



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 4, 24-30 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: 22 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 <u>Flu News Europe website</u>.

→Update of the week

During week 3 in 2016, 29 of the 45 countries and territories that reported indicated increasing rates of ILI and ARI while thirty-two countries reported influenza virus detections in specimens from influenza-like illness (ILI) and acute respiratory infection (ARI) surveillance this week, indicating increased influenza activity in the WHO European Region. The overall influenza-positivity rate in week 03/2016 was 40%. Influenza A(H1N1)pdm09 continued to be the predominant virus detected since the start of the season. For week 03/2016, seven of 11 countries reporting data on severe acute respiratory infection (SARI) indicated increasing numbers of cases. The percentages of influenza-positive SARI specimens were greater than 50% in Armenia, Georgia and the Republic of Moldova. The predominance of A(H1N1)pdm09 correlates with an increase in cases of severe disease, predominantly in people aged 15–64.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 28 January 2016

Rubella, caused by the rubella virus and commonly known as German measles, is usually a mild and self-limiting disease which often passes unnoticed. The main reason for immunising against rubella is the high risk of congenital malformations associated with rubella infection during pregnancy. All EU Member States recommend vaccination against rubella with at least two doses of vaccine for both boys and girls. The vaccine is given at the same intervals as the measles vaccine as part of the MMR vaccine. No new outbreaks have been detected in the EU since June 2015.

→Update of the week

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

On 27 January 2016, <u>Public Health England (PHE)</u> announced that rubella susceptibility screening in pregnancy will end in England on 1 April 2016 because:

- rubella infection levels in the UK are so low they are defined as eliminated by the World Health Organization
- rubella infection in pregnancy is very rare
- being fully immunised with the measles, mumps and rubella (MMR) vaccine before becoming pregnant is more effective in protecting women against rubella in pregnancy
- the screening test used can potentially give inaccurate results and cause unnecessary stress among women

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 28 January 2016

Measles, a highly transmissible vaccine-preventable disease, is still endemic in some EU countries where vaccination uptake remains below the level required to interrupt the transmission cycle. Elimination of measles requires consistent vaccination uptake above 95% with two doses of measles vaccine in all population groups, strong surveillance and effective outbreak control measures. In 2014, 16 EU/EEA countries were above the measles vaccination coverage target of 95% for the first dose, and six countries for the second dose. Fourteen countries have coverage rates of <95% for the first dose and 20 countries for the second dose.

→Update of the week

The only new outbreak detected in the EU/EEA since the last monthly update is an outbreak in a refugee camp in Calais (France).

In the rest of the world outbreaks were reported in Nigeria, Guinea and Nepal.

Non EU Threats

Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015

Latest update: 28 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 31 countries. 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

Since the last CDTR week 3, four additional countries or territories have reported laboratory confirmed autochthonous transmission: Nicaragua, US Virgin Island, Dominican Republic and Curaçao.

As of 28 January 2016, no autochthonous Zika virus transmission has been reported in the EU. However, in 2015 and 2016, there were several reports from EU countries with imported cases who have recent travel history in affected countries/territories. These countries are Portugal, Sweden, Italy, the UK, Netherlands, Spain, Switzerland, Denmark and Austria.

On 28 January 2016 a confirmed autochthonous case was reported from <u>Curaçao</u>, which is an independent state and part of the Kingdom of the Netherlands, situated in the southern part of the Caribbean region just north of the Venezuelan coast.

Several outermost EU regions continue to report Zika virus autochthonous circulation in Martinique, Guadeloupe, Saint Martin and French Guiana, which are French overseases territories.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2016

Opening date: 22 March 2014

Latest update: 28 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 20 January 2016, WHO has reported 28 602 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 first one.

→Update of the week

During the past week no new confirmed cases have been reported in Sierra Leone.

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

Opening date: 24 September 2012 Latest update: 28 January 2016

Since April 2012 and as of 28 January 2016, 1 655 cases of MERS, including 639 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

Saudi Arabia

During the past week Saudi Arabia reported five new MERS-CoV cases. All the of the cases were male. The age range of the cases was between 21 and 85 years. All cases reported camel contact. The cases came from Jeddah, Almodhannab, Alkhurmaand and Alkharj. The two cases reported from Alkhurmaand are asymptomatic.

Thailand

On 24 January 2016, WHO South-East Asia Regional Office (SEARO) reported a case of MERS-CoV in a 71-year –old male, from Oman. The man went to Thailand for medical treatment on 22 January and is currently hospitalised and contact tracing is on-going.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 28 January 2016

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then and up to 28 January 2016, 700 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 no new cases have been reported.

