situation report published on 5 February 2016, during the 2013 outbreak 8 750 suspect cases of Zika virus were reported, of which 383 were laboratory-confirmed. Seventy-four patients presented with neurological syndromes or auto-immune syndromes after an illness consistent with Zika virus infection. Of these, 42 were classified as Guillain–Barré syndrome (GBS). Of these 42 patients, 88% reported an illness compatible with Zika infection. Retrospective analysis demonstrated that all 42 cases were positive for dengue and Zika virus infection.

Guadeloupe: Among the 17 laboratory-confirmed cases of Zika virus infection, one case of myelitis was reported on 3 February 2016.

French Guiana: During January 2016, three suspected cases of GBS were reported with a possible link to Zika virus infection.

Suriname: According to WHO on 29 January 2016, the Suriname health authorities reported that in 2015, surveillance detected an increased incidence of GBS. Suriname registered 10 GBS cases in 2015 and 3 GBS cases in the first three weeks of 2016 compared with an average of 4 cases per year in the past.

Venezuela: On 2 February 2016, Venezuela reported that since the second week of January 2016, an increase in the number of GBS cases has been detected. In January 2016 there were 252 GBS cases. A clinical history consistent with Zika virus infection was observed in the days prior to onset of neurological symptoms in 76% of the GBS cases. Associated comorbidity was present in 65% of the cases. Additionally, among the laboratory confirmed cases there are two cases of GBS and three with other neurological disorders.

Colombia: According to WHO in February 2016, Colombia reported an increase in cases of GBS. Colombia reports an average of 242 cases of GBS per year. However, in the five weeks to 30 January 2016, there were 86 cases of GBS already reported.

Honduras: According to media quoting the national health authorities, 35 cases of GBS linked to Zika have been registered in the country.

Brazil: Scientists from the Oswaldo Cruz Foundation (Fiocruz) in Brazil have detected live Zika virus in urine and saliva samples. The ability of the virus to infect other people through these bodily fluids requires further investigation.

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Ebola Virus Disease Epidemic - West Africa - 2014 - 2016

Opening date: 22 March 2014 Latest update: 11 February 2016

The largest ever epidemic of Ebola virus disease (EVD) has affected West Africa from December 2013 - January 2016, mainly affecting Guinea, Liberia and Sierra Leone. On 8 August 2014, WHO declared the Ebola epidemic in West Africa a Public Health Emergency of International Concern (PHEIC). As of 10 February 2016, WHO has reported 28 603 cases of Ebola virus disease related to the outbreak in West Africa, including 11 301 deaths. The number of cases in the most affected countries peaked in autumn 2014 and has been slowly decreasing since then. Sierra Leone was declared Ebola-free by WHO on 7 November 2015, Guinea on 29 December 2015 and Liberia on 14 January 2016. On 15 January 2016, WHO reported a new sporadic case in Sierra Leone, which underlines the need to maintain effective surveillance even after EVD-free status is declared. On 20 January, the Sierra Leone Ministry of Health reported a second case, epidemiologically linked to the previous one.

➔Update of the week

According to WHO, no new confirmed cases have been reported in Sierra Leone during the past week. The most recent case was reported on 20 January 2016.

Influenza A(H5N1) and other strains of avian flu - Non EU/EEA countries

Opening date: 15 June 2005 Latest update: 11 February 2016

Highly pathogenic avian influenza viruses A(H5) of Asian origin are highly infectious for several bird species, including poultry. The human infections with influenza A(H5) viruses have been caused by influenza A(H5N1) virus in different non EU/EEA countries and by influenza A(H5N6) virus in ten human infections detected in China. Other avian influenza subtypes, including H7N7 and H9N2, have infected people sporadically. Many of these infections have been mild or even subclinical in humans, but some have been severe and have resulted in deaths.

ECDC is following the development of these viruses and is monitoring infections in humans.

➔Update of the week

Since 14 December, two new laboratory-confirmed human cases of avian influenza A(H5N1) were reported to WHO. In Bangladesh, one case was reported in a 60-year-old male who was hospitalised on 12 October. In China, one case was reported in a 42-year-old male who had onset of illness on 27 December 2015. Both cases had previous exposure to poultry.

In China, as of 20 January 2016, 10 human cases of influenza A(H5N6) have been reported since 2013, one of which is a historical case reported in the scientific literature. Five of the 10 cases were reported during this winter season and were all sporadic with no further transmission among contacts.

In Bangladesh, one human infection with avian influenza A(H9N2) virus was reported in a 46-year-old male poultry worker in Dhaka City with onset of illness on 27 October 2015. This is the third human infection of avian influenza A(H9N2) virus reported from Bangladesh.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 11 February 2016

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then and up to 12 February 2016, 721 cases have been reported to WHO, including 283 deaths. No autochthonous cases have been reported outside China. Most cases are isolated and sporadic zoonotic transmission from poultry to humans is the most likely explanation for the outbreak.

➔Update of the week

On 10 February 2016, WHO reported 28 new cases including five deaths of A(H7N9) in China. The onset dates of the cases ranged from 21 December 2015 to 25 January 2016. The age range of the cases were from 14 to 91 years, with a median age of 58 years. Eighteen of the 28 cases (64%) were male. The majority (25 cases, 89%) reported exposure to live poultry or live poultry markets; the exposure history of three cases is unknown or no clear exposure to poultry. No clusters were reported. Cases were reported from six provinces and municipalities: Zhejiang (13), Jiangsu (5), Guangdong (4), Fujian (3), Shanghai (2) and Hunan (1).

