COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 10, 6-12 March 2016

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Haemolytic uraemic syndrome (HUS) cases in young children –Romania

Opening date: 16 February 2016 Latest update: 4 March 2016

The Ministry of Health in Romania reports that 15 children aged 5 to 38 months were hospitalised in Bucharest and Iasi between 29 January and 24 February with haemolytic uraemic syndrome (HUS). Three of the cases died. *E. coli* O26 has been identified in several cases. In addition, two children under 2 years of age tested positive for O26 without suffering from HUS from the districts of Ialomita and Sibiu. The dates of onset of all 17 cases were between 25 January and 22 February.

➔Update of the week

Two VTEC O26 cases in children with no HUS were identified this week during stool samples screening at the national reference laboratory. The cases are in children under 2 years of age from Ialomita and Sibiu districts. The PFGE profile of the case from Sibiu and of one previously reported case from Arges district were similar but not indistinguishable. The PFGE profile from the case from Ialomita is expected to be available in the coming days.

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

Opening date: 2 October 2015 Latest update: 11 March 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

Of 44 countries that reported on qualitative influenza indicators in the WHO European Region, 25 reported widespread influenza activity and 28 reported medium intensity of influenza activity. The overall proportion of sentinel specimens positive for influenza virus was 44%, a slight decrease after having exhibited a plateau during the three previous weeks. Influenza B virus constituted 55% of influenza virus detections in sentinel samples compared with 47% for the previous week, indicating a gradual shift towards influenza B over the last few weeks. Among influenza A viruses, A(H1N1)pdm09 viruses remained the predominant subtype (87%) detected through sentinel surveillance. The number of cases of severe disease was fewer compared to previous weeks, but most cases continued to be associated with A(H1N1)pdm09 virus infection and were in people aged 15–64 years. There is a pattern suggesting excess all-cause mortality due to influenza among those aged 15–64 years from the 17 countries or regions reporting to the European monitoring of excess mortality for public health action project (EuroMOMO).

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Non EU Threats

Public health risks - Multistate - Refugee movements

Opening date: 4 November 2015 Latest update: 3 March 2016

Europe is experiencing its largest influx of refugees since the Second World War. According to the UN Refugee Agency (UNHCR), more than 1 015 000 refugees arrived in Europe in 2015 and 141 000 in 2016. 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 wintry 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.

Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015 Latest update: 10 March 2016

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. As of 4 March 2016, 41 countries and territories have reported autochthonous cases of Zika virus infection in the past nine months. 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. On 1 February 2016, WHO declared this a Public Health Emergency of International Concern (PHEIC) during a first meeting of the Emergency Committee convened by the Director-General under the International Health Regulations 2005. A second meeting of the Emergency Committee on 8 March 2016 confirmed the continuation of the PHEIC. 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

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Since last week, the Philippines and Fiji confirmed the first autochthonous cases of Zika virus transmission in 2016.

On 8 March, WHO published a statement following the second meeting of the IHR 2005 Emergency Committee on Zika virus and observed increase in neurological disorders and neonatal malformations. The Director-General declared the continuation of the Public Health Emergency of International Concern (PHEIC) and issued temporary recommendations including advice to pregnant women to postpone travel to Zika-affected areas.

Lao People's Democratic Republic: According to media quoting the Ministry of Health and Institut Pasteur du Laos, Zika virus has been identified in blood samples from 19 residents of Vientiane who were infected between 2012 and 2015.

United States: On 9 March, the Florida Department of Health reported the first case of sexual transmission of Zika virus in Florida.

Publications
On 4 March, the *New England Journal of Medicine* published a preliminary report on Zika virus infection in pregnant women in Rio de Janeiro. Fetal ultrasonography was performed on 42 Zika virus-positive women (58%) and in 16 Zika virus-negative women. Fetal abnormalities were detected in 12 of the 42 Zika-positive women (29%) and in none of the Zika virus-negative women.

A Morbidity and Mortality Report (MMWR) published by the US CDC provides temporal and geospatial evidence linking febrile rash illness consistent with Zika virus disease during the first trimester of pregnancy with the increased birth prevalence of microcephaly in Brazil 2015.

Update on the observed increase of congenital malformations and other central nervous system complications
Brazil
According to the Ministry of Health, since October 2015 and as of 5 March 2016, there have been 6 158 suspected cases of microcephaly from 1 179 municipalities across 26 states in Brazil. This is an increase of 249 suspected cases since the previous weekly update on 27 February. As of 5 March 2016, 745 of the cases have been confirmed to have microcephaly and/or other central nervous system findings suggestive of congenital infection. Of these cases, 88 have been confirmed positive for Zika virus by PCR.

