COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 2, 10-16 January 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: 15 January 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

In week 1 in 2016, 35 of 43 reporting countries indicated low influenza activity and eight medium activity.

Non EU Threats

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

Opening date: 24 September 2012 Latest update: 14 January 2016

Since April 2012 and as of 14 January 2016, 1 649 cases of MERS, including 638 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

During the past week, Saudi Arabia has reported two additional cases. One of the cases was an 85-year-old male from Asir region. The second case is a 50-year-old male from Madinah. Both cases had contact with camels.

On 13 January 2016, two cases of MERS-CoV were detected in United Arab Emirates (UAE). Prior to these two cases, the latest cases in UAE were reported in June 2015.

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Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 14 January 2016

An epidemic of Ebola virus disease (EVD) has been ongoing in West Africa since December 2013, 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 13 January 2016, WHO has reported 28 601 cases of Ebola virus disease related to the outbreak in West Africa, including 11 300 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 and this underlines the need to maintain effective surveillance, even after EVD-free status is declared.

➔Update of the week

According to WHO, there were no new confirmed cases of Ebola virus disease (EVD) reported during the week to 13 January.

On 14 January, WHO declared the end of the most recent outbreak of EVD in Liberia, 42 days after the last confirmed patient in Liberia tested negative for the disease twice. All known chains of transmission have been stopped in West Africa. However, strong surveillance and response systems will be critical in the coming months as the risk of additional small outbreaks remains. Flare-ups that were not part of the original outbreak have been identified, and are likely to be the result of the virus persisting in survivors even after recovery.

On 15 January, WHO confirmed a new sporadic case of EVD in Sierra Leone. According to media quoting Sierra Leone officials, this was a fatal case detected in a district in the Northern Province of Tonkolili. Sierra Leone was previously declared Ebola-free on 7 November 2015.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 14 January 2016

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then and up to 14 January 2016, 698 cases have been reported to WHO, including 278 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, according to the Centre for Health Protection in Hong Kong twelve new human cases of avian influenza A (H7N9) were reported in Zhejiang (8), Jiangsu (2), Guangdong (1) and Shanghai (1). These cases have not yet been acknowledged by WHO, however they have been included in the figures for this report.

Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015 Latest update: 14 January 2016

Zika virus infections are spreading in previously unaffected areas of the world. Since the beginning of 2015, autochthonous Zika cases have been reported in the Pacific region. Autochthonous transmission of Zika virus has been reported in Brazil since April 2015. Since then, Zika virus infections have spread to 13 countries in the Americas. Autochthonous cases have also been reported from Cape Verde. 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 after 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.

➔Update of the week

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No autochthonous cases of Zika virus infection have been reported in EU/EEA Member States in 2015 and 2016, with the exception of two EU Outermost Regions: Martinique and French Guiana (French overseas departments). In the Netherlands, RIVM has reported six imported cases of Zika from Suriname. Media quoting local health authorities report that ten suspected cases of Zika are under investigation, three cases each in Guadeloupe, Saint-Barthélemy and Saint-Martin and one case in Marie-Galante.

In the Americas, PAHO confirmed the autochthonous transmission of Zika virus in Haiti. Media quoting the Ministry of Health, report that the first case of ZIKV has been detected in Guyana. However, there is no indication yet as to whether this is a travel-associated or an autochthonous case.

As of 9 January 2016, 3 530 suspected cases of microcephaly in relation with Zika virus have been notified in Brazil including 46 deaths, affecting 724 municipalities in 21 states. According to the Ministry of Health, four fatal cases with congenital malformation associated with confirmed Zika virus infection in Rio Grande do Norte are currently being investigated by the CDC. Two of these cases are miscarriages and two are newborns (37-42 weeks gestation) who died in the first 24 hours of life. The samples were all positive for Zika virus by PCR. In addition, tissue samples of both newborns were positive following immunohistochemistry tests carried out by the US CDC.

A study published in *the Lancet* reports three cases of ocular manifestations in newborns with microcephaly born after the Zika virus outbreak in Brazil. According to the authors, this is the first report of ocular findings in infants with microcephaly born after the Zika virus outbreak.

Media report an increase in cases of *Guillain–Barré syndrome* (GBS) suspected to be associated with Zika virus infection in El Salvador and Venezuela.

