

COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 20, 14-20 May 2017

All users

This weekly bulletin provides updates on threats monitored by ECDC.

News

Review of influenza season 2016–2017 in EU/EEA

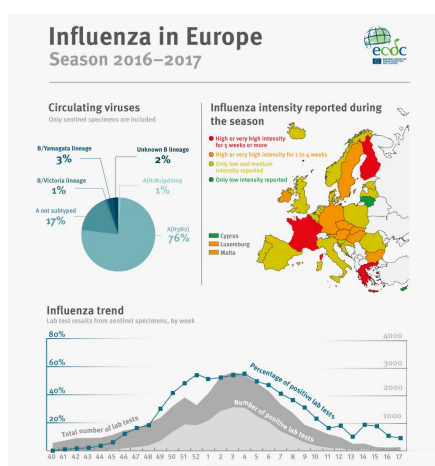
The [influenza season](#) 2016–2017 has now come to an end in Europe. In week 2017-17, all EU/EEA countries reported low influenza activity and the positivity rate (proportion of influenza virus positives among all tested specimens) fell below the 10% benchmark to 9.9%.

The season started in EU/EEA countries in week 2016-46, the earliest start to the season in the past five years and lasted for 27 weeks, five to seven weeks longer than recent past seasons. The peak of the season, when the positivity rate exceeded 50% in the EU, occurred between weeks 2016-52 and 2017-5.

Influenza A(H3N2) virus dominated, accounting for 76% of all sentinel specimens during the season. ECDC's monitoring detected signals that A(H3N2) was dominant as early as week 43. For intensive care unit admissions, A(H3N2) was the most commonly identified virus subtype and about two-thirds of intensive care unit patients were over 65 years of age.

Preliminary estimates of influenza vaccine effectiveness for the 2016–2017 season show moderate effectiveness (38%) against A(H3N2) for all age groups, but suboptimal effectiveness (23.4%) for those over 65 years, although this is similar to other A(H3N2)-dominated seasons.

Data from the 17 countries or regions reporting to the European monitoring of excess mortality for public health action project ([EuroMOMO](#)) reported a level of [excess all-cause mortality](#) similar to the 2014–2015 winter season, which was also characterised by the dominance of A(H3N2), that had an estimated 217 000 excess deaths. During the summer, [Flu News Europe](#) bulletins will be issued monthly.



I. Executive summary

EU Threats

Hepatitis A outbreaks in the EU/EEA mostly affecting MSM – 2016/2017

Opening date: 12 December 2016

Latest update: 19 May 2017

Since June 2016 and as of 17 May 2017, 1 173 confirmed hepatitis A cases infected with three distinct strains of sub-genotype IA virus have been reported by 15 EU countries. Most cases are reported among adult men who have sex with men (MSM), with only 80 women affected.

The main prevention measure in the context of the current outbreaks is hepatitis A vaccination of MSM. The ECDC guidance for '[HIV and STI prevention among men who have sex with men](#)' encourages Member States to offer and promote vaccination of MSM against hepatitis A. Information on vaccine availability should be included in health promotion programmes targeting MSM, particularly at sex venues.

→Update of the week

Since 12 May 2017, 14 countries have updated the line list or sent additional information. As of 17 May, 1 173 confirmed hepatitis A cases infected with three distinct strains of sub-genotype IA virus have been reported by 15 EU countries.

Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011

A measles outbreak in Romania has been ongoing since February 2016. Cases continue to be reported despite ongoing response measures that have been implemented at national level through reinforced vaccination activities. Between 1 January 2016 and 12 May 2017, Romania reported 5 728 cases including 25 deaths. In 2016, a number of additional EU/EEA countries reported measles outbreaks, and an increase in the number of cases continues to be observed in 2017. Some previous and ongoing measles outbreaks in other EU/EEA countries have been epidemiologically linked to the current outbreak in Romania.