There have been 157 intrauterine or neonatal deaths reported among children notified to have microcephaly and/or central nervous system malformations. Of these, 37 cases were confirmed to have microcephaly and/or central nervous system malformations. 102 cases are still under investigation and 18 cases have been discarded.

Colombia: The first Zika-linked birth defects have been detected in Colombia, one newborn with microcephaly and two others with congenital brain abnormalities, according to *Nature*.

Dominican Republic: On 9 March, media quoting the Ministry of Health reported eight cases of Guillain–Barré syndrome (GBS) associated with Zika virus in the past two months.

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

Opening date: 15 June 2005 Latest update: 10 March 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 several non EU/EEA countries and by influenza A(H5N6) virus 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
No new human cases have been reported by WHO since 20 January 2016.

On 7 March, the Egyptian Ministry of Health notified a confirmed human case of influenza A(H5N1) virus in a female child aged one and a half years where there was poultry-raising near her home. This is the first laboratory-confirmed human case of influenza A (H5N1) reported in Egypt in 2016. The last reported human case had been in June 2015.

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

Opening date: 24 September 2012 Latest update: 10 March 2016

Since April 2012 and as of 10 March 2016, 1 701 cases of MERS, including 652 deaths, have been reported by health authorities worldwide. The source of the virus remains unknown, but the pattern of transmission and virological studies point towards dromedary camels in the Middle East as 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 29 February, 25 new cases of MERS-CoV have been reported in Saudi Arabia. The cases are from Buraydah (17), Riyadh (2), Jeddah (2), Alrass (1), Alzulfi (1), Jubail (1) and Taif (1). Of these cases, five are healthcare workers and five had recent contact with camels.

On 7 March, the Ministry of Health in Saudi Arabia reported that they are investigating a nosocomial outbreak of MERS-CoV at the King Fahd Specialist Hospital in Buraydah.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 10 March 2016

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, and up to 10 March 2016, 722 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

During the past week, no new confirmed cases have been reported to WHO.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 3 March 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, one new wild poliovirus type 1 (WPV1) case was reported to WHO from Afghanistan.

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II. Detailed reports

Haemolytic uraemic syndrome (HUS) cases in young children –Romania

Opening date: 16 February 2016 Latest update: 4 March 2016

Epidemiological summary

Since January 2016, the Ministry of Health in Romania has reported that 15 children aged 5 to 38 months have been hospitalised in Bucharest and Iasi with haemolytic uraemic syndrome (HUS). In addition, two cases without HUS tested positive for VTEC O26. The dates of onset of the 17 children were between 25 January and 24 February. Three of the HUS cases died. Serum samples from six of the twelve HUS cases were positive for VTEC O26 by serology. Only three isolates from cases were obtained, all from different districts. The PFGE from these isolates showed some similarities (few bands difference), thus excluding infection from one single strain.

Following initial environmental investigations, *E. coli* O26 was identified in soft cheese samples produced by a local company that sells traditional dairy items in Arges district. The factory has been closed and the product is no longer available on the market. The PFGE profiles from the cheese isolates are very different (several bands difference) from the three obtained human isolates.

Web sources: Ministry of Health Romania

ECDC assessment

This is an outbreak of VTEC O26 confirmed through serology. The epidemiological investigation suggests a single source. The microbiological information has so far been inconclusive. The little molecular information available from very few human and food isolates does not provide sufficient evidence for or against a single strain outbreak. Romanian authorities continue collecting information from epidemiological, microbiological and environmental investigations in order to identify the source of this outbreak.

Actions

ECDC is closely monitoring this event.

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

Opening date: 2 October 2015 Latest update: 11 March 2016

Epidemiological summary

Among influenza A viruses, the A(H1N1)pdm09 subtype predominated in almost all countries in the Region, except in Italy and Slovenia where the proportions of A(H3N2) virus were higher. Since week 52/2015, European countries that reported severe acute respiratory infection (SARI) and countries reporting laboratory-confirmed influenza cases in hospitals and intensive care units (ICUs) have reported high numbers of cases associated with A(H1N1)pdm09 infection, but during the past weeks, these numbers have been declining in almost all reporting countries.

ECDC assessment

Most of the viruses characterised so far have been similar to those recommended for inclusion in the trivalent or quadrivalent vaccines for this season in the northern hemisphere. Recommendations for vaccine composition for the 2016–2017 season in the northern hemisphere are to include a virus of the B/Victoria lineage in the trivalent vaccine and a more recent A(H3N2) virus.

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.

Public health risks - Multistate - Refugee movements

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Opening date: 4 November 2015 Latest update: 3 March 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 currently not 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 published 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
- 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.