In Barbados, media quoting the Ministry of Health, report that eight suspected cases of Zika are currently under investigation.

Public health risks - Multistate - Refugee movements

Opening date: 4 November 2015 Latest update: 14 January 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 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 outbreaks involving refugees were reported during the past week.

A study published in *Eurosurveillance* reports that multidrug-resistant Gram-negative bacteria (MDR GNB) were found to colonise 60.8% of 143 refugee patients, mainly from Syria (47), Afghanistan (29), and Somalia (14), admitted to the University Hospital Frankfurt, Germany, between June and December 2015. This percentage exceeded the prevalence of MDR GNB in resident patients four–fold.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 7 January 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 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

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One new wild poliovirus type 1 (WPV1) case was reported in the past week to WHO from Pakistan and one new case of circulating vaccine-derived poliovirus type 1 (cVDPV1) from Lao People's Democratic Republic. Both cases had onset of disease in December 2015.

This week India marks five years without reporting a single case of wild polio.

According to WHO, in 2015 there were less cases in fewer places than ever before. It is more important than ever that the momentum gained thus far is maintained in 2016. In order to stop wild poliovirus in 2016, the programme's focus is now on strengthening surveillance, keeping Africa polio-free and ending transmission in Afghanistan and Pakistan.

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

Opening date: 15 June 2005 Latest update: 14 January 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 eight 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

On 13 January 2016, local health authorities in China notified a human case of avian influenza A(H5N1) in Chengdu. The case is a 42-year-old male who had contact with poultry before the onset of disease. This is the first human case of influenza A(H5N1) reported since July 2015.

In China, as of 13 January 2016, eight human cases of influenza A(H5N6) have been reported since May 2014, four of which occurred during this winter season. Among these cases, five are males and three females. One of the female cases was pregnant and delivered a healthy baby by caesarean section. Five of the cases have been fatal.

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II. Detailed reports

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

Opening date: 2 October 2015 Latest update: 15 January 2016

Epidemiological summary

The proportion of influenza-virus-positive sentinel-surveillance specimens has been over 10% since week 51/2015, indicating that the influenza season started in week 51/2015 in the European Region. Three quarters (74%) of the detected viruses were type A and 26% were type B. The vast majority of sub-typed A viruses and B viruses ascribed to a lineage were A(H1N1)pdm09 and B/Victoria respectively.

ECDC assessment

The majority 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. However, a small number of A(H3N2) viruses showed dissimilarities to the vaccine strain.

Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its report weekly on the Flu News Europe website.

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

Opening date: 24 September 2012 Latest update: 14 January 2016

Epidemiological summary

As of 14 January 2016, 1 649 cases of MERS, including 638 deaths, had been reported by local 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 residential cluster of cases reported from Saudi Arabia is a reminder that transmission to unprotected close contacts, not only in healthcare settings, remains possible, as also documented in outbreaks in South Korea and the United Arab Emirates.

Actions

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

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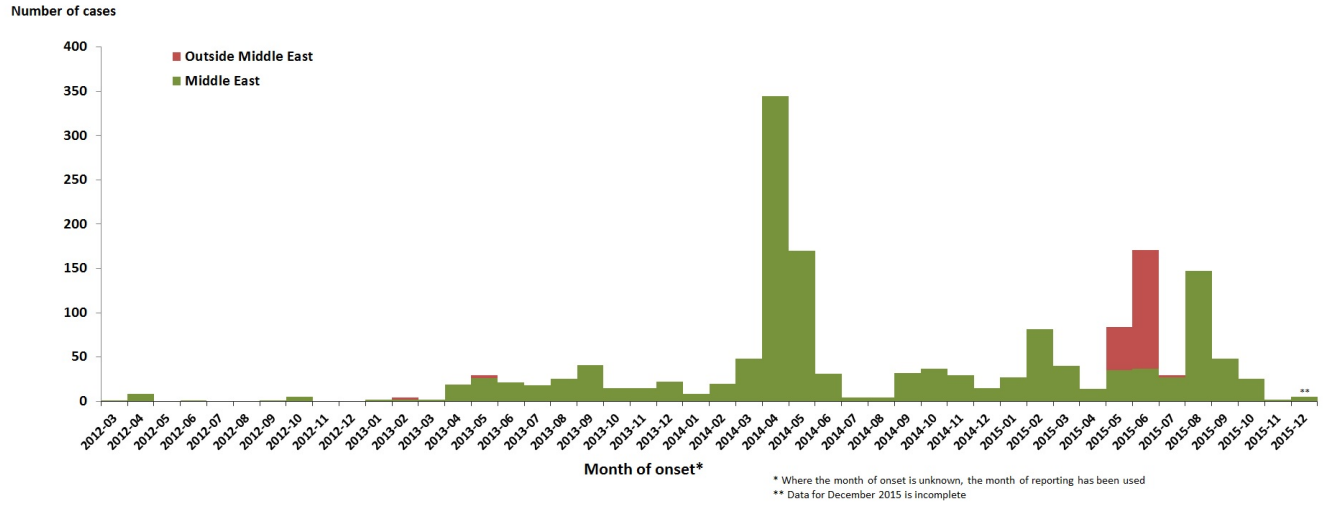
Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 31 December 2015 (n=1 644)