→Update of the week

In addition to Romania, the following EU/EEA countries have reported measles cases in 2017: Austria, Belgium, Bulgaria, Czech Republic, Denmark, France, Germany, Hungary, Iceland, Italy, Portugal, Slovakia, Spain and Sweden.

Poliomyelitis – Facility-related infection with WPV 2 – the Netherlands

Opening date: 12 April 2017

Latest update: 19 May 2017

In early April 2017, the Netherlands reported a spill of poliovirus in a vaccine production plant. According to protocol, immediate measures were taken to prevent further spread. Two employees were exposed and poliovirus was isolated in the faeces of one of them. Strict hygiene measures have been implemented to minimise the risk of further spread.

→Update of the week

On 16 May 2017, the [National Institute for Public Health and the Environment](#) in the Netherlands reported that the employee infected by poliovirus in early April, is now testing negative. As there is no more risk for subsequent spread of the virus, the monitoring of the case and of the household contacts will be interrupted. In addition, the enhanced sewage surveillance has been reduced.

Non EU Threats

New! Ebola - Republic Democratic of Congo - 2017

Opening date: 15 May 2017

Latest update: 19 May 2017

Since 22 April 2017, DRC authorities have reported 20 cases of Ebola virus disease, 18 suspected and two confirmed, including three deaths in Bas Uele Province. Investigations and laboratory results confirmed an Ebola outbreak of subtype Zaire on 11 May.

Influenza A(H7N9) – China – Monitoring human cases

Opening date: 31 March 2013

Latest update: 19 May 2017

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then and up to 17 May 2017, 1 486 cases have been reported to WHO, including 559 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. From week 2016-41, 688 cases have been reported, representing a significant increase compared to previous seasons.

→Update of the week

Since the last update, 23 additional cases, including seven deaths, have been detected in [China](#) according to the health authorities in Hong Kong.

Cholera – Multistate (World) – Monitoring global outbreaks

Opening date: 20 April 2006

Latest update: 19 May 2017

Several countries in Africa, Asia and the Americas are reporting [cholera](#) outbreaks. The current situation in Yemen, Somalia and Ethiopia is of particular concern as cholera outbreaks are occurring during major humanitarian crises.

→Update of the week

The Gulf of Aden region is the main affected area with Somalia, Yemen and Ethiopia reporting major cholera outbreaks since the beginning of 2017. These outbreaks are expected to intensify and spread with the start of the rainy season.

Travel-associated Legionnaires' disease – Dubai, UAE – 2016/2017

Opening date: 10 November 2016

Latest update: 19 May 2017

The ECDC ELDSNet surveillance scheme on travel-associated Legionnaires' disease (TALD) has observed an increase in the number of cases of Legionnaires' disease associated with travel to Dubai, United Arab Emirates (UAE) since October 2016.

→Update of the week

On 15 May 2017, the UK reported an additional case of Legionnaires' disease with travel to Dubai. The case is a 71-year-old male who stayed in private accommodation between 23 April 2017 and 28 April 2017. This case had onset of symptoms on 5 May.

Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 19 May 2017

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) by the World Health Organization (WHO) on 5 May 2014 due to concerns regarding the increased circulation and international spread of wild poliovirus during 2014. On 2 May 2017, the IHR [Emergency Committee](#) agreed that the international spread of poliovirus remains a PHEIC and recommended that the temporary recommendations should be extended for a further three months.

→Update of the week

Since the last report on 18 April and as of 18 May 2017, no new wild poliovirus type 1 (WPV1) or circulating vaccine-derived poliovirus (cVDPV) cases have been reported.

According to a [ProMED](#) report posted on 12 May, there is a cluster of acute flaccid paralysis cases in Miadin district, in Syria, with one of the specimens having a possible vaccine-derived poliovirus.

According to the [United Nations Office for the Coordination of Humanitarian Affairs](#) (OCHA), on 8 May 2017, a first confirmed case of wild polio virus since 2011 was detected in Democratic Republic of the Congo. The case occurred in the southern Bukama territory.

