



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 15, 8-14 April 2018

All users

This weekly bulletin provides updates on threats monitored by ECDC.

NEWS

ESCAIDE 2018 - call for abstracts

ESCAIDE 2018 will be held at the Hilton Malta Hotel in St. Julian's, Malta, 21–23 November 2018. The call for abstracts will close on 7 May 2018.

Ramadan 2018 and Umrah in Mecca, Saudi Arabia

This year, the Ramadan is estimated to take place from 16 May to 14 June. Ramadan is the holy month when Muslims around the world are fasting from dawn to sunset, except for pregnant women, children and sick people.

During this time, many Muslims choose to perform Umrah - a pilgrimage to Mecca. The Ministry of Health of Saudi Arabia does not recommend the pilgrimage to people over the age of 65-years, children, pregnant women, or people with chronic diseases or cancer. Due to the ongoing outbreak of the Middle East Respiratory Syndrome Coronavirus (MERS-CoV), pilgrims should avoid close contact with animals, particularly camels, when visiting farms, markets, or barn areas. Most commonly, coronaviruses are transmitted by respiratory droplets when an infected person coughs or sneezes. The disease is often mild (taking the form of a cold), but can occasionally lead to severe, life-threatening respiratory disease, especially in people with chronic conditions. Pilgrims may be at increased risk of infection in crowded baths, packed transportation and confined accommodation.

According to the Ministry of Health of Saudi Arabia, since 2012 and as of 9 April 2018, there have been 1 092 cases and 739 deaths due to MERS-CoV detected in the country: https://www.moh.gov.sa/en/CCC/PressReleases/Pages/statistics-2018-04-09-001.aspx

As recently as March 2018, 15 cases were detected from Riyadh (5), Jeddah (4), Hufoof (2), Najran (2), Hail (1) and Medinah (1). Almost half of these cases reported contact with camels, three were due to nosocomial transmission, three were household contacts and for two the route of transmission was not specified. Further information is available in the factsheets on MERS-CoV from WHO and ECDC.

Pilgrims visiting Mecca should check prior to departure whether they have the obligatory vaccinations against meningitis and yellow fever if coming from endemic country. It is recommended that they should be immunised against poliomyelitis, influenza, hepatitis A and B, measles, diphtheria and tetanus. According to WHO, an increase in measles cases has been reported in Saudi Arabia in 2017, with 402 confirmed cases reported compared to 112 cases reported in 2016.

Pilgrims should follow advice on personal hygiene and measures to prevent food- and waterborne diseases in order to decrease the risk of gastrointestinal illness. They should practise good hand and personal hygiene to reduce the risk of respiratory infections.

After returning from Umrah, if symptoms suggestive of gastrointestinal, respiratory or any other type of infection occur, pilgrims should mention their travel history to their healthcare provider.

ECDC published a rapid risk assessment 'Public health risks related to communicable diseases during the Hajj 2017' on 10 August 2017 and the main conclusions remain valid for the Umrah 2018.

EU Threats

Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 13 April 2018

Measles outbreaks continue to occur in a number of EU/EEA countries, with a risk of spread and sustained transmission in areas with susceptible populations.

→Update of the week

Updates are provided for 15 EU/EFTA countries. Outbreaks of measles are ongoing in France, Greece, Ireland, Italy, Portugal and Romania. Updated information on measles cases is available for Austria, Bulgaria, Czech Republic, Germany, Hungary, Latvia, Poland, Spain and Switzerland.

Relevant updates outside EU/EFTA countries are provided for Albania, Belarus, Georgia, Russia, Serbia, Turkey and Ukraine.

Dengue – France, La Réunion – 2018

Opening date: 13 March 2018 Latest update: 13 April 2018

Since the beginning of 2018, the island of La Réunion, a French department in the Indian Ocean, has seen a significant increase in dengue cases.

→Update of the week

Since the beginning of 2018 and as of 8 April, there have been 992 autochthonous cases of dengue in La Réunion. Among these cases, 237 were reported between 2 and 8 April 2018.