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Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 11 February 2016

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission of the virus has completely stopped and the world becomes 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 international spread of wild poliovirus during 2014. On 25 November 2015, the Temporary Recommendations in relation to the PHEIC were extended for another three months. WHO recently declared wild poliovirus type 2 eradicated worldwide. The type 2 component of the oral polio vaccine is no longer needed and there are plans for a globally synchronised switch in April 2016 from the trivalent to bivalent oral polio vaccine which no longer contains type 2.

➔Update of the week

During the past week, there was one new wild poliovirus type 1 (WPV1) case reported in Afghanistan with onset of disease in 31 December 2015 and one case of WPV1 in Pakistan with onset in January 2016. Two new cases of circulating vaccine-derived poliovirus were also reported from Lao People's Democratic Republic.

The WHO Director-General is convening the eighth meeting of the emergency committee for polio under the International Health Regulations on Friday, 12 February 2016.

Public health risks - Multistate - Refugee movements

Opening date: 4 November 2015 Latest update: 11 February 2016

Europe is experiencing its largest influx of refugees since the Second World War. According to the UN Refugee Agency (UNHCR), more than 944 000 refugees have arrived in Europe in 2015. To date, there have been reports of cases of acute respiratory tract infections, louse-borne relapsing fever, cutaneous diphtheria, scabies, measles, meningococcal meningitis, shigellosis, typhoid fever, hepatitis A, tuberculosis and malaria among refugees. While these cases do not represent a significant disease burden for the host countries, the diseases pose a potential threat, particularly to the health of the refugees themselves. The health conditions of the refugees may worsen with the wintery weather due to low temperatures and overcrowding in shelters.

➔Update of the week

No new events relating to migrants have been detected during the past week.

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II. Detailed reports

Influenza - Multistate (Europe) - Monitoring 2015-2016 season

Opening date: 2 October 2015 Latest update: 5 February 2016

Epidemiological summary

So far, a predominance of influenza A(H1N1)pdm09 viruses has characterised the 2015–2016 influenza season; this virus subtype may cause more severe disease and deaths in adults aged 15–64 years than A(H3N2) viruses. Since week 52/2015, several European countries with sentinel surveillance systems for SARI have reported increasing numbers of cases associated with A (H1N1)pdm09 infection. Similarly, countries reporting laboratory-confirmed influenza cases in hospitals and intensive care units (ICUs) have detected influenza A virus in the majority of cases since the start of the season, with A(H1N1)pdm09 being the dominant subtype.

ECDC assessment

Most of the viruses characterised so far are genetically similar to the strains recommended for inclusion in this winter's trivalent or quadrivalent vaccines for the northern hemisphere.

Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its report weekly on the Flu News Europe website. Season risk assessments are available from ECDC and WHO.

Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015 Latest update: 11 February 2016

Epidemiological summary

As of 12 February, no autochthonous Zika virus transmission has been reported in the EU. ECDC is collecting data regarding imported cases through media and official government communication lines. As of 12 February 2016 ECDC has recorded imported cases in 14 EU/EEA countries: Austria (1), Denmark (1), Finland (2), France (18), Germany (7), Ireland (2), Italy (5), Malta (1), Netherlands (2), Portugal (6), Spain (9), Sweden (1), Slovenia (1) and the UK (7).

Thirty EU/EEA countries have issued travel advice for people travelling to Zika-affected areas. Of these, 25 have advised pregnant women to consider postponing travel to countries affected by the Zika epidemic.

Several Outermost EU regions continue to report autochthonous transmission.
Martinique: From December 2015 to 4 February 2016, 3 940 clinically confirmed cases have been reported.
French Guiana: From December 2015 to 4 February 2016, 430 laboratory and clinically confirmed cases have been reported.
Guadeloupe: As of 4 February 2016, there have been 17 laboratory confirmed cases, this is an increase of seven cases since the last update on 29 January 2016.

As of 12 February 2016, several countries or territories have reported confirmed autochthonous cases of Zika virus infection in the past nine months: American Samoa, Barbados, Bolivia, Brazil, Cape Verde, Colombia, Costa Rica, Curaçao, Dominican Republic, Ecuador, El Salvador, Fiji, French Guiana, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Maldives, Martinique, Mexico, New Caledonia, Nicaragua, Panama, Paraguay, Puerto Rico, Saint Martin, Samoa, Solomon Islands, Suriname, Thailand, Tonga, Vanuatu, Venezuela and the US Virgin Islands.

Web sources: ECDC Zika Factsheet | WHO DON | PAHO | Colombian MoH | Brazilian MoH | Brazilian microcephaly case definition

ECDC assessment

This case report from Slovenia adds to the body of evidence that transplacental infections with Zika virus can cause severe central nervous system damage and microcephaly. This case together with the case in Hawaii and a few verified cases in Brazil have documented all steps in the chain of an intrauterine infection, from symptomatic Zika-like infection in a pregnant mother residing in a Zika-affected area to detection of microcephaly with brain calcifications in the foetus and detection of Zika virus either in the amniotic fluid, in the cerebrospinal fluid of the newborn or in the central nervous system of an aborted foetus or a dead newborn.

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The magnitude of the risk that Zika virus infection during pregnancy will result in malformations in the foetus is under investigation, but remains unknown at present.

Considering the growing body of evidence of adverse pregnancy outcomes associated with Zika virus infection, ECDC recommends that pregnant women postpone non-essential travel to Zika affected areas.