On 2 May 2017, [WHO](#) issued the statement of the 13th IHR emergency committee regarding the international spread of poliovirus, stating that it still constitutes a public health event of international concern (PHEIC) and recommended the extension of revised temporary recommendations for a further three months. The statement highlights the progress in reaching the global elimination, lists the major threats that may compromise this effort and urges countries to avoid complacency which could lead to a polio resurgence.

Countries are now classified in three risk categories:

- 1) States infected with WPV1, cVDPV1 or cVDPV3, with potential risk of international spread – Pakistan, Afghanistan and Nigeria;
- 2) States infected with cVDPV2 – Nigeria and Pakistan; and
- 3) States no longer infected by WPV1 – Cameroon, Niger, Chad and Central African Republic, or cVDPV – Ukraine, Madagascar, Myanmar, Guinea and Laos, but which remain vulnerable to re-infection by WPV or cVDPV.

II. Detailed reports

Hepatitis A outbreaks in the EU/EEA mostly affecting MSM – 2016/2017

Opening date: 12 December 2016

Latest update: 19 May 2017

Epidemiological summary

Between 1 June 2016 and 17 May 2017, 15 EU countries, Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Slovenia, Spain, Sweden and the United Kingdom, have reported 1 173 HAV genotype IA confirmed cases. The investigations of these events have identified three separate clusters based on genetic sequencing of the hepatitis A virus (HAV).

Event 1, cluster VRD_521_2016.

As of May 2017, 15 EU Member States have reported 598 cases associated with this cluster initially reported by the UK on 6 December 2016 through an EPIS FWD urgent inquiry. Most cases have been reported by Spain (223), Portugal (144), Italy (114), France (70) and the United Kingdom (56). Of the 588 cases with documented gender, 541 (92%) are male and 189 of 221 documented cases (86%) identify themselves as MSM. Twenty-two of the 51 cases with a travel history, travelled to Spain.

Event 2, cluster RIVM-HAV16-090.

As of 16 May 2017, 12 EU Member States have reported 388 cases through the Early Warning and Response System (EWRS) on 14 October 2016 by the Netherlands and through EPIS-FWD on 31 January 2017. The first two Dutch cases reported visiting the EuroPride festival in Amsterdam between 23 July and 7 August 2016. Most cases have been reported by the United Kingdom (168), France (51) and Italy (35). Of the 375 cases with documented gender, 347 (93%) are in males and 198 of 239 documented cases identify themselves as MSM. Of the 76 cases with a travel history during the incubation period, 28 travelled to Spain and nine to Germany.

Event 3, cluster V16-25801.

As of 17 May 2017, ten EU Member States have reported 109 cases associated with this cluster, which was first reported through EPIS-FWD on 11 January 2017 by Germany. Cases were reported by Germany (40), United Kingdom (39), Spain (12), Italy (5), the Netherlands (5), France (4), Austria (1), Belgium (1), Denmark (1) and Finland (1). Of the 109 documented cases, 104 are in males and 38 of 42 documented cases identify themselves as MSM. Six of 20 cases with information on travel visited Spain during the incubation period.

Additional information on national outbreaks

In addition to the previous clusters described, the Netherlands reported one case of HAV of another strain (RIVM-HAV- 16-069) in an MSM. This strain was only identified in the UK (one case, MSM) and Italy (one case, MSM unknown status).

UK reported 266 cases of the three above-mentioned circulating strains in England between July 2016 and 2 April 2017. Most cases (74%) were among MSM and geographically clustered (63%) in London.

Portugal reported 242 HAV cases between 1 January and 8 May 2017 of which 93% in men and 79% clustered in Lisbon and Vale do Tejo region. Sexual transmission was reported by 57% of the cases; transmission unknown in 25% cases. Hepatitis A vaccine is being offered to eligible groups.