Rubella – Multistate (EU) – Monitoring European outbreaks

Opening date: 7 March 2012 Latest update: 13 April 2018

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 March 2017.

ECDC reports global outbreaks of rubella in the CDTR on a monthly basis or if there is a critical event.

→Update of the week

No new outbreaks have been detected in 2018.

Influenza - Multistate (Europe) - Monitoring season 2017 - 2018

Opening date: 11 October 2017 Latest update: 13 April 2018

Influenza transmission in Europe shows a seasonal pattern, with peak activity during the winter months.

→Update of the week

During week 14 in 2018 (2-8 April 2018), influenza viruses continued to circulate in the region with 28% of the individuals sampled from primary healthcare settings testing positive, while all countries reported low- or medium-intensity activity of respiratory infections. Both influenza virus types A and B were co-circulating, with the majority being type A viruses.

Listeria monocytogenes clusters - Europe - 2018

Opening date: 21 February 2018 Latest update: 13 April 2018

An outbreak of invasive *Listeria monocytogenes* (*L. monocytogenes*) infections defined by whole-genome sequencing (WGS) and probably linked to frozen corn has been ongoing in five EU Member States (Austria, Denmark, Finland, Sweden and the United Kingdom) since 2015. As of 11 April 2018, this outbreak has been associated with 41 cases identified between December 2015 and March 2018.

→Update of the week

Since the publication of the joint ECDC-EFSA rapid outbreak assessment on a multi-country outbreak of *Listeria monocytogenes* serogroup IVb, multi-locus sequence type 6 (ST 6) on 22 March 2018, three EU Member States have reported nine new confirmed outbreak cases: Finland (5 cases), Sweden (1 case) and the United Kingdom (3 cases).

Non EU Threats

New! Health crisis - Venezuela - 2018

Opening date: 9 April 2018 Latest update: 13 April 2018

Between 2016 and April 2018, Venezuela has experienced outbreaks of measles, malaria, diphtheria and Chagas disease. In the past month UNHCR has reported a significant increase in asylum seekers from Venezuela.

Yellow fever - Brazil - 2017 - 2018

Opening date: 16 January 2017 Latest update: 13 April 2018

<u>Yellow fever</u> is a mosquito-borne viral infection which occurs in some tropical areas of Africa and South America. Brazil experienced a major outbreak of yellow fever in 2016–2017. An upsurge of confirmed cases has been reported since December 2017.

→Update of the week

Since the previous CDTR on 6 April 2018 and as of 10 April, <u>Brazil</u> has not reported additional confirmed cases. However, three additional deaths among previously reported cases have been reported.

During the same time period, <u>Brazil</u> has reported confirmed epizootics in non-human primates in São Paulo (10), Minas Gerais (2) and Tocantins (1) states.

II. Detailed reports

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 13 April 2018

Epidemiological summary

Updates are provided for 15 EU/EFTA countries. In 2018 and as of 12 April, most of the cases in EU had been eported from Romania (1 709), France (1 547), Greece (1 532) and Italy (411). Thirteen deaths have been reported in 2018 from Romania (9), Italy (2), Greece (1) and France (1). Outbreaks of measles are ongoing in France, Greece, Ireland, Italy, Portugal and Romania. Updated information on cases of measles is available for Austria, Bulgaria, Czech Republic, Germany, Hungary, Latvia, Poland, Spain and Switzerland.

Outside of the EU/EFTA, Ukraine has continued to experience the largest outbreak, with almost 10 000 cases reported in 2018, including seven deaths. Ongoing outbreaks are being reported in Albania, Belarus, Georgia, Serbia, Turkey and Ukraine. Over 500 cases are reported from Russia, the host country of FIFA 2018 during the summer.

Epidemiological summary for EU/EEA countries with updates since last month

<u>France</u> has reported 1 547 cases between 1 January 2018 and 8 April. This is an increase of 1 118 cases since 20 February 2018. Since the beginning of the outbreak in November 2017 there have been 1 605 cases, including one death reported across the country. Of these cases, 51% are from the New Aquitaine region, the only region experiencing an epidemic. The highest incidence is in children under one year of age. Among the reported cases, 20% had been hospitalised and 87% were not immunised or had incomplete vaccination.