Cases of MERS-CoV by country of reporting, March 2012 – 14 January 2016 (n=1 649)

Region	Country	Number of cases	Number of deaths
Middle East	Saudi Arabia	1285	551
	United Arab Emirates	83	11
	Qatar	13	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	1	0
Americas	United States of America	2	0
	Global	**1649**	**638**

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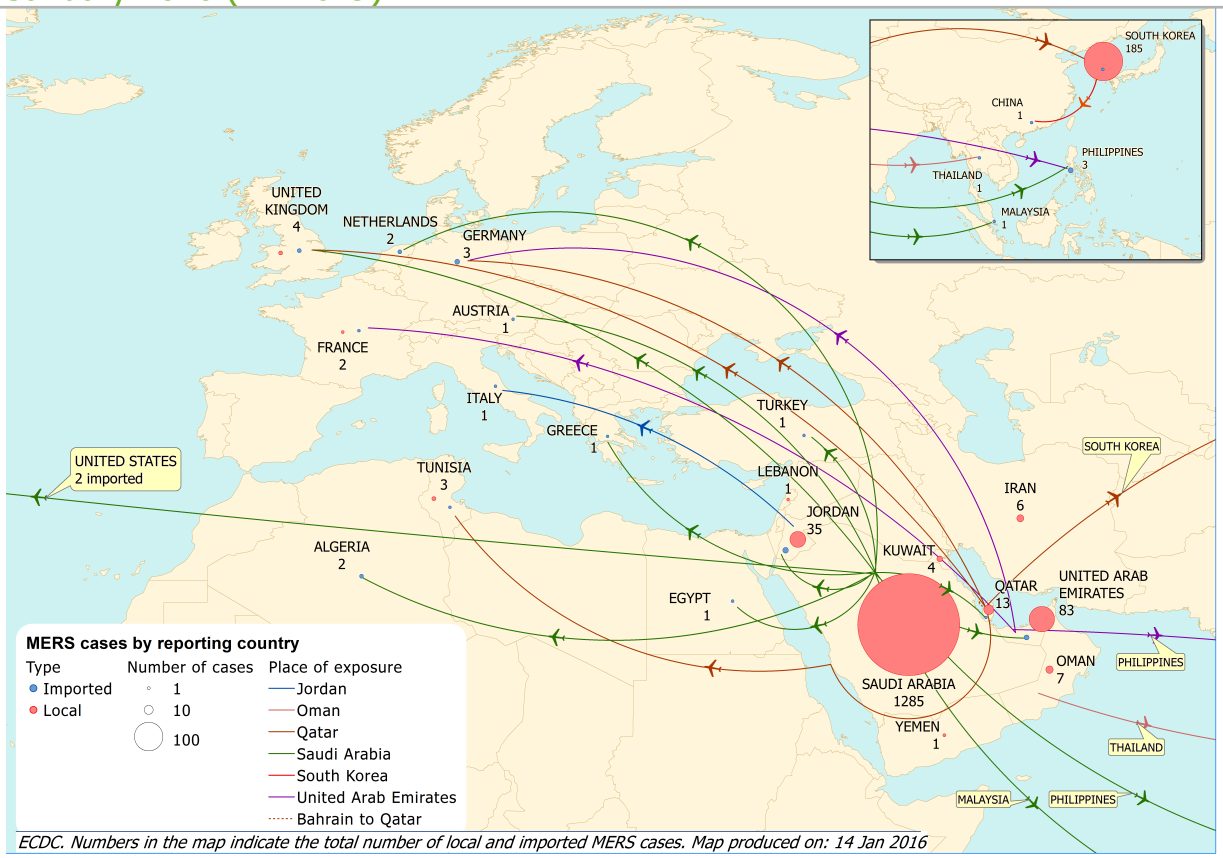
Distribution of confirmed cases of MERS-CoV by place of probable infection, March 2012 – 14 January 2016 (n=1 649)