The spread of Zika virus epidemic in the Americas is likely to continue as the competent vectors *Aedes aegypti* and *Aedes albopictus* mosquitoes are widely distributed there. There is a significant increase in the number of babies born with microcephaly in the north-eastern states of Brazil. However, the magnitude and geographical spread of the increase have not yet been well characterised. Despite growing evidence of a link between intra-uterine Zika virus infection and adverse pregnancy outcomes, a causal link between these events has not yet been firmly confirmed.

As neither treatment nor vaccines are available, prevention is based on personal protection measures similar to those that are applied against dengue and chikungunya infections.

Actions

ECDC publishes an epidemiological update every Friday and daily maps with information on countries or territories which have reported confirmed autochthonous cases of Zika virus infection.

ECDC published an update of the rapid risk assessment on 8 February 2016 and has updated the ECDC Zika page with Frequently Asked Questions.

Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past nine months and past two months, as of 12 February 2016

ECDC

	Affected in the past 9 months	Affected in the past 2 months
American Samoa	Yes	Sporadic transmission following recent introduction
Barbados	Yes	Increasing or widespread transmission
Bolivia	Yes	Sporadic transmission following recent introduction
Brazil	Yes	Increasing or widespread transmission
Cabo Verde	Yes	Increasing or widespread transmission
Colombia	Yes	Increasing or widespread transmission
Costa Rica	Yes	Sporadic transmission following recent introduction
Curaçao	Yes	Sporadic transmission following recent introduction
Dominican Republic	Yes	Increasing or widespread transmission
Ecuador	Yes	Increasing or widespread transmission
El salvador	Yes	Increasing or widespread transmission
Fiji	Yes	No
French Guiana	Yes	Increasing or widespread transmission
Guadeloupe	Yes	Sporadic transmission following recent introduction
Guatemala	Yes	Increasing or widespread transmission
Guyana	Yes	Sporadic transmission following recent introduction
Haiti	Yes	Increasing or widespread transmission
Honduras	Yes	Increasing or widespread transmission
Jamaica	Yes	Sporadic transmission following recent introduction
Maldives	Yes	No
Martinique	Yes	Increasing or widespread transmission
Mexico	Yes	Increasing or widespread transmission
New Caledonia (France)	Yes	No
Nicaragua	Yes	Sporadic transmission following recent introduction
Panama	Yes	Increasing or widespread transmission
Paraguay	Yes	Increasing or widespread transmission
Puerto Rico	Yes	Increasing or widespread transmission
Saint Martin	Yes	Sporadic transmission following recent introduction
Samoa	Yes	Sporadic transmission following recent introduction
Solomon Islands	Yes	No
Suriname	Yes	Increasing or widespread transmission
Thailand	Yes	Sporadic transmission following recent introduction
Bolivarian Republic of Venezuela	Yes	Increasing or widespread transmission
Tonga	Yes	Sporadic transmission following recent introduction
Virgin island (US)	Yes	Sporadic transmission following recent introduction

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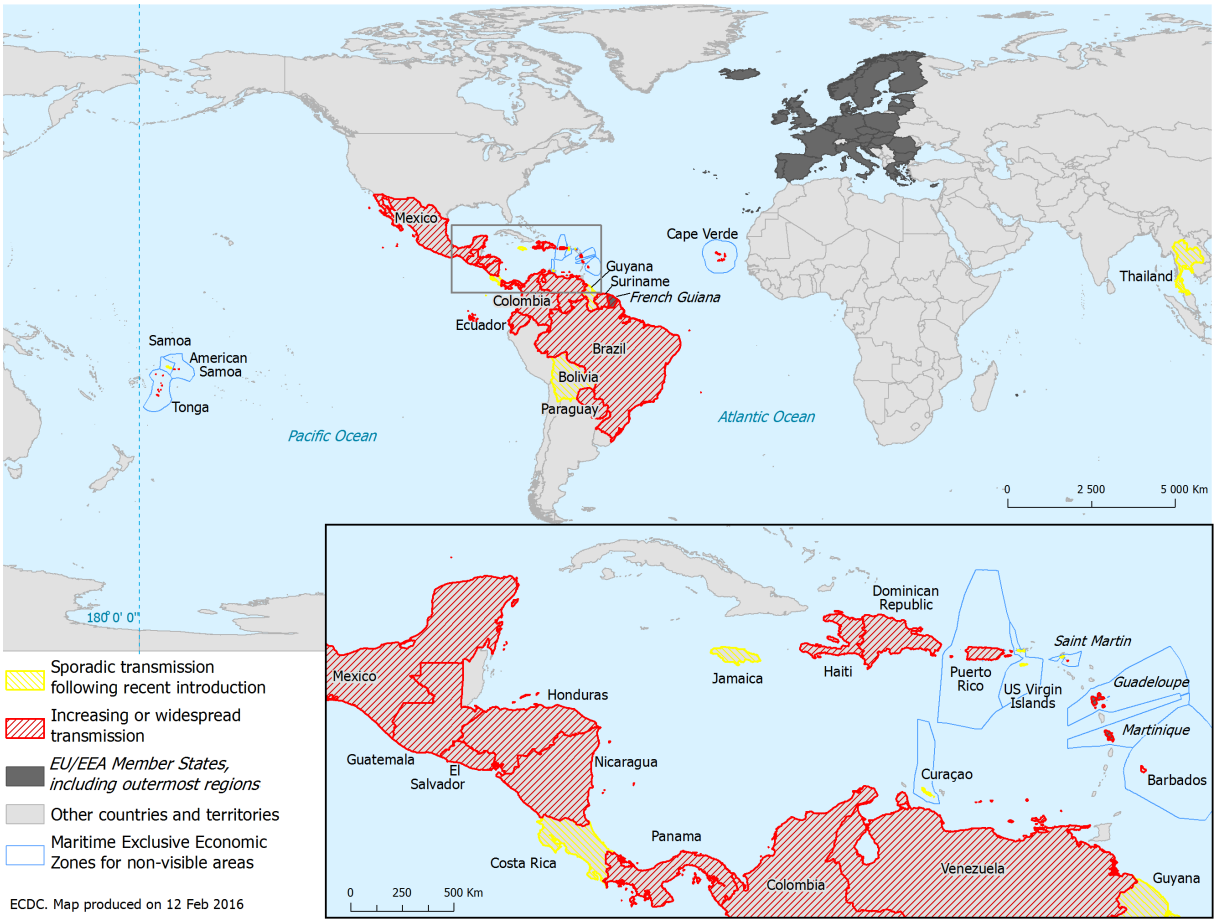
Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past two months, as of 12 February 2016