<u>Greece</u> has reported 1 532 cases in 2018 as of 12 April, including one death. This is an increase of 524 cases since the previous CDTR on 9 March. As of 12 April 2018, and since the beginning of the outbreak in May 2017, Greece has reported 2 500 measles cases, of which 1 485 have been laboratory confirmed. Among the laboratory-confirmed cases, three deaths have been reported. Most of the cases occurred in southern Greece among young Roma children, as well as in Greek adults, mainly in the age group of 25-44 years.

Ireland has confirmed 28 measles cases linked to the ongoing outbreak in the Mid-West region, as of 5 April 2018. The majority of these are in Limerick City. There is one associated case in Clare, one in Dublin and one in Galway, all linked to the Limerick outbreak. There are also a number of cases in the South East area, who are possibly linked to the Limerick outbreak. This is an increase of eight cases since previous CDTR on 9 March. The majority of these are in Limerick city and one is in Clare. For the duration of this outbreak free vaccination with MMR is being held in HSE MMR vaccination clinic and from GP's. In 2018 and as of 7 April, Ireland reported 61 confirmed and possible cases of measles across the country.

<u>Italy</u> has reported 411 cases of measles, including two deaths between 1 January and 28 February 2018. This is an increase of 247 cases since previous CDTR on 9 March. The cases have been reported from 16 regions. Of all cases reported by the 16 regions, over 80% were from four regions: Sicily, Lazio, Calabria and Tuscany.

<u>Portugal</u> reports 107 confirmed cases of measles in 2018, as of 12 April 2018. Additionally 24 cases are pending test results. Of the confirmed cases, 106 are adults and 85 (79%) are healthcare professionals. Most of the cases (103) are reported in the north of the country.

Romania, reports 1 709 measles cases, including nine deaths in 2018, as of 6 April. This is an increase of 952 cases and six deaths since previous CDTR on 9 March. Since the beginning of the outbreak in October 2016 and as of 6 April 2018, Romania has reported 11 988 confirmed measles cases, including 46 deaths.

<u>Austria</u> has reported 29 measles cases in 2018, as of 6 April. Of the reported cases, 14 are from Vienna. Among the 29 cases, 22 are adults, of which 16 are over 30 years of age.

Bulgaria reports three cases of measles in 2018 as of 1 April. Two of these cases are new since last report on 25 February.

In <u>Czech Republic</u>, according to media, 29 cases of measles have been reported in 2018, as of 2 March. This is an increase of six cases since previous CDTR on 9 March. Fourteen of the cases possibly acquired the infection in Ukraine.

<u>Germany</u> has reported 77 cases of measles as of 11 March 2018. This is an increase of 44 cases since the previous CDTR on 9 March.

Hungary reported 14 cases of measles in 2018 as of 1 April. This is an increase of 13 cases since 18 February.

Latvia has reported 10 confirmed measles cases in 2018 as of 4 March. Among these cases, one have been reported since the last CDTR, published on 9 March. Since the beginning of measles outbreak in December 2017, Latvia has reported 15 measles cases.

Spain has reported 11 cases in 2018, as of 11 March, which is an increase of four cases since previous CDTR on 9 March.

Switzerland has reported 14 cases in 2018, as of 14 March. This is an increase of four cases since previous CDTR on 9 March.

Poland has reported 31 cases of measles in 2018, as of 31 March.

Relevant epidemiological summary for countries outside EU/EEA

Albania, according to media quoting the health officials, report 352 children under the age of 14 years mainly in the areas of Tirana, Lezha, Durrës, Kukës, Vlora and Elbasan.

The MoH of Belarus reported 40 cases of measles in 2018 as of 3 April. This is an increase of 35 cases since previous CDTR on 9 March. Cases occurred in the Gomel (11), Grodno (28) and Brest regions (1). Cases in Gomel developed symptoms after a family trip to Ukraine.