ECDC. Numbers in the map indicate the total number of local and imported MERS cases. Map produced on: 14 Jan 2016

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 14 January 2016

Epidemiological summary

Distribution of cases as of 13 January 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**: 14 122 cases, including 3 955 deaths. The country was declared Ebola-free on 7 November 2015. (One new sporadic case of EVD confirmed by WHO on 15 January is not included in the total figures)
- **Guinea**: 3 804 cases including 2 536 deaths. Guinea was declared EVD-free on 29 December 2015.

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

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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 cases of Ebola virus disease by week of reporting in Guinea, Sierra Leone, Liberia, Nigeria and Senegal, weeks 48/2013 to 03/2016.

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

As of 13 January, ECDC has deployed 95 experts (on a rotating basis) from within and outside the EU in response to the Ebola outbreak. This includes an ECDC-mobilised contingent of experts to Guinea.

On 23 November 2015, ECDC published an epidemiological update.
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 virus disease and people exposed to Ebola virus.
On 10 September 2014, ECDC published an EU case definition.

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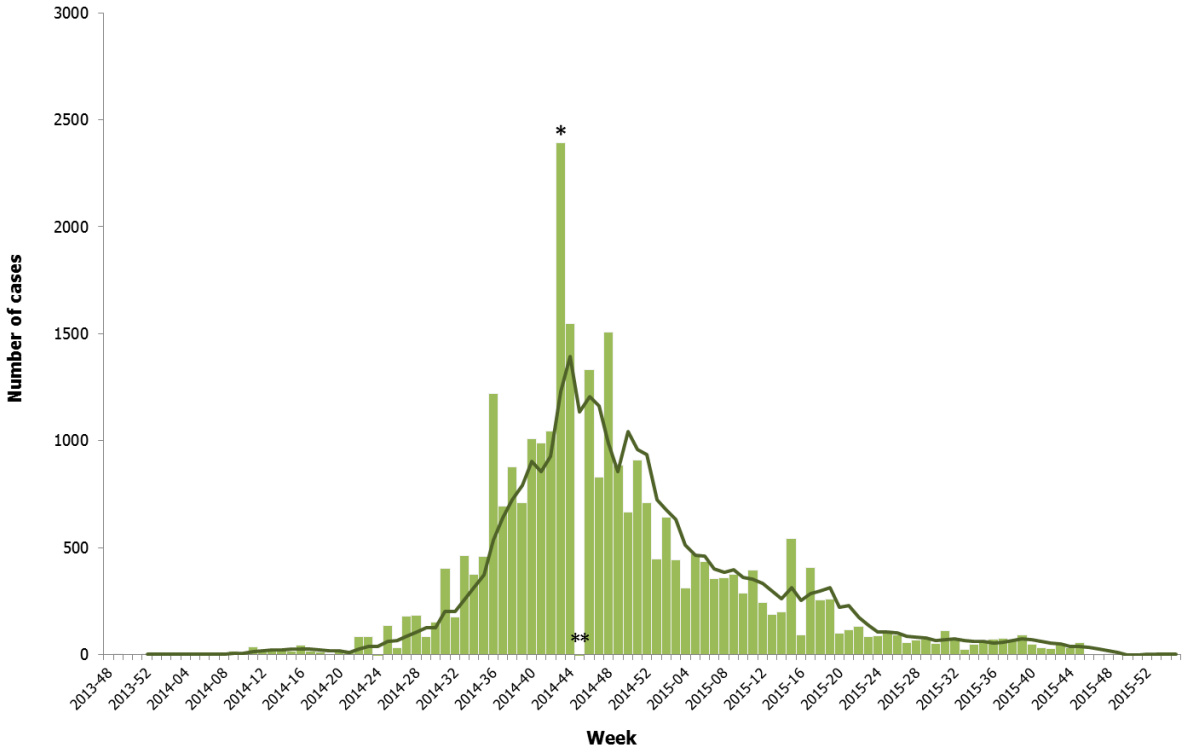
Distribution of cases of Ebola virus disease by week of reporting in Guinea, Sierra Leone, Liberia, Nigeria and Senegal, weeks 48/2013 to 03/2016