ECDC



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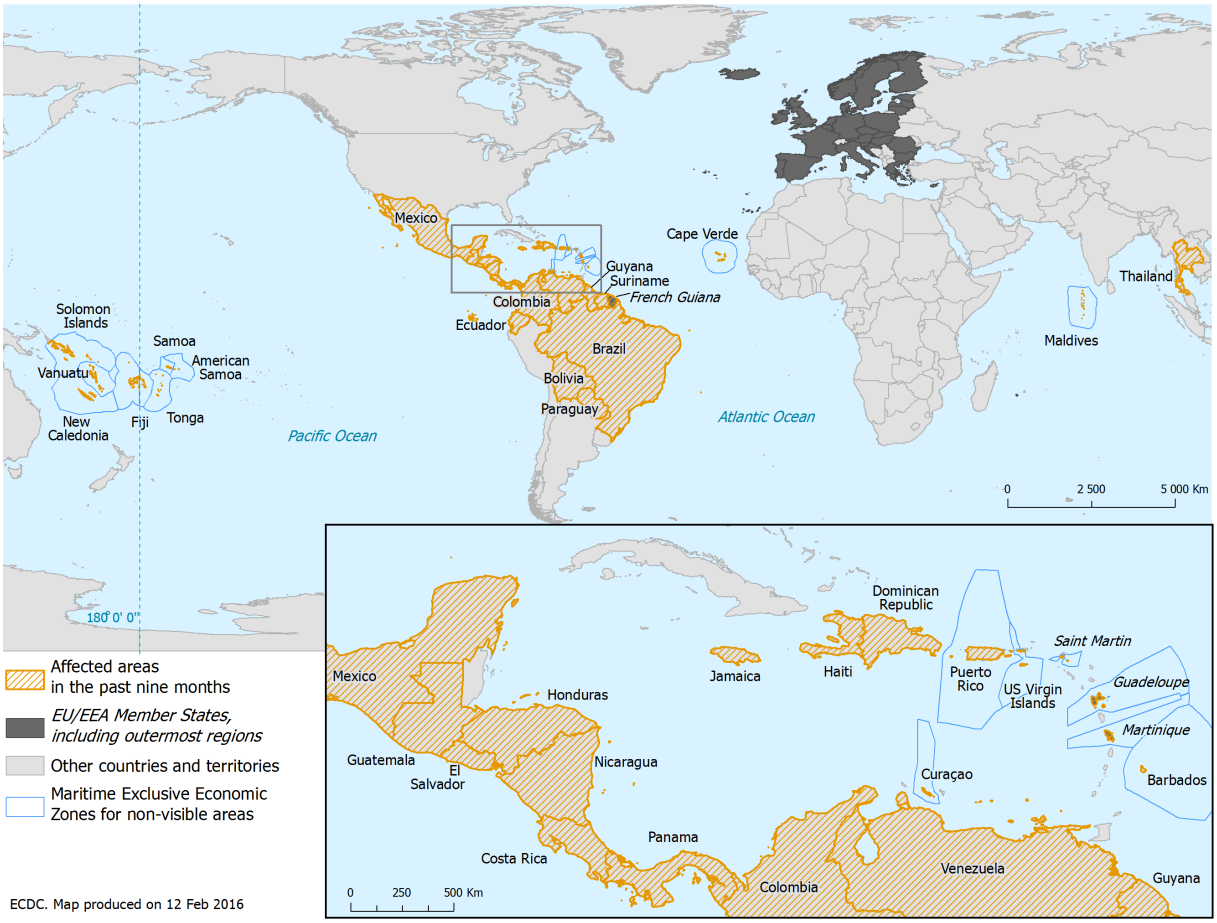
Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past nine months, as of 12 February 2016

ECDC



Ebola Virus Disease Epidemic - West Africa - 2014 - 2016

Opening date: 22 March 2014 Latest update: 11 February 2016

Epidemiological summary

Distribution of cases as of 10 February 2016:

- **Liberia:** 10 675 cases, including 4 809 deaths. Liberia was declared EVD-free on 3 September 2015. However, a family cluster occurred in the week leading up to 22 November 2015.
- **Sierra Leone**: 14 124 cases, including 3 956 deaths. The country was declared Ebola-free on 7 November 2015. However, two epidemiologically linked sporadic case were reported on 14 and 20 January 2016.
- **Guinea**: 3 804 cases including 2 536 deaths. Guinea was declared EVD-free on 29 December 2015.