Georgia reports 447 measles cases in 2018 as of 3 April. This is an increase of 121 cases since previous report on 23 February. Most of the cases were reported from Adjara region by the coast of the Black Sea.

Russia has reported 571 cases of measles in January and February 2018. The proportion of children has increased among the reported cases since January 2018. Overall, in 2017, Russia reported 721 cases of measles, of which the majority were in the city of Moscow, Moscow region, Republic of Dagestan, and Chechen Republic.

Serbia has reported 4 538 cases, including 12 deaths, between October 2017 and 5 April 2018. Of the reported cases, 2 368 were confirmed.

<u>Turkey</u> has detected nine cases of measles among students of the Akdeniz University in city of Antalya, according to media on 3 April 2018. Two of the cases developed symptoms upon return from abroad. Antalya is highly touristic area of Turkey on the Mediterranean coast.

Ukraine has reported 9 091 cases of measles, including seven deaths in 2018 and as of 3 April. This is an increase of 3 252 cases since 25 February 2018. Among the cases, 3 270 were adults and 5 821 were children. Most of the cases are reported from Ivano-Frakivsk, Zakarpatie, Odessa, Chenivetsk and Lviv regions. Vaccination campaign is ongoing in all regions of Ukraine.

In addition, according to WHO report as of 16 March, during 2018, there have been nine countries in the Americas Region reporting confirmed cases: Antigua and Barbuda (1 case), Brazil (14 cases), Canada (4 cases), Guatemala (1 case), Mexico (4 cases), Peru (2 cases), the United States (13 cases), Colombia (1 case), and Venezuela (886 cases in total, 159 cases in 2018).

ECDC links: Measles web page | ECDC Communicable Disease Threats Reports (CDTR) | ECDC rapid risk assessment ongoing outbreak of measles in Romania, risk of spread and epidemiological situation in EU/EEA countries, 3 March 2017 | ECDC rapid risk assessment 'Risk of measles transmission in the EU/EEA', 23 March 2018

Sources: National Public Health Institutes | Ministries of Health | media

ECDC assessment

Measles outbreaks continue to occur in a number of EU/EEA countries. There is a risk of spread and sustained transmission in areas with susceptible populations. Current outbreaks affect various population groups, including healthcare workers caring for people at risk of severe disease and complications (e.g. infants under one year of age, immunosuppressed).

Prompt and targeted outbreak response to break chains of transmission is essential. This includes the isolation of suspected and confirmed cases and the close monitoring of previously unvaccinated contacts. Vaccination with measles-containing vaccines (MCV) is encouraged for those not able to show proof of complete vaccination or history of previous infection.

Vaccination with at least two doses of an MCV remains the most effective preventive measure. Every encounter with the healthcare system should be used to ensure that every resident in the EU has a documented history of MCV vaccination, as per national recommendations. If not, additional doses should be administered. Vaccination history needs to be readily available to healthcare workers in case of exposure or outbreak. Vaccination coverage of 95% of the general population at national as well as subnational levels with two doses of MCV is necessary to ensure that measles circulation is interrupted, and that the introduction of measles cases does not result in secondary cases.

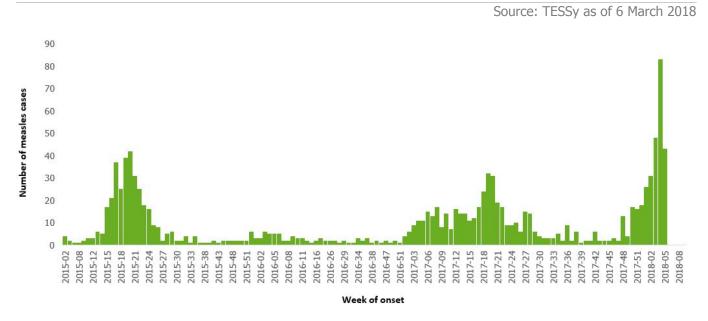
In the EU/EEA, only seven countries have reached the target of 95% measles vaccination coverage (two doses) necessary to prevent outbreaks and eliminate the disease. The current epidemiological events are putting the elimination status of some countries at risk and will require sustained efforts to increase population immunity to measles and halt transmission.