Adapted from WHO figures



Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 14 January 2016

Epidemiological summary

Cases reported by China since March 2013 have the following geographical distribution: Zhejiang (197), Guangdong (184), Jiangsu (80), Fujian (63), Shanghai (50), Hunan (26), Anhui (30), Hong Kong (13), Xinjiang Uygur Zizhiqu (10), Jiangxi (12), Beijing (6), Shandong (7), Guangxi (3), 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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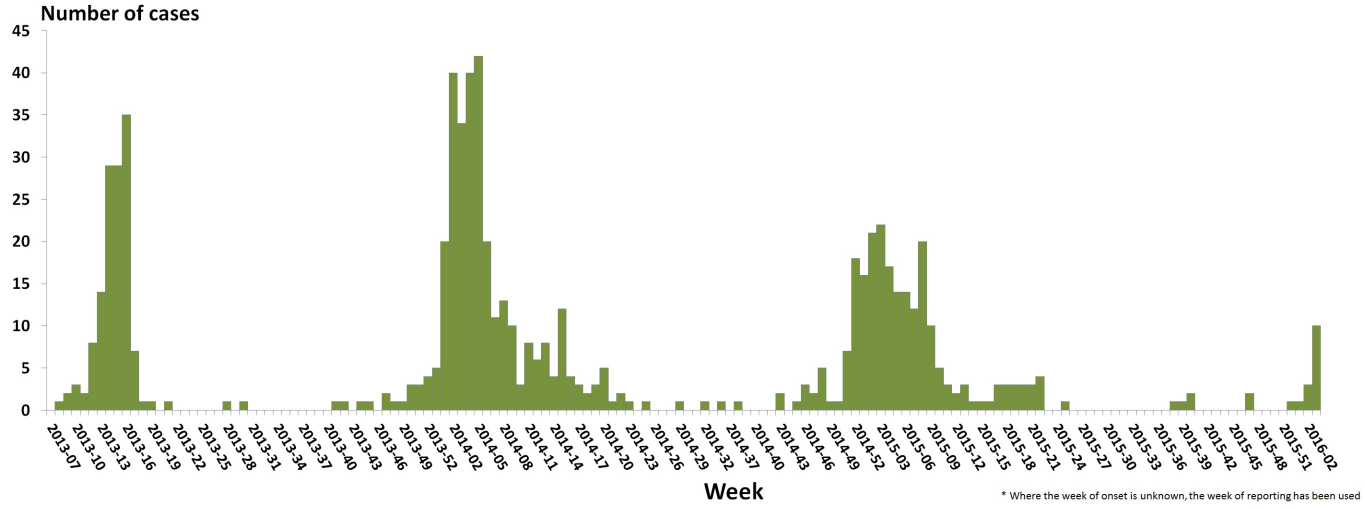
During 2015, there have been continued avian influenza A(H7N9) virus detections in the animal population in several provinces of China, indicating that the virus persists in the poultry population. If the pattern of human cases follows the trends seen in previous years, the number of human cases may 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 week of reporting (weeks 07/2013 to 02/2016)



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Distribution of confirmed cases of A(H7N9) by four periods of reporting (weeks 07/2013 to 02/2016)

Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015 Latest update: 14 January 2016

Epidemiological summary

As of 14 January 2016, 13 countries in the Americas reported locally acquired cases of Zika virus infection: Brazil, Colombia, El Salvador, Guatemala, Mexico, Paraguay, Suriname, Haiti, Venezuela, Honduras, Martinique and French Guiana (France), Panama and Puerto Rico (USA). Possible links between Zika virus infection in pregnancy and microcephaly of the foetus are under investigation in Brazil. As a response, the country has declared a public health emergency and opened an emergency operations centre, as well as a national centre to combat microcephaly that will focus on controlling *Aedes* mosquitoes, which transmit Zika virus.