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Sierra Leone
According to WHO on 10 February, no new confirmed cases were reported during the past week. The last reported case, a 38-year-old aunt and caregiver of the 22-year-old woman who died of EVD on 12 January at her family home in the district of Tonkolili in Sierra Leone, was reported by the Sierra Leone Ministry of Health on 20 January. According to media on 8 February, she was discharged from the hospital on 5 February.

Seven countries have reported an initial case or localised transmission: Nigeria, Senegal, the USA, Spain, Mali, the UK and Italy.

Situation among healthcare workers

Outside of the three most affected countries, with repatriated cases included, there have been eight cases in Mali, 20 in Nigeria, three in Spain (including two repatriated cases), three in the UK (including two repatriated cases), one in Senegal (infected in Guinea), one in Norway (repatriated), two in France (repatriated), one in the Netherlands (repatriated), one in Switzerland (repatriated), 11 in the USA (seven repatriated) and one in Italy (infected in Sierra Leone).

Epicurve: The epicurve shows the distribution of confirmed cases of Ebola virus disease by week of reporting in Sierra Leone, weeks 01/2015 to 06/2016.
Map: The map shows the distribution of confirmed cases in Sierra Leone during the past six weeks.

Web sources: ECDC Ebola page | ECDC Ebola and Marburg fact sheet | WHO situation summary | WHO Roadmap | WHO Ebola Factsheet | CDC | Ebola response phase 3: Framework for achieving and sustaining a resilient zero | ReEBOV Antigen Rapid Test Kit | Institut Pasteur will open a lab in Conakry | Emergency Operation Centres in the three affected countries | Entry screening in US

ECDC assessment

The detection of a new case in Sierra Leone is not an unexpected event and highlights the importance of maintaining heightened surveillance in the coming months as the risk of additional small outbreaks remains. Sporadic cases have been identified previously and are likely to be the result of the virus persisting in survivors even after recovery.

Actions

In 2015, ECDC deployed 95 experts (on a rotating basis) from within and outside the EU in response to the Ebola outbreak. This included an ECDC-mobilised contingent of experts to Guinea.

On 16 October 2015, ECDC published the latest (13th) update of the rapid risk assessment.

On 16 October 2015, ECDC published Recent development on sexual transmission of Ebola virus.

On 31 July 2015, ECDC published Positive preliminary results of an Ebola vaccine efficacy trial in Guinea.

On 22 January 2015, ECDC published Infection prevention and control measures for Ebola virus disease. Management of healthcare workers returning from Ebola-affected areas.

On 4 December 2014, EFSA and ECDC published a Scientific report assessing risk related to household pets in contact with Ebola cases in humans.

On 29 October 2014, ECDC published a training tool on the safe use of PPE and options for preparing for gatherings in the EU.

On 23 October 2014, ECDC published Public health management of persons having had contact with Ebola virus disease cases in the EU.

On 22 October 2014, ECDC published Assessing and planning medical evacuation flights to Europe for patients with Ebola virus disease and people exposed to Ebola virus.

On 13 October 2014, ECDC published Infection prevention and control measures for Ebola virus disease: Entry and exit screening measures.

On 6 October 2014, ECDC published risk of transmission of Ebola virus via donated blood and other substances of human origin in the EU.

On 22 September 2014, ECDC published assessment and planning for medical evacuation by air to the EU of patients with Ebola

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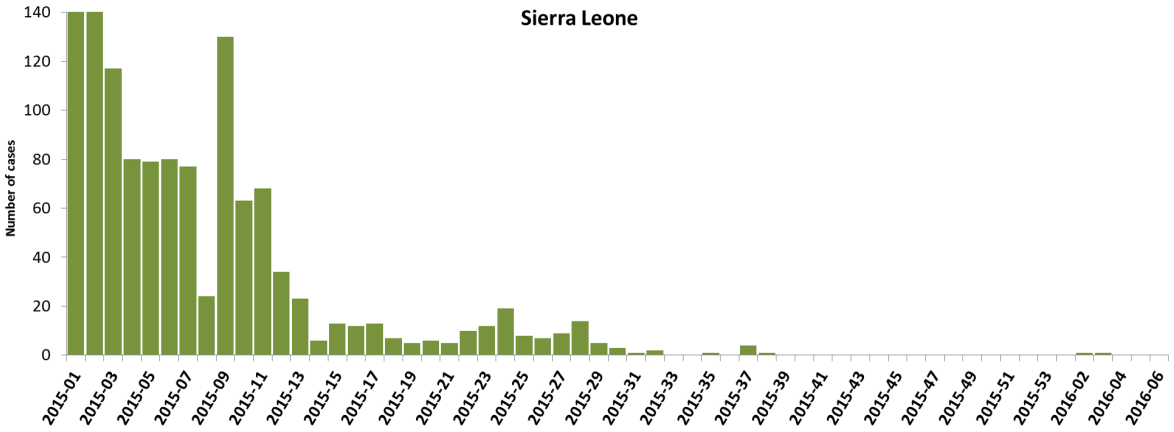
virus disease and people exposed to Ebola virus.

On 10 September 2014, ECDC published an EU case definition.