Zika - Multistate (world) - Monitoring global outbreaks

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Opening date: 16 November 2015 Latest update: 10 March 2016

Epidemiological summary

As of 10 March, no autochthonous Zika virus transmission has been reported in the continental EU. ECDC is collecting data regarding imported cases through the media and official government communication lines. As of 10 March 2016, ECDC has recorded 235 imported cases in 16 EU/EEA countries. In addition, one confirmed case has been published following diagnosis in a Slovenian hospital. Fifteen cases are among pregnant women.

Several countries in the Americas, Caribbean and the Pacific continue to report an increase in autochthonous cases of Zika virus infection including outermost EU regions.

Martinique: From December 2015 to 10 March 2016, 10 950 suspected cases have been reported, this is an increase of 1 710 suspected cases since the last update on 3 March 2016.

French Guiana: From December 2015 to 10 March 2016, 1 805 suspected and 142 laboratory-confirmed cases have been reported, an increase of 410 suspected and 13 laboratory-confirmed cases since the last update on 3 March 2016.

Guadeloupe: As of 10 March 2016, 717 suspected and 77 laboratory-confirmed cases have been reported, this is an increase of 228 suspected and 11 laboratory-confirmed cases since the last update on 3 March 2016.

Saint Martin: As of 10 March, 129 suspected and 20 laboratory-confirmed cases have been reported, this is an increase of 28 suspected and 3 laboratory-confirmed cases since the last update on 3 March 2016.

As of 10 March 2016, several countries or territories have reported confirmed autochthonous cases of Zika virus infection in the past nine months: American Samoa, Aruba, Barbados, Bolivia, Brazil, Bonaire, Cape Verde, Colombia, Costa Rica, Curaçao, Dominican Republic, Ecuador, El Salvador, Fiji, French Guiana, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Marshall Islands, Martinique, Mexico, New Caledonia, Nicaragua, Panama, Paraguay, Philippines, Puerto Rico, Saint Martin, Saint Vincent and the Grenadines, Samoa, Sint Maarten, Solomon Islands, Suriname, Thailand, Tonga, Trinidad and Tobago, Vanuatu, Venezuela and the US Virgin Islands.

Thirty EU/EEA countries have issued travel advice for people travelling to Zika-affected areas. Of these, 28 have advised pregnant women to consider postponing travel to countries affected by the Zika epidemic.

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

ECDC assessment

There is growing evidence that transplacental infections with Zika virus can cause severe central nervous system damage and microcephaly. Several studies have documented 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. However, a causal link between intrauterine Zika virus infection and adverse pregnancy outcomes has not yet been firmly confirmed.

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. In addition, in order to protect pregnant women, male travellers returning from affected areas should consider using a condom with a pregnant partner until the end of pregnancy, or for six months with partners at risk of getting pregnant. This precautionary advice is based on limited evidence and will be revised as more information becomes available.

The spread of the Zika virus epidemic in the Americas is likely to continue as the 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.

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.

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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 9 March 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 11 March 2016

ECDC

	Affected in the past 2 months	Affected in the past 9 months
American Samoa	Increasing or widespread transmission	Yes
Aruba	Sporadic transmission	Yes
Barbados	Increasing or widespread transmission	Yes
Bolivia	Increasing or widespread transmission	Yes
Brazil	Increasing or widespread transmission	Yes
Bonaire	Sporadic transmission	Yes
Cape Verde	Increasing or widespread transmission	Yes
Colombia	Increasing or widespread transmission	Yes
Costa Rica	Increasing or widespread transmission	Yes
Curaçao	Increasing or widespread transmission	Yes
Dominican Republic	Increasing or widespread transmission	Yes
Ecuador	Increasing or widespread transmission	Yes
El Salvador	Increasing or widespread transmission	Yes
Fiji	Sporadic transmission	Yes
French Guiana	Increasing or widespread transmission	Yes
Guadeloupe	Increasing or widespread transmission	Yes
Guatemala	Increasing or widespread transmission	Yes
Guyana	Sporadic transmission	Yes
Haiti	Increasing or widespread transmission	Yes
Honduras	Increasing or widespread transmission	Yes
Jamaica	Sporadic transmission	Yes
Marshall Islands	Increasing or widespread transmission	Yes
Martinique	Increasing or widespread transmission	Yes
Mexico	Increasing or widespread transmission	Yes
New Caledonia	Sporadic transmission	Yes
Nicaragua	Increasing or widespread transmission	Yes
Panama	Increasing or widespread transmission	Yes
Paraguay	Increasing or widespread transmission	Yes
Philippines	Sporadic transmission	Yes
Puerto Rico	Increasing or widespread transmission	Yes
Saint Martin	Increasing or widespread transmission	Yes
Saint Vincent and the Grenadines	Sporadic transmission	Yes
Samoa	Increasing or widespread transmission	Yes
Sint Maarten	Sporadic transmission	Yes
Solomon Islands	No	Yes
Suriname	Increasing or widespread transmission	Yes
Thailand	Sporadic transmission	Yes
Tonga	Increasing or widespread transmission	Yes
Trinidad and Tobago	Increasing or widespread transmission	Yes
Vanuatu	No	Yes
Venezuela	Increasing or widespread transmission	Yes
US Virgin Islands	Increasing or widespread transmission	Yes