Some countries like Belgium, Denmark, Finland and Sweden have reported that the current situation is quite stable or declining in the number of cases.

Regarding the overall situation of hepatitis A in the EU MSs, from January until May 2017 six countries have notified an increase in the number of HAV infection cases compared to the same period in 2016: Belgium (203 HAV infection cases far in 2017 versus (vs.) 37 HAV infection cases in the same period of 2016), Estonia (10 vs. 2), Finland (14 vs. 2), Italy (20 vs. 11), Spain (1539 vs. 236) and Sweden (45 vs. 33). In addition, Italy reports 1 247 cases of hepatitis A between August 2016 and April 2017, a five-fold increase compared to cases reported in 2015.

ECDC assessment

Between 1 June 2016 and 17 May 2017, 15 EU countries have reported three clusters involving 1173 HAV infection confirmed cases, associated with three different HAV sequences of genotype IA. The definition of confirmed cases is based on viral RNA sequencing performed on a large proportion of strains and in a timely fashion only in a minority of EU countries. The current figures represent a significant underestimation of the true extent of these outbreaks.

The highly interconnected sexual networks among MSM in Europe may explain the multinational dimension of these clusters. In at least two EU Member States, the United Kingdom and Germany, secondary cases have been linked to travel-associated index cases. The circulation of three different HAV genotype IA strains in the MSM population is likely to be the result of several introductions into these networks.

Further transmission resulting from these clusters may be prevented by vaccination of MSM and post-exposure prophylaxis in contacts of cases. However, limited vaccine availability in some countries may have an impact on the implementation of control

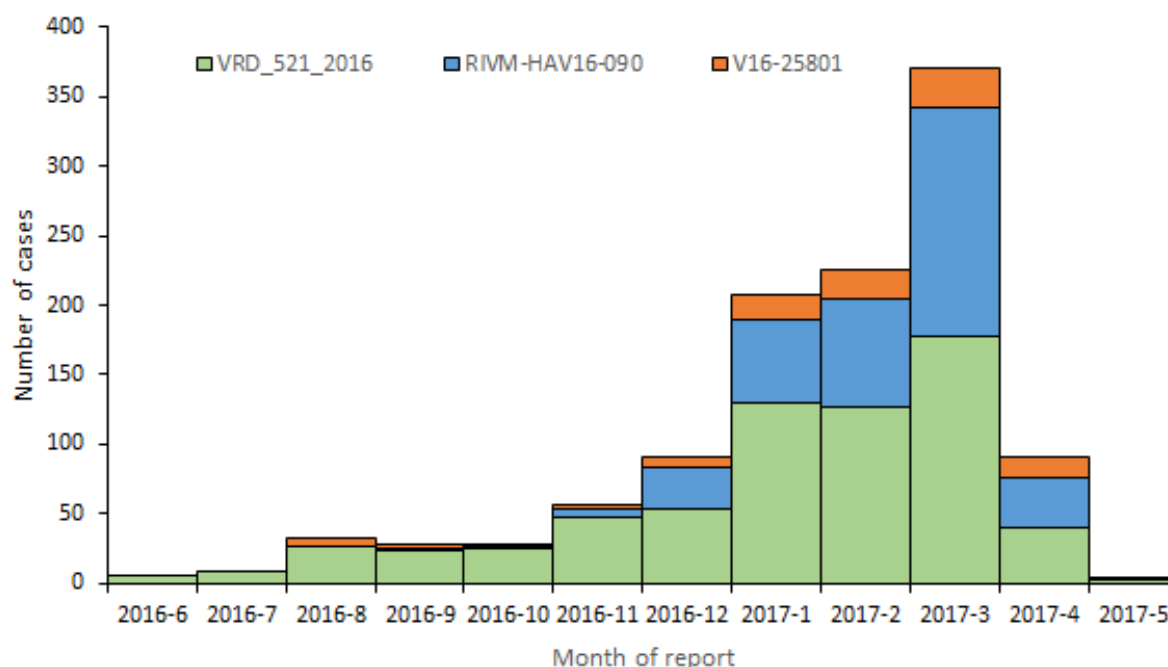
measures. In addition, since many of the risk group contacts are anonymous, their timely vaccination is challenging. National authorities should consider interacting directly with marketing authorisation holders (MAH) to enquire about supply at a national level as early as possible to plan for vaccination arrangements.