Public health risks - Multistate - Refugee movements

Opening date: 4 November 2015

Latest update: 28 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 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

On 25 January 2016, <u>media</u> quoting Médecins Sans Frontières (MSF) reported an outbreak of measles in a refugee camp in Calais, France. Suspected cases have also been reported in a camp in Dunkerque. MSF is currently in discussions with the French government regarding the launch of a vaccination campaign.

In the Netherlands, between 30 and 40 asylum seekers in the Arnhem asylum centre reported being ill, most likely with flu, according to media.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 21 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 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 were no new wild poliovirus type 1 (WPV1) cases or cases of circulating vaccine-derived polioviruses reported to WHO.

On 21 January, Syria passed two years without a reported case of polio in spite of the conflict which has affected the delivery of health services, including childhood vaccinations.

Non-demyelinating variants of Guillain-Barre syndrome - UK - 2016

Opening date: 19 January 2016

On 18 January 2016, the UK reported, through the Early Warning Response System (EWRS), seven cases of non-demyelinating variants of Guillain-Barré syndrome in residents of South East Wales with onset of paralysis since 29 October 2015. By the end of January, ten adults (eight probable and two possible) and four children (all probable cases) were reported to Public Health Wales.

II. Detailed reports

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

Opening date: 2 October 2015

Latest update: 22 January 2016

Epidemiological summary

So far, the 2015–2016 influenza season has been characterised by a predominance of the influenza A(H1N1)pdm09 virus, which is known to cause more severe disease and death in younger adults compared with influenza A(H3N2). Three quarters (78%) of the detected viruses were type A, and 22% were type B. The vast majorities of subtyped A viruses were A(H1N1)pdm09, and B viruses when ascribed to a lineage were B/Victoria. 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.

Since week 52/2015, several European countries have reported increasing numbers of SARI cases of associated with A(H1N1) pdm09 in sentinel systems. Similarly, countries reporting laboratory-confirmed influenza in hospitals and intensive care units (ICUs), have detected influenza A in 426 of 452 ICU cases since the start of the season with A(H1N1)pdm09 being the dominant subtype (92%). In all other wards, 32% of the detected viruses were influenza type B, and 68% were influenza type A with A (H1N1)pdm09 representing 97% of those subtyped.

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. Furthermore, the most prevalent B virus lineage (Victoria) is not included in the trivalent vaccine, which is the more widely used in Europe.

Actions

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

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 28 January 2016

Epidemiological summary

No new outbreaks have been detected in the EU since June 2015.

During the period October 2014–September 2015, 2 427 cases of rubella were reported to TESSy. Laboratory confirmation (by serology, virus detection or isolation) was available for 2.8% (n=69) of the cases. The rubella notification rate was less than the elimination target of one case per million population in 20 of the 23 countries that reported consistently over the 12-month period, including 15 countries that reported zero cases.

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

ECDC assessment

The WHO has targeted the elimination of measles and rubella in the 53 Member States of the WHO European region. Elimination is defined as the absence of endemic cases in a defined geographical area for a period of at least 12 months, in the presence of a well-performing surveillance system. Regional elimination can be declared after 36 or more months of the absence of endemic measles or rubella in all Member States. Although progress has been made towards elimination, this goal has not yet been achieved. At the third <u>meeting</u> of the Regional Verification Commission for measles and rubella in November 2014, based on country reports on 2013 data for rubella, 16 EU/EEA countries were declared to have interrupted endemic transmission, six of which were classified as at risk of re-establishment. Eight countries were classified as still having endemic transmission and five countries were classified as inconclusive.

Actions

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

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 28 January 2016

Epidemiological summary

No new outbreaks or updates identified in EU Member States since the last monthly update in October 2015 apart from an outbreak in a refugee camp in Calais.

Rest of the world

Africa

Nigeria

According to the <u>media</u>, five children have died in a measles outbreak affecting Oyo state with an unknown number of cases. An immunisation campaign is ongoing since 19 January.

Guinea

An ongoing measles outbreak is reported by the media in the prefecture of Labe with an unknown number of affected cases.

Asia

Nepal

The <u>media</u> report a suspected measles outbreak in Kapilvastu district bordering India with an unknown number of cases. Investigations are ongoing.