Distribution of confirmed cases of Ebola virus disease by week of reporting in Sierra Leone (weeks 01/2015 to 06/2016)

Adapted from WHO figures; *data for week 06/2016 are incomplete



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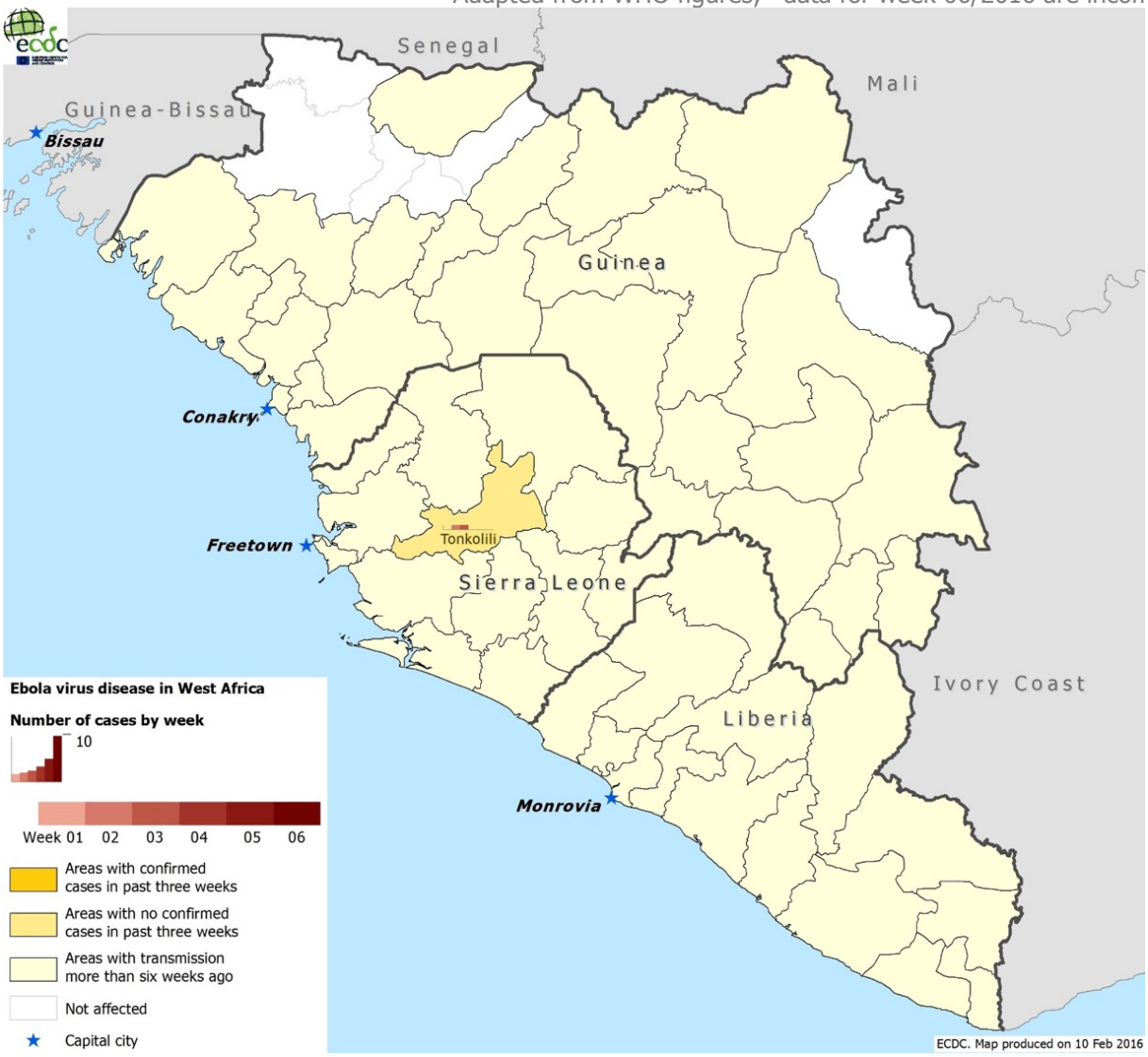
Distribution of confirmed cases of EVD by week of reporting in Sierra Leone (as of week 06/2016)

Adapted from WHO figures; *data for week 06/2016 are incomplete



Influenza A(H5N1) and other strains of avian flu - Non EU/EEA countries

Opening date: 15 June 2005 Latest update: 11 February 2016

Epidemiological summary

Avian influenza viruses can cause infection in birds and humans. 'Highly pathogenic' avian influenza (HPAI) viruses cause high mortality in poultry, while 'low pathogenic' (LPAI) viruses result in mild disease. Since 2003 and as of 20 January 2016, 846 laboratory-confirmed human cases of avian influenza A(H5N1) virus infection, including 449 deaths, have been reported from 16 countries, none of which are in EU/EEA Member States.

In China, as of 20 January 2016, ten human cases of influenza A(H5N6) have been reported since 2013, five of which occurred during this winter season.

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Various influenza A(H5) subtypes, such as influenza A(H5N1), A(H5N2), A(H5N3), A(H5N6), A(H5N8) and A(H5N9) continue to be detected in birds in Africa, Europe, Americas and Asia, according to reports received by the World Organization for Animal Health (OIE).

Web sources: ECDC Rapid Risk Assessment | Avian influenza on ECDC website |EMPRES | OIE | WHO

ECDC assessment

When avian influenza viruses circulate in poultry, sporadic infections or small clusters of human cases are possible in people exposed to infected poultry or contaminated environments, especially in households and at live bird markets in areas where the viruses are circulating.