Actions

ECDC is supporting a European study to describe the extent of the outbreak and identify possible risk factors and characteristics independently associated with the three currently ongoing clusters. ECDC published an [updated rapid risk assessment](#) on this threat on 23 February 2017 and [an epidemiological update](#) on 28 April 2017. ECDC is preparing second update of the rapid risk assessment.

Distribution of hepatitis A cases, by month of report and genetic sequence, June 2016, as of 15 May 2017, EU/EEA (n=1 148)

ECDC



Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011

Epidemiological summary

EU/EEA countries with updates since last week:

Austria: Since the beginning of 2017 and as of 12 May, Austria has reported 76 cases. This exceeds the cumulative number of cases reported in 2016.

Czech Republic: As of 16 May 2017, the Moravian-Silesian region has reported 104 measles cases, including 95 confirmed. Fourteen confirmed cases have been reported among healthcare workers.

Italy: Since the beginning of 2017 and as of 14 May, Italy has reported 2 395 cases in 18 of the 21 regions. Among these, 197 cases occurred among healthcare workers. Most of the cases (73%) are above the age of 15 years, 89% of the cases were not vaccinated and 7% received only one dose of vaccine.

Portugal: Since the beginning of 2017 and as of 16 May, Portugal has reported 29 confirmed cases, of which 19 (66%) are older than 18 years of age, 17 (59%) were unvaccinated, 13 (45%) are health professionals and 13 (45%) were hospitalised. Twenty-one cases have been confirmed in the regions of Lisbon and Vale do Tejo, followed by seven cases in the Algarve and one in the North. One death has been reported.

Romania: Between 1 January 2016 and 12 May 2017, Romania has reported 5 728 cases, including [25 deaths](#). Cases are either laboratory-confirmed or have an epidemiological link to a laboratory-confirmed case. Infants and young children are the most affected group. Thirty-nine of the 42 districts have reported cases, Timis (West part of the country, at the border with Serbia) being the most affected with 1 051 cases. Vaccination activities are ongoing in order to cover communities with suboptimal vaccination coverage. On 16 May, [media](#) reported an additional death, bringing the number of deaths to 26.

EU/EEA countries with no updates since last week:

Belgium: Since 20 December 2016 and as of 16 April 2017, Wallonia has reported 288 cases, of which 163 are confirmed, 81 probable and 44 clinical (ECDC 2012 definition). The outbreak affects all provinces of Wallonia, with the exception of the province of Luxembourg. Thirty-seven cases are among healthcare workers (31 confirmed, four probable and two possible). Of the 288 cases, 111 (38%) were hospitalised. Two of the cases had acute encephalitis. No deaths are reported. The index case of the outbreak in Wallonia travelled to Romania during the incubation period.

In Flanders, one isolated imported case was reported in January and another in March, with possible links to a cluster in Wallonia. In the Brussels Capital Region, one isolated imported case was reported in February and two cases were notified in March without known links to the outbreak in Wallonia. Both imported cases had a travel history to Romania during the incubation period, and the national reference centre for measles, mumps and rubella (WIV-ISP) identified genotype B3, which is the same strain found in Romania, Italy and Austria, at the end of 2016.

Bulgaria: Since mid-March 2017 and as of 3 May, media in Bulgaria have reported 71 cases. Thirty-seven cases are confirmed, mostly in the city of Plovdiv (34). This represents an increase by six cases since the last report on 24 April.