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Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past two months, as of 11 March 2016

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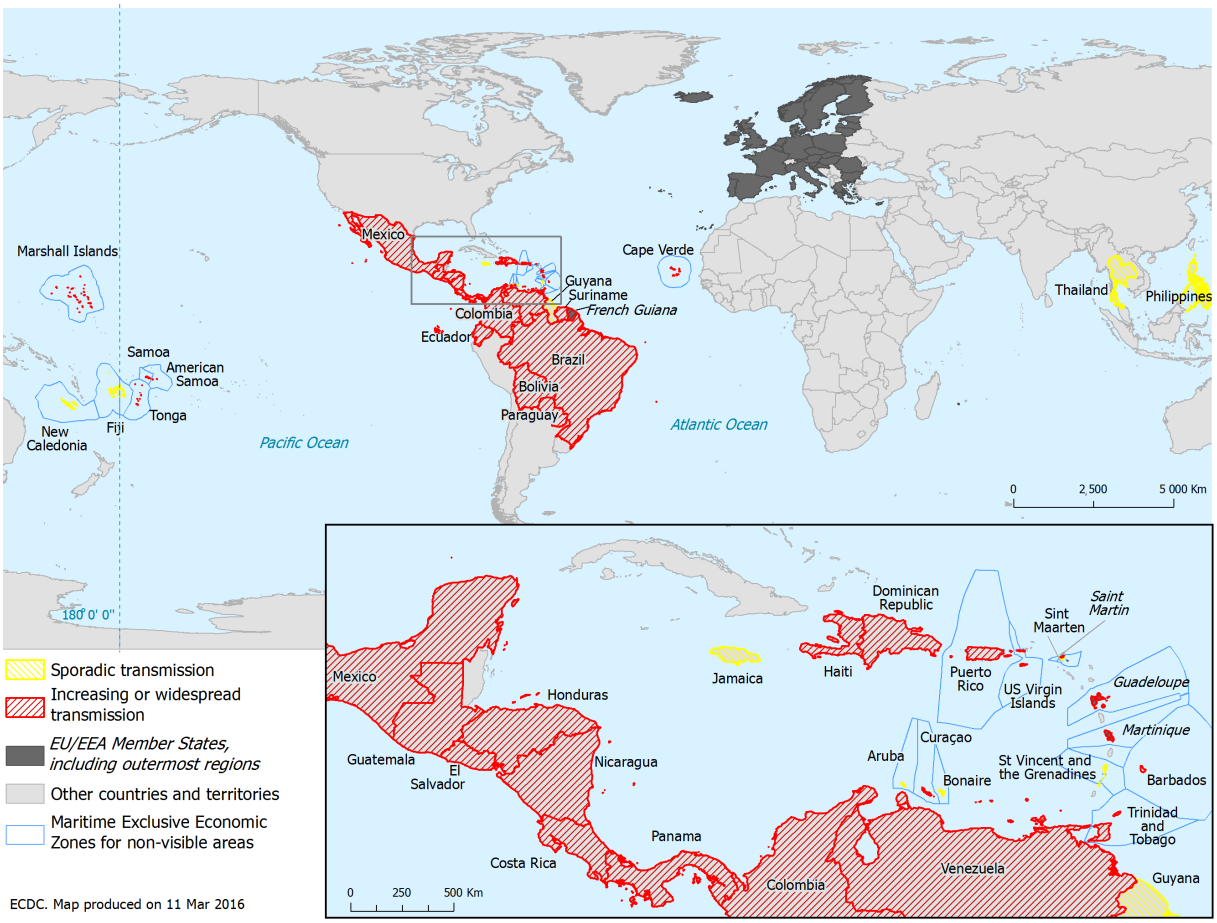