Publications

Notes from the Field: Subacute Sclerosing Panencephalitis Death — Oregon, 2015

A 14-year-old boy died in Oregon, USA in 2015 due to subacute sclerosing panencephalitis (SSPE). The patient had been vaccinated against measles in the Philippines at 8 months of age but contracted measles at one year of age while still in the Philippines. He had been well until 2012 when his neurodegenerative symptoms began.

Analysis of SSPE among persons who had measles during the 1989–1991 resurgence of measles in the US indicated an incidence between 4 and 11 SSPE cases per 100 000 measles cases, approximately 10 times higher than earlier estimates.

Subacute sclerosing panencephalitis in pregnancy

SSPE was diagnosed post mortem in a previously healthy 29-year-old pregnant woman who had returned from a trip to rural India shortly before the onset of symptoms.

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

ECDC assessment

During the 12-month period from October 2014 to September 2015, 4 202 cases were reported by 30 EU/EEA countries. Twenty-five countries reported consistently throughout this period.

Germany accounted for 62.6% of the cases reported during this period. In 12 of the countries reporting consistently, the measles notification rate was less than the elimination target of one case per million population, including seven countries which reported zero cases during the 12-month period. Thirteen countries had a notification rate above this target, the highest reported by Croatia (50.4 cases per million).

Measles is targeted for elimination in Europe. Elimination is defined as the absence of endemic cases in a defined geographical area for a period of at least 12 months, in the presence of a well-performing surveillance system. Regional elimination can be declared after 36 or more months of the absence of endemic measles or rubella in all Member States. Although progress has been made towards elimination, this goal has not yet been achieved. At the third <u>meeting</u> of the Regional Verification for generating for more months in Neuroper 2014, been achieved and enverte reports are 2012 date.

Verification Commission for measles and rubella in November 2014, based on country reports on 2013 data, 14 EU/EEA countries were declared to have interrupted measles transmission, five of which were classified as at risk of the re-establishment of endemic transmission. Eight countries were classified as still having endemic transmission and seven countries were classified as inconclusive.

Actions

ECDC monitors measles transmission and outbreaks in EU and neighbouring countries in Europe on a monthly basis through enhanced surveillance and epidemic intelligence activities.

Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015 Latest update: 28 January 2016

Epidemiological summary

As of 28 January 2016, several countries or territories have reported confirmed autochthonous cases of Zika virus infection in the past nine months: Barbados, Bolivia, Brazil, Cape Verde, Colombia, Curaçao, Dominican Republic, Ecuador, El Salvador, Fiji, French Guiana, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Maldives, Martinique, Mexico, New Caledonia, Nicaragua, Panama, Paraguay, Puerto Rico, Saint Martin, Samoa, Solomon Islands, Suriname, Thailand, Venezuela and Virgin Island (US).

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

ECDC assessment

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 the measures that are applied against dengue and chikungunya infections.

Actions

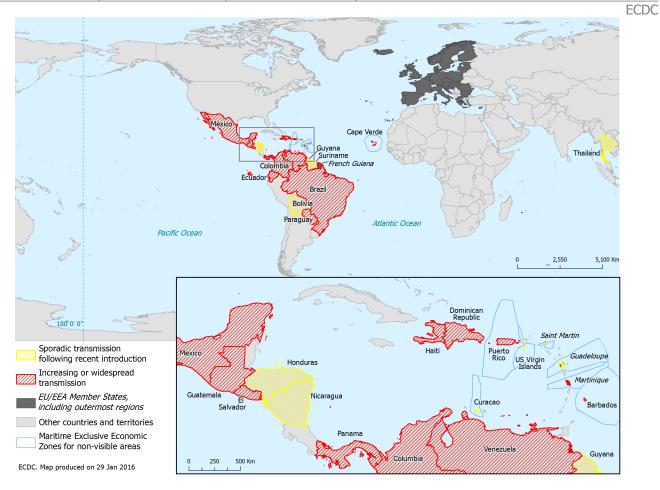
On 24 November 2015, ECDC published a rapid risk assessment on microcephaly in Brazil linked to the Zika virus epidemic.

ECDC published an update of the rapid risk assessment on microcephaly in Brazil on 22 January 2016.