Denmark: On 15 March 2017, Denmark reported an imported case in an unvaccinated adult who was infected during a holiday in Asia.

France: Since 1 January 2017 and as of 31 March, France has reported 134 cases, three times more than over the same period in 2016. The cases are mainly linked to an outbreak in Lorraine (60 cases). Two cases of encephalitis and 15 severe pneumopathies have been recorded since the beginning of the year.

Germany: Since the beginning of 2017 and as of 16 April, Germany has reported 504 cases. This is an increase by 42 cases since the previous update. In the same period in 2016, Germany reported 33 cases.

Hungary: Between 21 February and 22 March 2017, Hungary has reported 54 cases. Health authorities have lifted the quarantine from the hospital in Mako, Southeast Hungary, as no new cases were detected in two weeks.

Iceland: On 31 March 2017, Iceland reported two cases in two 10-month-old unvaccinated twin siblings. The first case was diagnosed 10 days before the second case. This is the first time in a quarter of a century that measles infection has occurred in Iceland.

Slovakia: On 24 April 2017, Slovakia reported an imported case in a 25-year-old, unvaccinated Italian who studies in Kosice. In Slovakia, the last endemic cases were reported in 1998 and the last imported cases in 2011 and 2012.

Spain: An outbreak started in the first week of January in Barcelona metropolitan area, due to an imported case from China. As of 7 April, 46 cases have been confirmed. Most of the cases are unvaccinated or incompletely-vaccinated adults. Four of the cases are children, and ten cases were hospitalised.

Sweden: On 30 April, Sweden reported five cases in the Southern part of the country. Since the beginning of 2017 and as of 21 March, Sweden has reported 15 cases in Stockholm area, including three imported cases.

ECDC assessment

Measles outbreaks continue to occur in EU/EEA countries. There is a risk of spread and sustained transmission in areas with susceptible populations. The national vaccination coverage remains less than 95% for the second dose of MMR in the majority of EU/EEA countries. The progress towards elimination of measles 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 measles. At the fifth meeting of the RVC for Measles and Rubella in October 2016, of 53 countries in the WHO European Region, 24 (15 of which are in the EU/EEA) were declared to have reached the

elimination goal for measles, and 13 countries (nine in the EU/EEA) were concluded to have interrupted endemic transmission for between 12 and 36 months, meaning they are on their way to achieving the elimination goal. However, six EU/EEA countries were judged to still have endemic transmission: Belgium, France, Germany, Italy, Poland and Romania.

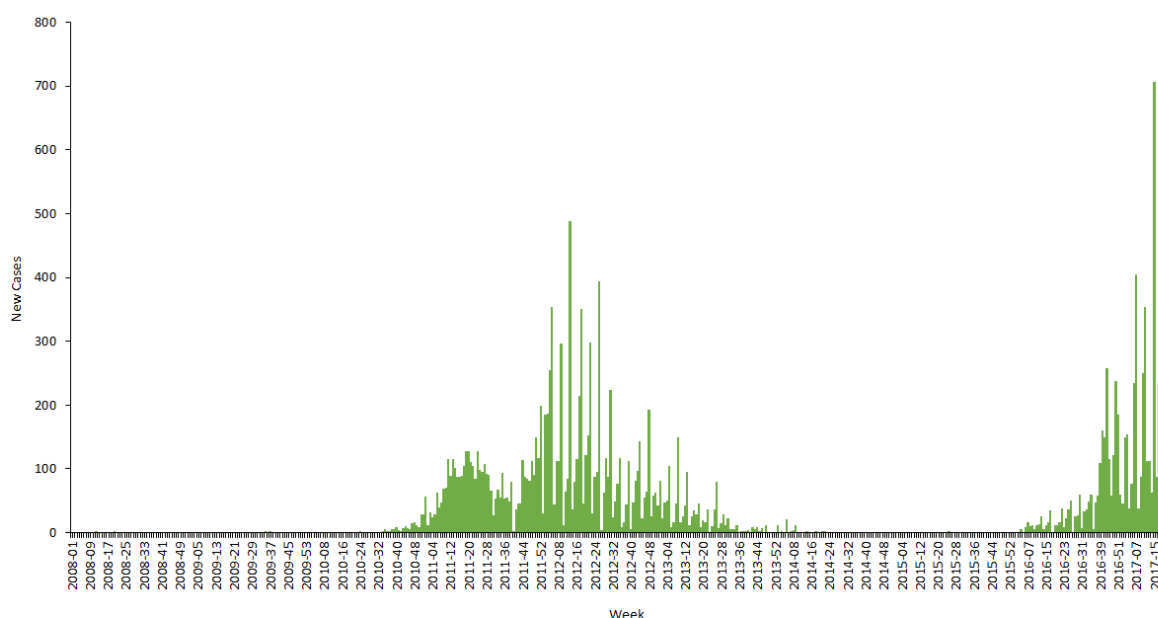
More information on strain sequences would allow further insight into the epidemiological investigation. All EU/EEA countries report measles cases on a monthly basis to ECDC and these data are published every month. Since 10 March 2017, ECDC has been reporting on measles outbreaks in Europe on a weekly basis through epidemic intelligence activities.