Actions

All EU/EEA countries report on measles through TESSy on a monthly basis to ECDC; data are published every month. ECDC also monitors EU/EEA outbreaks on a monthly basis through epidemic intelligence activities.

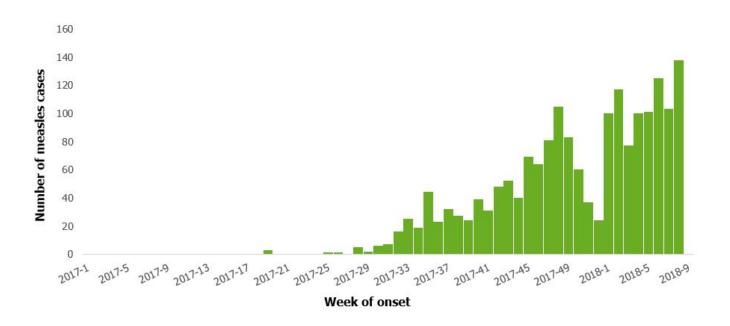
ECDC published a rapid risk assessment 'Risk of measles transmission in the EU/EEA' on 23 March 2018.

Distribution of measles cases (possible, probable, confirmed) by week of onset, France, 2015-2018



Distribution of measles cases (possible, probable, confirmed) by week of onset, Greece, 2017-2018

Source: KEELPNO, as of 1 March 2018



Dengue – France, La Réunion – 2018

Opening date: 13 March 2018 Latest update: 13 April 2018

Epidemiological summary

Authorities have reported 992 cases on the island from the beginning of 2018 until 8 April 2018. Of all reported cases, 237 were reported between 2 and 8 April 2018. The main affected areas are on the western part of the island. The most prevalent serotype is DENV-2.

The main vector of infection implicated in the outbreak is Aedes albopictus.

On 27 March 2018, authorities decided to raise the level of the emergency plan ORSEC to 3. This plan includes:

- active case finding;
- intensification of vector control;
- reinforcement of communication to the public and healthcare workers;
- mobilisation of additional resources such as the firefighters.

Sources: ARS

ECDC assessment

The current outbreak is a significant event because the number of cases already exceeds the yearly number of cases reported since 2010. This epidemic could continue and intensify in the coming weeks. Based on previous *Aedes* mosquito-borne outbreaks in the island, further transmission is expected up to the beginning of the austral winter (lasting from July to September) when the temperature will be cooler. Control activities are currently in place and include active reinforced vector control, enhanced surveillance, blood safety measures and social mobilisation.

The risk for onward transmission of dengue fever in Europe is linked to importation of virus by viraemic travellers into receptive areas with established and active competent vectors (i.e *Aedes albopictus* in mainland Europe, primarily around the Mediterranean, and *Aedes aegypti* on Madeira island). Environmental conditions in Europe are expected to become more favourable for the growth of mosquito populations in the coming weeks, reaching a high vector abundance in summer and early autumn. Prior to this high activity season, there is a low likelihood of sustained dengue virus autochthonous transmission in

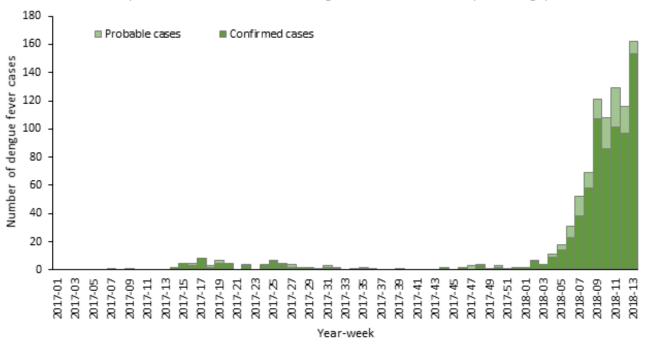
continental Europe associated with introduction by a returning traveller from La Réunion or other areas in the world with active DENV transmission.

Actions

ECDC is closely monitoring the situation and is producing a rapid risk assessment on this event to be published on 16 April 2018. ECDC reports monthly dengue outbreaks detected through epidemic intelligence in the CDTR.