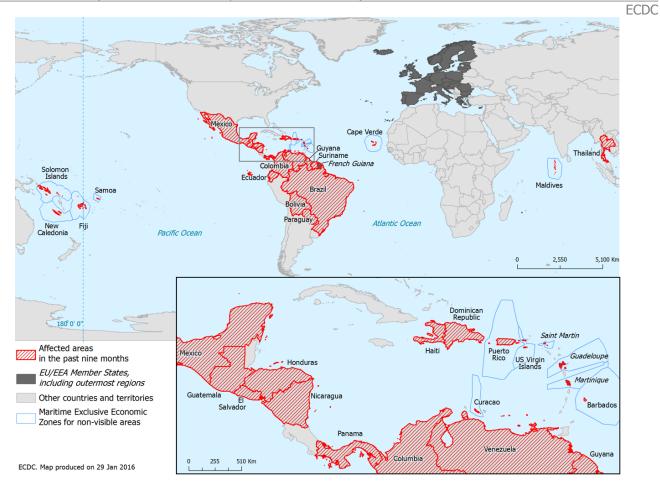
Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past nine months and past two months, as of 28 January 2016

	Affected in	Affected in	
	the past 9 months	the past 2 months	
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	
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	Historical Zika virus circulation	
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	Sporadic transmission following recent introduction	
Maldives	Yes	Historical Zika virus circulation	
Martinique	Yes	Increasing or widespread transmission	
Mexico	Yes	Increasing or widespread transmission	
New Caledonia (France)	Yes	Historical Zika virus circulation	
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	Historical Zika virus circulation	
Solomon Islands	Yes	Historical Zika virus circulation	
Suriname	Yes	Sporadic transmission following recent introduction	
Thailand	Yes	Sporadic transmission following recent introduction	
Bolivarian Republic of			
Venezuela	Yes	Increasing or widespread transmission	
Virgin island (US)	Yes	Sporadic transmission following recent introduction	

Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past two months, as of 29 January 2016



Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past nine months, as of 29 January 2016



Ebola Virus Disease Epidemic - West Africa - 2014 - 2016

Opening date: 22 March 2014

Latest update: 28 January 2016

Epidemiological summary

Distribution of cases as of 20 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**: 14 123 cases, including 3 956 deaths. The country was declared Ebola-free on 7 November 2015. However, two epidemiologically linked sporadic case were reported 14 and 20 January 2016.
- **Guinea**: 3 804 cases including 2 536 deaths. Guinea was declared EVD-free on 29 December 2015.

Sierra Leone

During the past week no new confirmed cases have been reported. 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. She is currently receiving treatment in a military hospital in Freetown.

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 04/2016.

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 EbolaFactsheet | CDC | Ebola response phase 3:Framework for achieving and sustaining a resilient zero | ReEBOV Antigen Rapid TestKit | Institut Pasteur will open a lab in Conakry | Emergency Operation Centres in the three affected countries | Entry screening inUS

ECDC assessment

The detection of a new cases 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 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 <u>Scientific report assessing risk related to household pets in contact with Ebola</u> 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.

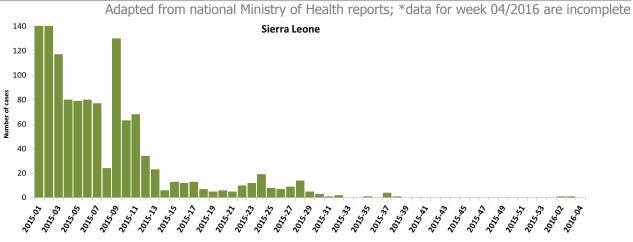
On 6 October 2014, ECDC published risk of transmission of Ebola virus via donated blood and other substances of human origin in

the EU.

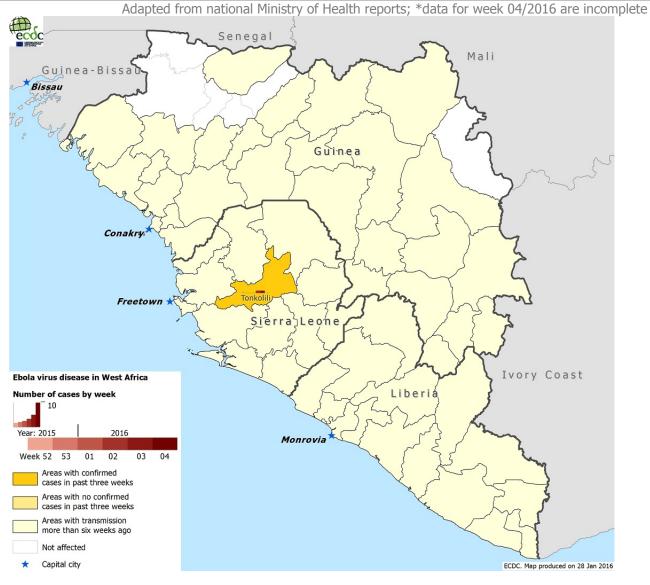
On 22 September 2014, ECDC published assessment and planning for medical evacuation by air to the EU of patients with Ebola virus disease and people exposed to Ebola virus.