Actions

ECDC published a [rapid risk assessment](#) on 6 March. ECDC monitors measles transmission and outbreaks in the EU/EEA on weekly basis through enhanced surveillance and epidemic intelligence activities.

New measles cases per week of reporting, week 2008-01 to 2017-19, Romania

ECDC



*From 2008 to 2016-39 data from TESSy, from 2016-40 onwards data from Romanian MoH

Poliomyelitis – Facility-related infection with WPV 2 – the Netherlands

Opening date: 12 April 2017

Latest update: 19 May 2017

8/17

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[Link](#) to ECDC CDTR web page – including related PowerPoint© slides

Epidemiological summary

In early April 2017, the Netherlands reported a spill of poliovirus in a vaccine production plant. According to protocol, immediate measures were taken to prevent further spread. Two employees were exposed and poliovirus was isolated in the faeces of one of them. Spill of the virus was limited to a confined area of the production plant. Strict hygiene measures have been implemented to minimise the risk of further spread.

Source: [RIVM](#) | [Bilthoven Biologicals](#) | [media](#)

ECDC assessment

The release of WPV and detection of WPV in an exposed person constitutes a polio event in light of wild polio eradication worldwide in April 2017. This polio event and the resulting 'infection' of an employee constitute a biosafety hazard in a production facility containing WPV for IPV vaccine manufacturing. Updated assessment on the outcome of the investigations being performed by Dutch authorities is provided on a regular basis. In the Netherlands, polio vaccination is administered to children from two months of age and the majority of the population is protected from the disease. Control and hygiene measures around the infected employee are necessary until the virus disappears from his stool.

Actions

ECDC is in contact with the Netherlands and WHO EURO. ECDC continues to monitor this event.

New! Ebola - Republic Democratic of Congo - 2017

Opening date: 15 May 2017

Latest update: 19 May 2017

Epidemiological summary

Since 22 April 2017 and as of 17 May, DRC authorities have reported two confirmed cases and 18 suspected cases in Bas Uele Province. Investigations and laboratory results confirmed an Ebola outbreak of subtype Zaire on 11 May. The cases are from three areas: Nambwa, Mouma and Ngay. WHO acknowledged that at least 416 close contacts have been identified and are being monitored.

Source: [WHO](#) | [media](#)

ECDC assessment

This is the eighth outbreak of Ebola Virus Disease (EVD) in the Democratic Republic of the Congo (DRC) since the discovery of the virus in 1976. DRC national authorities have experience in responding to such outbreaks. However, this is the first time the Likati Health zone is affected and the local authorities have no or limited experience in managing such an outbreak. Investigations in DRC are ongoing to assess the extent of the outbreak. WHO and GOARN partners are supporting the national health authorities in the response. Although the outbreak is in an extremely remote area, Likati is situated on the migration route of refugees from the Central African Republic, which may pose a risk of spread of the disease in DRC.