Number of dengue autochthonous cases by week of onset between week 1-2017 and week 13-2018 in La Réunion.





Rubella – Multistate (EU) – Monitoring European outbreaks

Opening date: 7 March 2012 Latest update: 13 April 2018

Epidemiological summary

No new outbreaks have been detected in the EU in 2018.

Epidemiological summary for EU/EEA countries with updates since last month

In January and March 2018, one to three cases of rubella have been reported from <u>Germany</u>, <u>Ireland</u> and <u>Italy</u>. In <u>Poland</u>, 124 cases have been reported as of 31 March.

Web sources: ECDC measles and rubella monitoring | ECDC rubella factsheet | WHO epidemiological brief summary tables | WHO epidemiological briefs | Progress report on measles and rubella elimination

ECDC assessment

World Health Organization (WHO) has targeted the elimination of measles and rubella in the 53 Member States of the WHO European Region. The progress towards elimination of rubella in the WHO European Region is assessed by the European Regional Verification Commission for Measles and Rubella Elimination (RVC). Member States of the WHO European Region are making steady progress towards the elimination of rubella. At the sixth meeting of the RVC for Measles and Rubella in June 2017, of 53 countries in the WHO European Region, 33 (21 of which are in the EU/EEA) were declared to have reached the elimination goal for rubella, and four countries (two in the EU/EEA) were deemed to have interrupted endemic transmission for between 12 and 36

months, meaning they are on their way to achieving the elimination goal. However, seven EU/EEA countries were judged to still have endemic transmission: Belgium, Denmark, France, Germany, Italy, Poland and Romania.

Web source: European Regional Verification Commission for Measles and Rubella Elimination (RVC) (2017)

Actions

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

Influenza – Multistate (Europe) – Monitoring season 2017 – 2018

Opening date: 11 October 2017 Latest update: 13 April 2018

Epidemiological summary

The season overview for the 2017-2018 period, shows that influenza has been circulating widely in the region since week 52/2017, based on positivity rates among sentinel specimens, which is longer than in previous recent seasons and may contribute to the severity of this season.

For the region overall, the majority of influenza viruses detected were type B, representing a high level of circulation for influenza B viruses compared to recent seasons. B/Yamagata lineage viruses have greatly outnumbered those of the B/Victoria lineage. Different patterns of dominant type and A subtypes were observed between the countries of the region. Influenza A viruses are now dominant in several eastern European countries.

Of the type A virus detections from sentinel sources, the majority of which were subtyped, A(H1N1)pdm09 viruses have outnumbered A(H3N2) viruses. In non-sentinel sources, more A(H3N2) viruses than A(H1N1)pdm09 viruses were reported. While low in number, 55% of the A(H3N2) viruses characterised belong to clade 3C.2a and 41% of B/Victoria lineage viruses belong to a subclade of clade 1A viruses that are antigenically distinct from the current trivalent vaccine component.

The majority of severe cases reported this season are due to influenza type B and have mostly occurred in persons above the age of 15 years. Mortality from all causes based on pooled data from 19 EU countries and regions that reported to EuroMOMO remained elevated in some countries.

Interim results from five European studies indicate 25% to 52% vaccine effectiveness against any influenza.

Source: Flu News Europe, EuroMOMO

ECDC assessment

Influenza activity continues to be reported in Europe, putting pressure on healthcare systems and creating significant media attention. Excess winter mortality is being reported from several countries and is associated with A(H3N2) circulation. Vaccination programmes targeting the elderly, people with chronic diseases, and healthcare workers should be continued and intensified in countries that have not yet seen a seasonal peak. Antiviral treatment with neuraminidase inhibitors should be advised for people at high risk of complications from influenza, such as people with underlying chronic respiratory or cardiovascular diseases, and for people with severe or rapidly progressive symptoms. Antiviral prophylaxis should be considered during the early phases of outbreaks in closed settings such as nursing homes. Interpersonal distancing measures are also likely to provide protection for infants, the elderly and the frail.

Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the Flu News Europe website. ECDC's risk assessment for the 2017-2018 season is available on ECDC's website. Recommendations on the composition of the 2017-2018 influenza virus vaccine are available on WHO's website.

Listeria monocytogenes clusters - Europe - 2018

Opening date: 21 February 2018 Latest update: 13 April 2018

Epidemiological summary

On 3 November 2017, Finland posted an urgent inquiry on EPIS-FWD, describing a cluster of *L. monocytogenes* PCR serogroup IVb, ST ST6, confirmed by WGS (in-house cgMLST scheme), with cases detected in different parts of Finland since October 2016.

As of 11 April 2018, this outbreak has been associated with 41 cases identified between December 2015 and March 2018. The following countries have detected cases: Finland (19 cases), United Kingdom (9 cases), Sweden (7 cases), Denmark (4 cases) and Austria (2 cases).

As shown in the latest <u>epidemiological update</u>, the outbreak has intensified in the past two months, with six new confirmed cases reported in February and five in March.

The outbreak was detected through whole-genome sequencing (WGS). Core genome multi-locus sequencing typing (cgMLST) analysis showed that all human isolates are within five allelic differences from the Finnish representative outbreak strain. The WGS analysis provides a strong microbiological link between the human and the non-human isolates and is suggestive of a potential contaminated food source related to frozen corn persisting in the food chain at least since 2016.

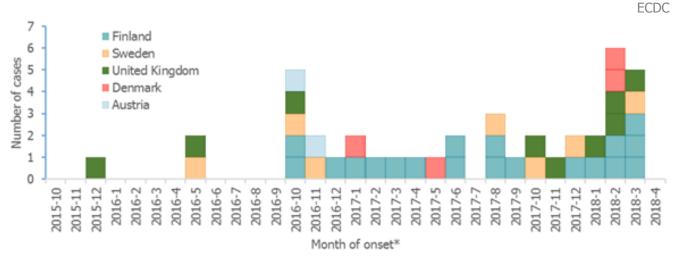
ECDC assessment

The close relation between isolates in five different countries is suggestive of a multi-country common-source outbreak. New cases may be reported, either because of delayed reporting and the long incubation period, or because of the time taken to establish the root source of contamination and implement control measures.

Actions

ECDC and the European Food Safety Authority (EFSA) published a <u>joint outbreak assessment</u> relating to this event on 22 March 2018 which provided information on the human and food investigations. The assessment and the conclusions of the rapid outbreak assessment remain valid.

Listeria monocytogenes PCR serogroup IVb, ST 6; confirmed outbreak cases by month of symptom onset, European Union, 2015–2018 (n=41)



New! Health crisis - Venezuela - 2018

Opening date: 9 April 2018 Latest update: 13 April 2018

Epidemiological summary

Measles

In Venezuela, since the first <u>measles</u> case was confirmed in the epidemiological week (EW) 26 of 2017 and up until EW 12 of 2018, there were 1 006 confirmed cases (757 by laboratory and 249 by epidemiological link), including two deaths. Of the confirmed cases 67% were reported in Bolívar. Cases were also reported in Apure, Anzoategui, Delta Amacuro, the Capital District, Miranda, Monagas, and Vargas. The most affected age group among the confirmed cases were children under five years of age, followed by the 6-15 age group.

Malaria

According to WHO PAHO, from January to October 2017, 319 765 <u>malaria</u> cases were detected in Venezuela. Of the cases reported, 77% were due to *P. vivax*, 17% due to *P. falciparum*, 6% due to mixed infections, and <1% due to *P. malariae*. The number of malaria cases reported in 2017 was higher than the annual average recorded in the past 29 years (1988-2016).

Diphtheria

In Venezuela, since the beginning of the diphtheria outbreak in July 2016, up to the beginning of February 2018, 969 probable diphtheria cases were reported (324 cases in 2016, 609 in 2017, and 36 in 2018), 726 of which were confirmed by laboratory or clinically, and 113 of whom died (17 in 2016 and 96 in 2017) with a case fatality rate of 11.7%.