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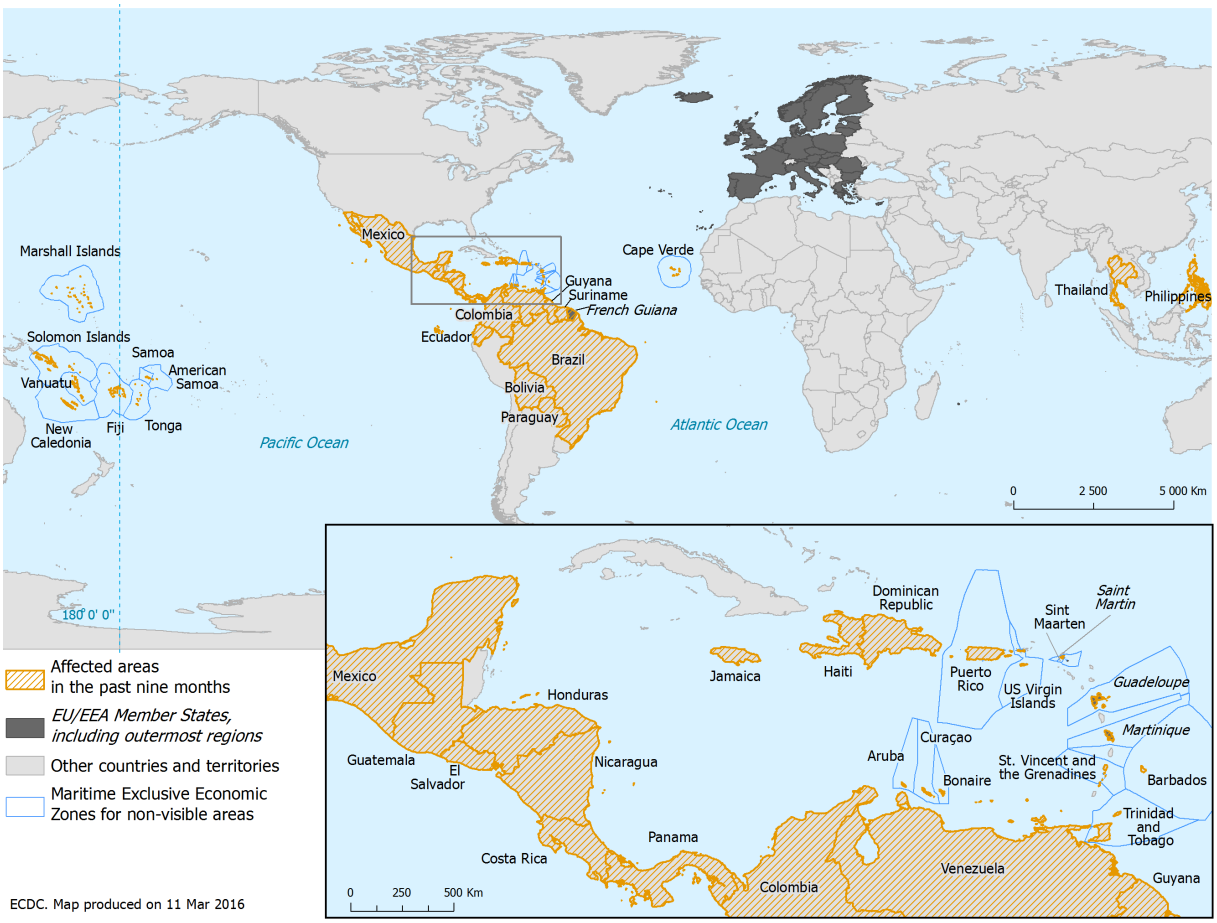
Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past nine months, as of 11 March 2016

ECDC



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

Opening date: 15 June 2005 Latest update: 10 March 2016

Epidemiological summary

From 2003 to 10 March 2016, 847 laboratory-confirmed human cases of avian influenza A(H5N1) virus infection have been reported from 16 countries. Of these cases, 449 have died.

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

ECDC assessment

The identification of sporadic cases in Egypt is not unexpected as avian influenza A(H5N1) viruses are known to be circulating in poultry in the country.