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

Distribution of confirmed cases of Ebola virus disease by week of reporting in Sierra Leone (weeks 01/2015 to 04/2016)



Distribution of confirmed cases of EVD by week of reporting in Sierra Leone (as of week 04/2016)



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

Opening date: 24 September 2012

Latest update: 28 January 2016

Epidemiological summary

As of 28 January 2016, 1 655 cases of MERS, including 639 deaths, had been reported by local health authorities worldwide.

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

ECDC assessment

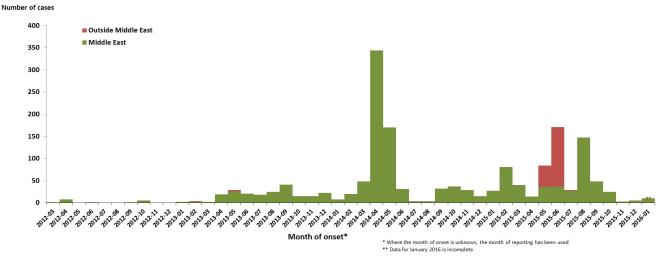
The MERS outbreak in the Middle East poses a low risk to the EU. Efforts to contain the nosocomial clusters in the affected countries are vital to prevent wider transmission. Although sustained human-to-human community transmission is unlikely, the residential cluster of cases reported from Saudi Arabia 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.

13/22

Actions

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

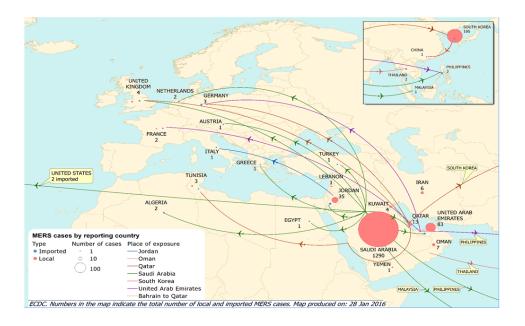
Cases of MERS-CoV by place of reporting, March 2012 – 28 January 2016 (n=1 655)



Distribution of confirmed cases of MERS-CoV by country of reporting, March 2012 - 28 January 2016 (n=1 655)

			Number
Region	Country		of deaths
Middle East	Saudi Arabia	1290	551
	United Arab Emirates	83	12
	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	2	0
Americas	United States of America	2	0
	Global	1655	639

Distribution of confirmed cases of MERS-CoV by first available date, and probable place of infection, March 2012 - 28 January 2016 (n=1 655)



Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 28 January 2016

Epidemiological summary

Cases reported by China since March 2013 have the following geographical distribution: Zhejiang (197), Guangdong (186), 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.

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.

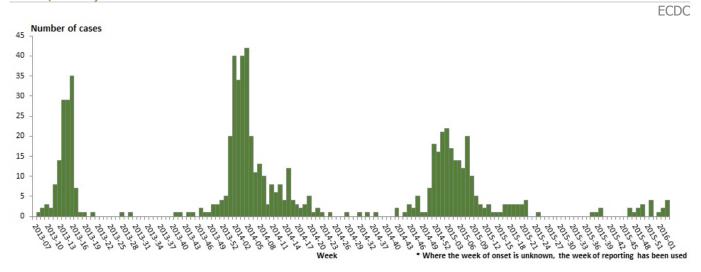
Actions

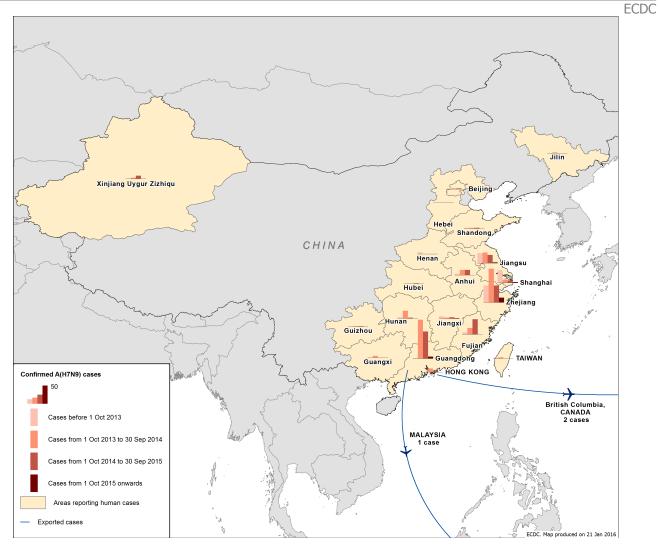
The Chinese health authorities continue to respond to this public health event with enhanced surveillance, epidemiological and laboratory investigation, and scientific research.