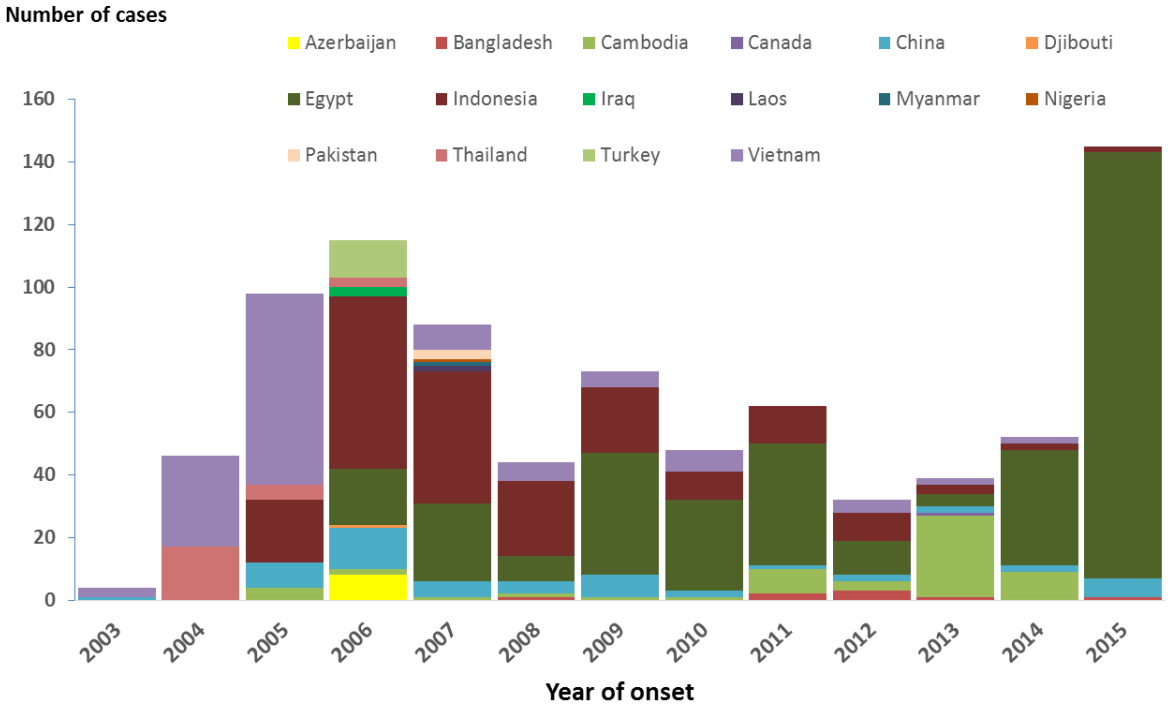
The viruses remain poorly adapted to humans and transmission from birds to humans is infrequent. Only limited clusters of human cases have been reported since the first human epidemics of A(H5N1). No sustained human-to-human transmission has been observed. The risk of foodborne transmission, e.g. through the consumption of eggs or meat, is considered extremely low.

Actions

ECDC monitors avian influenza strains through epidemic intelligence activities in order to identify significant changes in the epidemiology of the virus. ECDC re-assesses the potential of the A(H5N1) risk to humans changing on a regular basis.

Distribution of confirmed cases of influenza A(H5N1) by country of reporting

Adapted from WHO figures



Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 11 February 2016

Epidemiological summary

Cases reported by China since March 2013 have the following geographical distribution: Zhejiang (208), Guangdong (187), Jiangsu (85), Fujian (66), Shanghai (50), Hunan (27), Anhui (33), Hong Kong (13), Xinjiang Uygur Zizhiqu (10), Jiangxi (12), Beijing (6), Shandong (6), Guangxi (4), Henan (4), Taiwan (4), Jilin (2), Guizhou (2), Hubei (1) and Hebei (1). Three imported cases have also been reported: one in Malaysia and two in Canada.

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Web sources: Chinese CDC | WHO | WHO FAQ page | ECDC | WHO avian influence updates

ECDC assessment

This outbreak is caused by a novel reassortant avian influenza virus capable of causing severe disease in humans. This is a zoonotic outbreak, in which the virus is transmitted sporadically to humans in close contact with the animal reservoir, similar to the influenza A(H5N1) situation.

In the past 12 months, there have been continued avian influenza A(H7N9) virus detections in the animal population in several provinces of China, indicating that the virus persists in the poultry population. If the pattern of human cases follows the trends seen in previous years, the number of human cases may rise over the coming months. Further sporadic cases of human infection with avian influenza A(H7N9) virus are therefore expected in areas that are already affected and in neighbouring areas.

Imported cases of influenza A(H7N9) may be detected in Europe. However, the risk of the disease spreading among humans following an importation to Europe is considered to be very low. People in the EU presenting with severe respiratory infection and a history of potential exposure in the outbreak area will require careful investigation.