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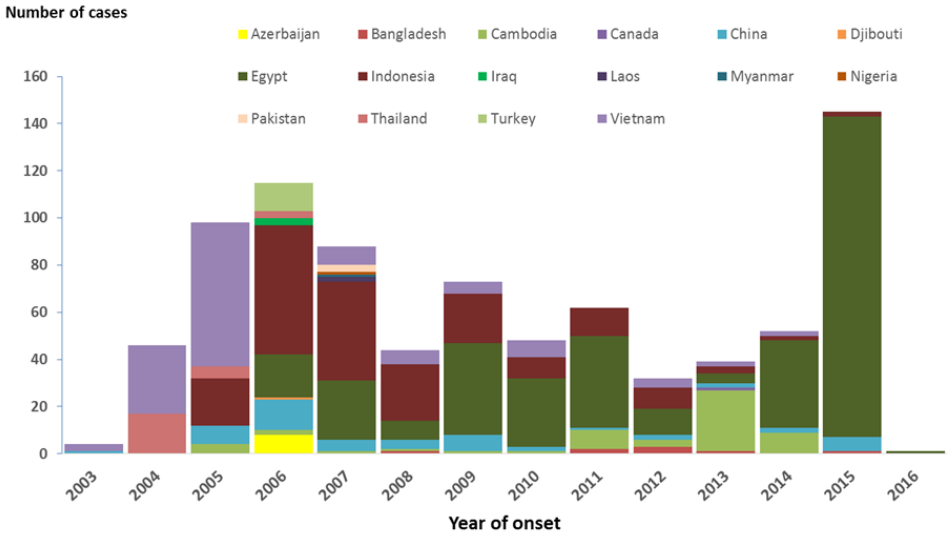
When avian influenza viruses circulate in poultry, sporadic infections or small clusters of human cases are possible in people exposed to infected poultry or contaminated environments, especially in households and at live bird markets. The viruses remain poorly adapted to humans and transmission from 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 on a regular basis.

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

Adapted from WHO figures



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

Opening date: 24 September 2012 Latest update: 10 March 2016

Epidemiological summary

As of 10 March 2016, 1 701 cases of MERS, including 652 deaths, have been reported by health authorities worldwide.

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 | Saudi Arabia statement |ECDC factsheet for professionals

ECDC assessment

The MERS outbreak in the Middle East poses a low risk to the EU. Efforts to contain the nosocomial clusters in the affected countries are vital to prevent wider transmission. Although sustained human-to-human community transmission is unlikely, the ongoing outbreak in Saudi Arabia should be a reminder that transmission to unprotected close contacts, not only in healthcare settings, remains possible, as was also documented in outbreaks in South Korea and the United Arab Emirates.

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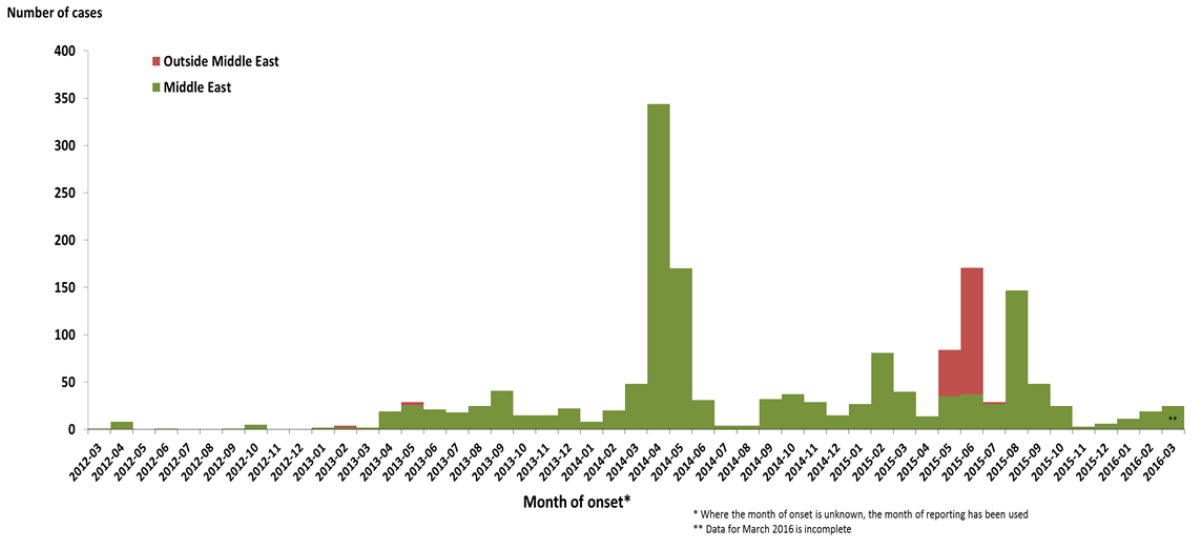
Actions

ECDC published the 21st update of its MERS CoV rapid risk assessment on 21 October 2015.