In French Polynesia investigations are still ongoing following the detection of 17 cases of central nervous system malformations in foetuses and infants that had occurred in pregnancies during 2014-2015, after the 2013-2014 Zika virus outbreak. None of the mothers described clinical signs of Zika virus infection during pregnancy, but four of the women tested were found positive for flavivirus using IgG serology assays, suggesting a possible asymptomatic Zika virus infection. Based on the temporal correlation of these cases with the Zika virus epidemic, the health authorities of French Polynesia hypothesise that Zika virus infection may be associated with these abnormalities if mothers are infected during the first or second trimester of pregnancy.

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

ECDC assessment

Further cases of Zika virus infection are expected to be reported in other countries, particularly in the Americas, where the mosquito vector is present.
So far, only a few travel-associated cases have been reported in the EU. With the spread of the Zika virus epidemic in the Americas, the likelihood of travel-related cases in the EU is increasing. Further imported cases in the EU Overseas Countries and Territories and the EU Outermost Regions, with onward autochthonous transmission in EU Member States in continental Europe cannot be excluded during the summer season in areas where *Aedes albopictus* or *Aedes aegypti* are established. Vigilance during the mosquito season is therefore required in areas where a potential vector is present as early detection of cases is essential when it comes to reducing the risk of autochthonous transmission.

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Residents and travellers visiting affected areas, particularly pregnant women, need to be advised to take individual protective measures to prevent mosquito bites all day long as Zika virus disease, chikungunya and dengue are transmitted by a daytime-biting mosquito. Consequently, protective measures should be taken, especially during the day.

Clinicians and travel medicine clinics should be aware of the evolution of Zika virus infections in the affected areas and should include Zika virus infection in their differential diagnosis for travellers from those areas. Fever and/or macular or papular rash not attributable to dengue or chikungunya infection among travellers, especially in pregnant women returning from areas currently experiencing Zika virus infection outbreaks, should prompt a possible investigation for Zika virus infection. In addition, blood safety authorities need to be vigilant regarding the epidemiological situation and might wish to consider the deferral of donors with relevant travel history, in line with measures defined for dengue virus.

This is the first time that Zika virus infections during pregnancy have been suspected of causing congenital malformations. The information currently available is not sufficient to confirm a causative link between microcephaly and Zika infection during pregnancy or to quantify the magnitude of the public health issue. Further investigations are being conducted to confirm the link between this increase in microcephaly incidence or other neurological malformations and the Zika virus outbreaks in Brazil and French Polynesia.

Actions

On 24 November 2015, ECDC published a rapid risk assessment on microcephaly in Brazil linked to the Zika virus epidemic. ECDC published a second rapid risk assessment on microcephaly in Brazil on 10 December 2015.