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

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

Distribution of confirmed cases of A(H7N9) by four periods of reporting (weeks 07/2013 to 04/2016)





Distribution of confirmed cases of A(H7N9) by week of reporting (weeks 07/2013 to 04/2016)

Public health risks - Multistate - Refugee movements

Opening date: 4 November 2015

Latest update: 28 January 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 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.

<u>WHO, UNHCR and UNICEF</u> 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 <u>ECDC expert opinion</u> 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 <u>RRA</u> on the risk of communicable disease outbreaks in refugee populations in the EU/EEA
- an updated <u>RRA</u> on louse-borne relapsing fever amongst migrants in the EU/EEA
- an <u>RRA</u> on cutaneous diphtheria among recently arrived refugees and asylum seekers in the EU
- an <u>RRA</u> on the risk of importation and spread of malaria and other vector-borne diseases associated with the arrival of migrants in the EU
- an <u>RRA</u> 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: 21 January 2016

Epidemiological summary

In 2016, no cases of wild polio virus type 1 (WPV1) have been reported, compared with three cases for the same period in 2015.

As of 28 January 2016, no cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO so far this year, zero cases were also reported for the same period in 2015.

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

ECDC assessment

The last locally-acquired wild polio cases within the current EU borders were reported from Bulgaria in 2001. The most recent wild

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polio outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

References: <u>ECDC latest RRA</u> | <u>Rapid Risk Assessment on suspected polio cases in Syria and the risk to the EU/EEA</u> | <u>Wild-type</u> 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 <u>risk assessment</u>. 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 <u>website</u>.

Non-demyelinating variants of Guillain-Barre syndrome - UK - 2016

Opening date: 19 January 2016

Epidemiological summary

A cluster of atypical Guillain-Barré syndrome in ten adults, temporarily related to a cluster of four children with acute flaccid paralysis in residents of South East Wales over a 3-month period, have been <u>reported to Public Health Wales</u>. The overall incidence of Guillain-Barré syndrome is estimated to be between 1.1 to 1.8 per 100 000 population per year worldwide. Guillain-Barré syndrome can be divided into at least four main subtypes of disease. in Western Europe and North America the demyelinating subtype accounts for around 90% of cases.

All adult cases were male, aged between 24 and 77 years. Seven had prominent facial diplegia at onset. Available electrophysiological studies showed axonal involvement in five adults. Seven reported various forms of respiratory disease before onset of neurological symptoms.

Detailed interviewing of cases has been undertaken in an attempt to identify links or common factors among cases. Additional microbiological and toxicology investigations have been performed. Two of the three children with available information on enterovirus testing had evidence of enterovirus D68 infection in stool or respiratory samples.

Local public health authorities have increased awareness among health professionals to ensure early reporting and investigation of cases.

References: Eurosurveillance

ECDC assessment

The occurrence of ten cases of the less common non demyelinating variants of Guillain-Barré syndrome in a period of just over two months in a population of 1.3 million in South East Wales, UK is unusual and unexpected.

ECDC does not have any indication of similar clusters of neurological illness in the EU during the same time period. However, syndromic surveillance for neurological syndromes is not widely available in Europe. Acute flaccid paralysis (AFP) surveillance for polio is established in most, but not all, EU countries and WHO's Regional Office for Europe receives weekly case-based reports from these countries. The quality of AFP surveillance in most EU countries is not optimal and improving the coverage and timeliness of the surveillance would benefit not only polio surveillance but also the detection of clusters or trend changes in non-polio AFPs.

The potential threat posed to other EU Member States by the cluster of unusual variants of GBS in the south-east Wales (UK) arises from a potential common pathogenic agent. The concurrent occurrence of acute flaccid paralysis and enterovirus-D68 cases among children in the same geographic area opens the question about their relations with GBS cases. The cases are still under investigation, and the detection of the infection associated with the cases of GBS and established causal relationship will contribute to the final threat assessment.

The cases did not report any recent vaccination history, therefore vaccines as a causative mechanism can be ruled out.

Actions

ECDC is preparing a rapid risk assessment following a request from the European Commission.

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