Distribution of confirmed cases of MERS-CoV by country of reporting, March 2012 – 10 March 2016 (n=1 701)

Region	Country	Number of cases	Number of deaths
Middle East	Saudi Arabia	1335	564
	United Arab Emirates	83	12
	Qatar	14	5
	Jordan	35	14
	Oman	7	3
	Kuwait	4	2
	Egypt	1	0
	Yemen	1	1
	Lebanon	1	0
	Iran	6	2
Europe	Turkey	1	1
	UK	4	3
	Germany	3	2
	France	2	1
	Italy	1	0
	Greece	1	1
	Netherlands	2	0
	Austria	1	0
Africa	Tunisia	3	1
	Algeria	2	1
Asia	Malaysia	1	1
	Philippines	3	0
	South Korea	185	38
	China	1	0
	Thailand	2	0
Americas	United States of America	2	0
	Global	**1701**	**652**

Cases of MERS-CoV by place of reporting, March 2012 – 10 March 2016 (n=1 701)



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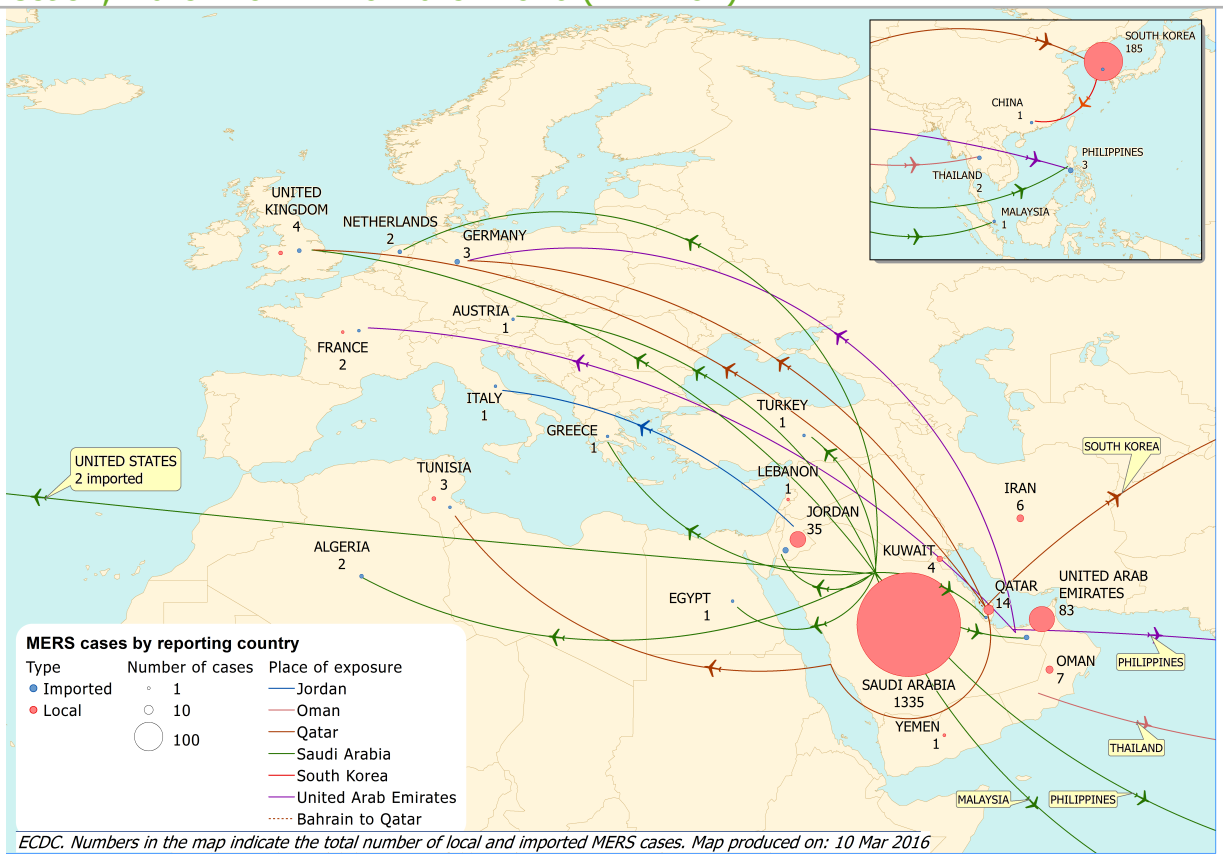
Distribution of confirmed cases of MERS-CoV by first available date, and probable place of infection, March 2012 – 10 March 2016 (n=1 701)



ECDC. Numbers in the map indicate the total number of local and imported MERS cases. Map produced on: 10 Mar 2016

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 10 March 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 (14), 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.

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.

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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.