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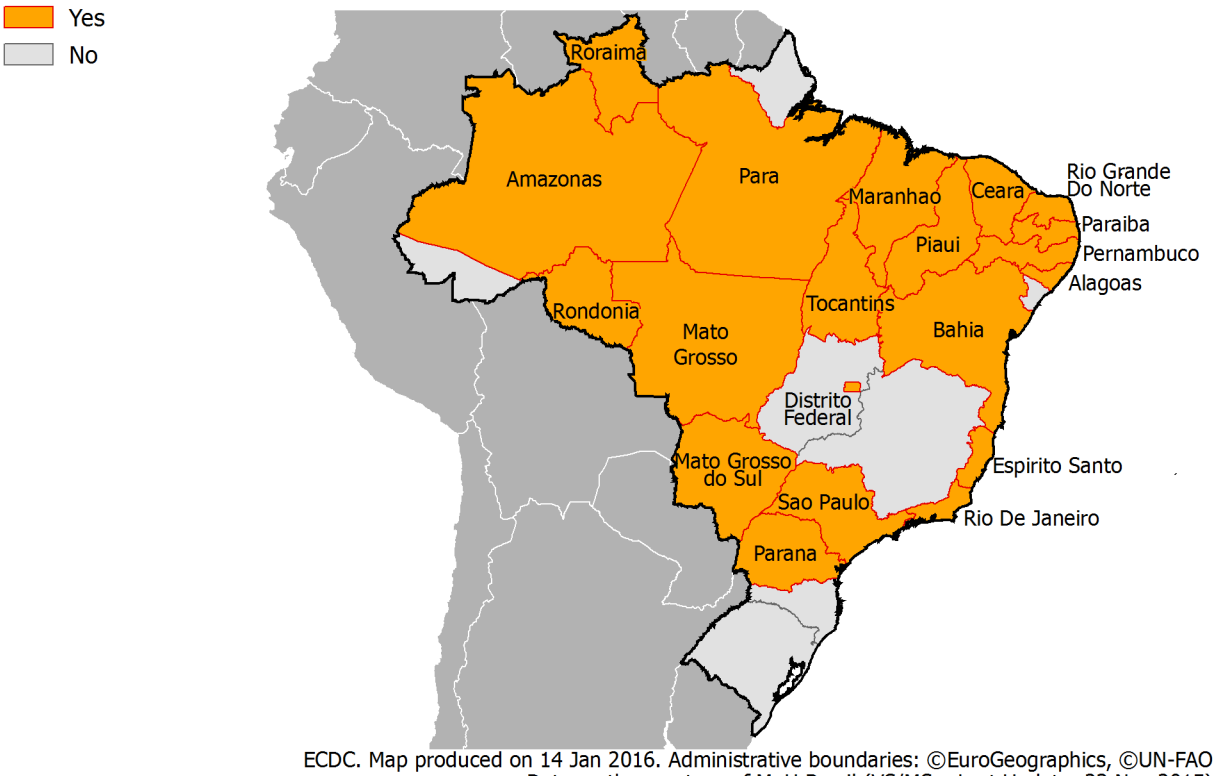
Presence of ZIKV laboratory-confirmed cases in Brazil, 2015-2016 (as of 8 January 2016)

ECDC



ECDC. Map produced on 14 Jan 2016. Administrative boundaries: ©EuroGeographics, ©UN-FAO
Data on the courtesy of MoH Brazil (VS/MS – Last Update: 23 Nov 2015)

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Countries reporting local transmission of confirmed Zika virus infections in the past nine months (as of 14 January 2016)

Source: ECDC

Public health risks - Multistate - Refugee movements

Opening date: 4 November 2015 Latest update: 14 January 2016

Epidemiological summary

Recent weeks have seen reports of emerging episodes of communicable diseases affecting the refugee population including 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 for Europe with respect to communicable diseases, but they are a priority group for communicable disease prevention and control efforts because 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

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respiratory and gastrointestinal conditions will increase in the coming months.
Low vaccination coverage for some diseases, along with low immunity for some diseases, 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
- 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.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 7 January 2016

Epidemiological summary

In 2015, wild poliovirus transmission was at the lowest level ever, with less cases reported from fewer countries than ever before. In 2015, 71 wild poliovirus cases were reported from two countries: Pakistan (52 cases) and Afghanistan (19 cases), compared with 349 cases from nine countries in 2014.

In 2015 and as of 5 January 2016, 27 cases of circulating vaccine-derived poliovirus (cVDPV) had been reported to WHO, compared with 51 for the same period in 2014. The cases this year are from Madagascar (10), Laos (6), Ukraine (2), Pakistan (2), Nigeria (1), Myanmar/Burma (2) and Guinea (4).

In April 2016, the trivalent oral polio vaccine (tOPV), which contains protection against all three strains, will be replaced worldwide by bivalent oral polio vaccine (bOPV) which no longer contains type 2. As the type 2 component of the oral polio vaccine has caused 90% of circulating VDPV outbreaks in recent years, switching from the trivalent vaccine to the bivalent vaccine will be an important step towards polio eradication.

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

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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.

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

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

Opening date: 15 June 2005 Latest update: 14 January 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 14 January 2016, 845 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 13 January 2016, eight human cases of influenza A(H5N6) have been reported since May 2014, four of which occurred during this winter season. Among these cases, five are males and three females. One of the female cases was pregnant and delivered a healthy baby by caesarean section. Five of the cases have been fatal.

Various influenza A(H5) subtypes, such as influenza A(H5N1), A(H5N2), A(H5N6) 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.

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

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