Chagas disease

On 8 April 2018, media reported an outbreak of 45 cases of Chagas disease in Táchira region, bordering Colombia. Health authorities are implementing measures in the region in order to contain the outbreak.

Population flows

According to <u>UNHCR</u>, 94 284 asylum seekers were registered from Venezuela in 2017 compared to 34 183 in 2016 and 10 168 in 2015. In 2018, for the first two months, 3 898 asylum seekers were registered. The main countries who received the Venezuelan asylum seekers in 2017 were USA (30 119), Peru (20 000) and Brazil (17 865). In the EU, the main country receiving Venezuelan asylum seekers in 2017 was Spain (7 389).

ECDC assessment

In addition to travellers to and from the EU/EEA countries and Venezuala, there are historical migratory movements between between the two regions. This means that many EU/EEA citizens are potentially exposed to the current outbreaks in Venezuela. Therefore the risk of severe disease in EU citizens travelling to or residing in Venezuela is considered low, provided that they are appropriately vaccinated and basic preventive measures are followed.

Additionally, according to the <u>EU</u>, Venezuelan applicants for asylum in the EU have increased annually by over 3 500% between 2014 and 2017 (325 to 11 980). In February 2018, Spain received by far the largest number of applications for asylum from Venezuelans, with 1 160 applications out of almost 1 400.

Actions

ECDC will monitor this event through epidemic intelligence and has opened a threat.

Asylum-seekers, Venezuela, 2014 - 2018

UNHCR



Yellow fever - Brazil - 2017 - 2018

Opening date: 16 January 2017 Latest update: 13 April 2018

Epidemiological summary

Between July 2017 and week 14-2018, the Ministry of Health in Brazil reported 1 127 confirmed human cases of yellow fever, including 331 deaths. The cases occurred in Minas Gerais (480), São Paolo (453), Rio de Janeiro (187), Espirito Santo (6) and Distrito Federal (1).

During the same time period, the Ministry of Health reported 704 confirmed epizootics in non-human primates. Of those, 564 were reported in São Paulo State, 99 in Minas Gerais, 36 in Rio de Janeiro State, three in Tocantins, and one each in Mato Grosso and Espirito Santo.

Cases among returning travellers

Since the beginning of 2018, unvaccinated travellers from France (1), the Netherlands (1), Romania (1), Switzerland (1) and Germany (two confirmed cases, one of whom was reported by the United Kingdom) have contracted yellow fever in Brazil.

Vaccination recommendations

WHO determined that, in addition to the areas listed in previous updates, the entire state of São Paulo should be considered at risk for yellow fever transmission. Consequently, vaccination against yellow fever is recommended for international travellers visiting the state of São Paulo.

The Ministry of Health, Brazil announced a progressive extension of the standard vaccination recommendations for the whole of Brazil. It will be expanded gradually until 2019.

Sources: MoH | WHO

ECDC assessment

The detection of confirmed yellow fever cases in the vicinity of major cities such as São Paulo and Rio de Janeiro is of concern. Authorities are conducting vaccination campaigns. In this context, European citizens travelling to areas at risk should seek

medical advice prior to travel and receive the yellow fever vaccine at least 10 days before travelling. They should also follow measures to avoid mosquito bites and be aware of yellow fever signs and symptoms.

In Europe, *Aedes aegypti*, the primary vector of yellow fever in urban settings, has been established in Madeira, Portugal, since 2005. Presence of *Aedes aegypti* was first reported in 2017 in Fuerteventura, Canary Islands, Spain. The probability of local yellow fever transmission in the EU/EEA following introduction by a viraemic traveller is currently considered very low as weather conditions during the winter season in mainland EU/EEA are not favourable to vector activity.

Actions

ECDC published updates of its rapid risk assessment 'Outbreak of yellow fever in Brazil' on <u>13 April 2017</u> and <u>18 January 2018</u>. On 16 March 2018, ECDC published the third update of the RRA on its <u>website</u>.

Distribution of confirmed human cases of yellow fever by month, Brazil, January 2017 - 10 April 2018

ECDC