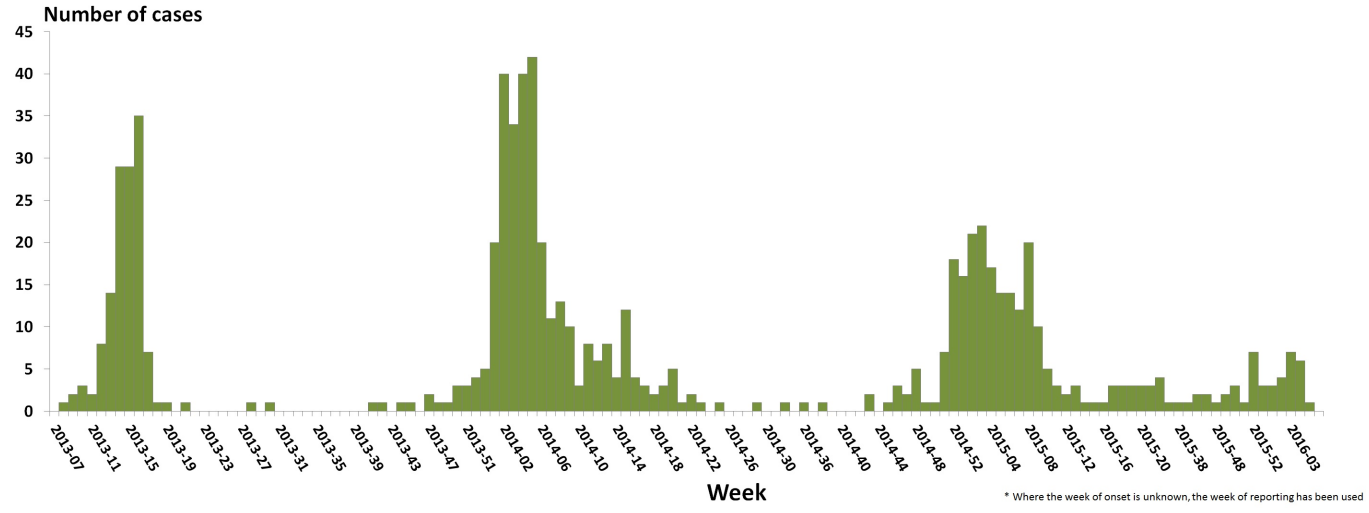
Actions

The Chinese health authorities continue to respond to this public health event with enhanced surveillance, epidemiological and laboratory investigation, and scientific research.

ECDC published an updated Rapid Risk Assessment on 3 February 2015.

ECDC published a guidance document Supporting diagnostic preparedness for detection of avian influenza A(H7N9) viruses in Europe for laboratories on 24 April 2013.

Distribution of confirmed cases of A(H7N9) by first available date (weeks 07/2013 to 06/2016)



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Distribution of confirmed cases of A(H7N9) by four periods of reporting (weeks 07/2013 to 06/2016)

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 11 February 2016

Epidemiological summary

In 2016, one case of wild polio virus type 1 (WPV1) has been reported, compared with seven cases for the same period in 2015.

As of 11 February 2016, two cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO this year. There were no cases reported for the same period in 2015.

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet | Temporary Recommendations to Reduce International Spread of Poliovirus | WHO Statement on the Seventh Meeting of the International Health Regulations Emergency Committee on Polio

ECDC assessment

The last locally-acquired wild polio cases within the current EU borders were reported from Bulgaria in 2001. The most recent wild polio outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460

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cases.

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? |RRA Outbreak of circulating vaccine-derived poliovirus type 1 (cVDPV1) in Ukraine

Actions

ECDC monitors 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 into 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.

Following the detection of the cases of circulating vaccine-derived poliovirus type 1 in Ukraine, ECDC published a rapid risk assessment on its website.

Public health risks - Multistate - Refugee movements

Opening date: 4 November 2015 Latest update: 11 February 2016

Epidemiological summary

There have been reports of emerging episodes of communicable diseases affecting the refugee population including; acute respiratory tract infections, louse-borne relapsing fever, cutaneous diphtheria, scabies, measles, meningococcal meningitis, shigellosis, typhoid fever, hepatitis A, tuberculosis and malaria.

ECDC assessment

Refugees are not currently a threat to Europe with respect to communicable diseases, but they are a priority group for communicable disease prevention and control efforts as they are more vulnerable. The risk that refugees arriving in Europe will contract communicable diseases has increased because of the current overcrowding at reception facilities.

While the risk of mosquito-borne diseases has been reduced as a result of the winter, the risk of infection from diseases whose spread is facilitated by overcrowding and lower temperatures has increased. It is therefore expected that the incidence of respiratory and gastrointestinal conditions will increase in the coming months.

Low vaccination coverage for some diseases, along with low immunity for others, may result in susceptible refugees developing diseases such as measles and chicken pox, given their high incidence in some regions of the EU.

WHO, UNHCR and UNICEF jointly recommend that refugees, asylum seekers and migrants should have non-discriminatory, equitable access to healthcare services, including vaccines, irrespective of their legal status. They should be provided with timely immunisation against vaccine-preventable diseases, particularly measles and polio. All countries should have effective disease surveillance and reporting systems, outbreak investigation ability and case management and response capacity.

The risk to European residents of being affected by outbreaks occurring among refugee populations remains extremely low because overcrowding, limited access to clean water and poor hygiene levels are only encountered in certain reception facilities for refugees.

Actions

An ECDC expert opinion on the public health needs of irregular migrants, refugees or asylum seekers across the EU's southern and south-eastern borders was posted on the ECDC website in September 2015.

ECDC prepared:

- an RRA on the risk of communicable disease outbreaks in refugee populations in the EU/EEA

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- an updated RRA on louse-borne relapsing fever amongst migrants in the EU/EEA
- an RRA on cutaneous diphtheria among recently arrived refugees and asylum seekers in the EU
- an RRA on the risk of importation and spread of malaria and other vector-borne diseases associated with the arrival of migrants in the EU
- an RRA on shigellosis among refugees in the EU.

ECDC, in collaboration with Member States, the European Commission and WHO, continues to closely monitor the situation to rapidly identify and assess potential communicable disease threats.

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

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