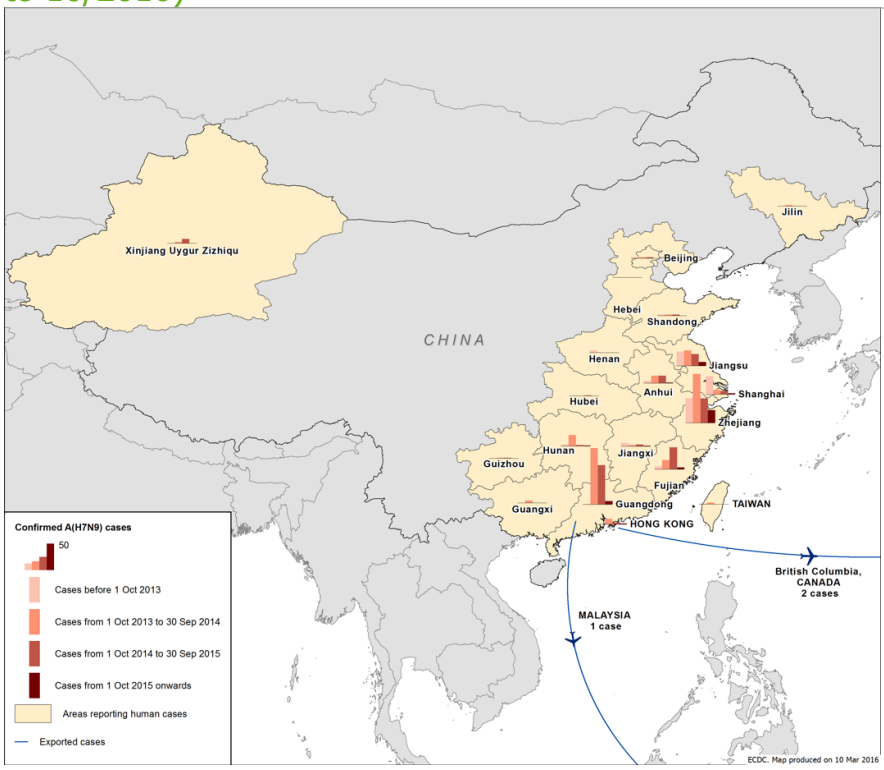
Actions

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 four periods of reporting (weeks 07/2013 to 10/2016)



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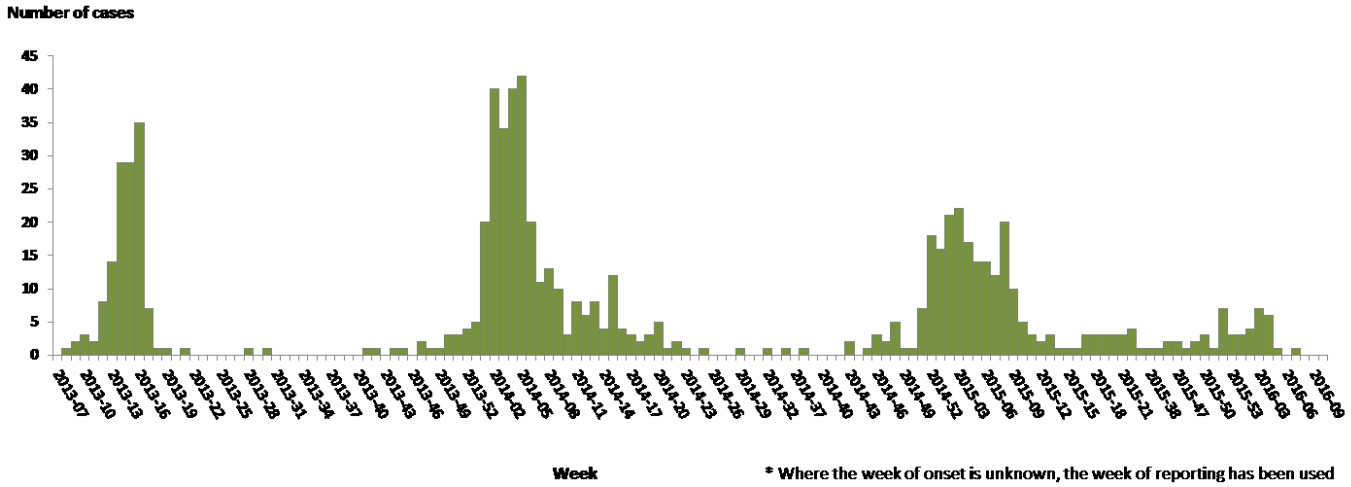
Distribution of confirmed cases of A(H7N9) by first available date (weeks 07/2013 to 10/2016)



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 3 March 2016

Epidemiological summary

In 2016, six cases of wild poliovirus type 1 (WPV1) have been reported, compared with 17 cases for the same period in 2015. The cases were detected in Pakistan (five cases) and in Afghanistan (one case).

As of 9 March 2016, three cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO in 2016, all from Laos.

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 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.

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

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

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