For EU/EEA citizens living or travelling through DRC, the risk of exposure is negligible.

For people who are entering the affected area such as healthcare workers supporting the response to the outbreak, the risk of infection remains very low assuming they follow the recommended precautions.

The risk of introduction in the EU is most likely to be related to an infected traveller coming from the affected area. This is most unlikely given the remote location of the outbreak, but cannot be excluded. The overall risk of the introduction and further spread of Ebola virus within the EU/EEA is therefore currently considered to be extremely low.

Actions

ECDC produced a Rapid Risk Assessment on Outbreak of Ebola virus disease in Bas Uele province, Democratic Republic of the Congo.

Influenza A(H7N9) – China – Monitoring human cases

Opening date: 31 March 2013

Latest update: 19 May 2017

Epidemiological summary

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then and up to 17 May 2017, 1 486 cases have been reported to WHO, including 559 deaths. The A(H7N9) outbreak shows a seasonal pattern. The first wave in spring 2013 (weeks 2013-7 to 2013-40) included 135 cases, the second wave (weeks 2013-41 to 2014-40) 320 cases, the third wave (weeks 2014-41 to 2015-40) 223 cases, and the fourth wave (weeks 2015-41 to 2016-40) 120 cases. A fifth wave started in October 2016 (week 2016-41), with 688 cases as of 17 May 2017.

The 1 486 cases were reported from Zhejiang (307), Guangdong (258), Jiangsu (247), Fujian (107), Anhui (96), Hunan (91), Shanghai (56), Jiangxi (50), Sichuan (31), Guangxi (30), Hubei (30), Beijing (27), Henan (26), Hong Kong (21), Shandong (21), Hebei (20), Guizhou (17), Xinjiang (10), Chongqing (6), Gansu (5), Taiwan (5), Liaoning (4), Shaanxi (4), Tianjin (4), Jilin (3), Tibet (3), Macau (2), Yunnan (2), and three imported cases were reported in Canada (2) and Malaysia (1).

Sources: [Chinese CDC](#) | [WHO](#) | [WHO FAQ page](#) | [ECDC](#) | [Hong Kong CHP](#)

ECDC assessment

This is the fifth winter season in the northern hemisphere with human cases caused by A(H7N9) infections. During this wave, the number of human cases has been higher than in previous waves. This is most likely due to greater environmental contamination in live bird markets and increased circulation of the virus among poultry.

In February 2017, a new A(H7N9) virus with mutations in the haemagglutinin gene – indicating high pathogenicity in poultry – was detected in three cases related to Guangdong, as well as in environmental and poultry samples. It is unclear at the moment if the newly emerged, highly pathogenic avian influenza (HPAI) virus A(H7N9) will replace the low-pathogenic virus or if both will co-circulate in the bird population. Although the genetic changes in A(H7N9) may have implications for poultry in terms of pathogenicity, surveillance and control strategies, there is no evidence to date of increased transmissibility to humans or sustainable human-to-human transmission.

The continued transmission of A(H7N9) to humans in China poses the risk that sporadic imported cases may be detected in Europe. The following options for prevention and control of the infection should be considered:

- people travelling to China should avoid direct exposure to poultry and refrain from visiting live poultry markets or backyard farms
- travellers who have visited affected areas and develop respiratory symptoms and fever upon their return should consult a physician and mention their recent travel history to enable early diagnosis and treatment
- travellers who have visited affected areas should avoid entering farms for the entire duration of the 10-day incubation period (and during the symptomatic period in the event that they develop symptoms) in order to prevent a possible virus introduction to poultry in the EU.

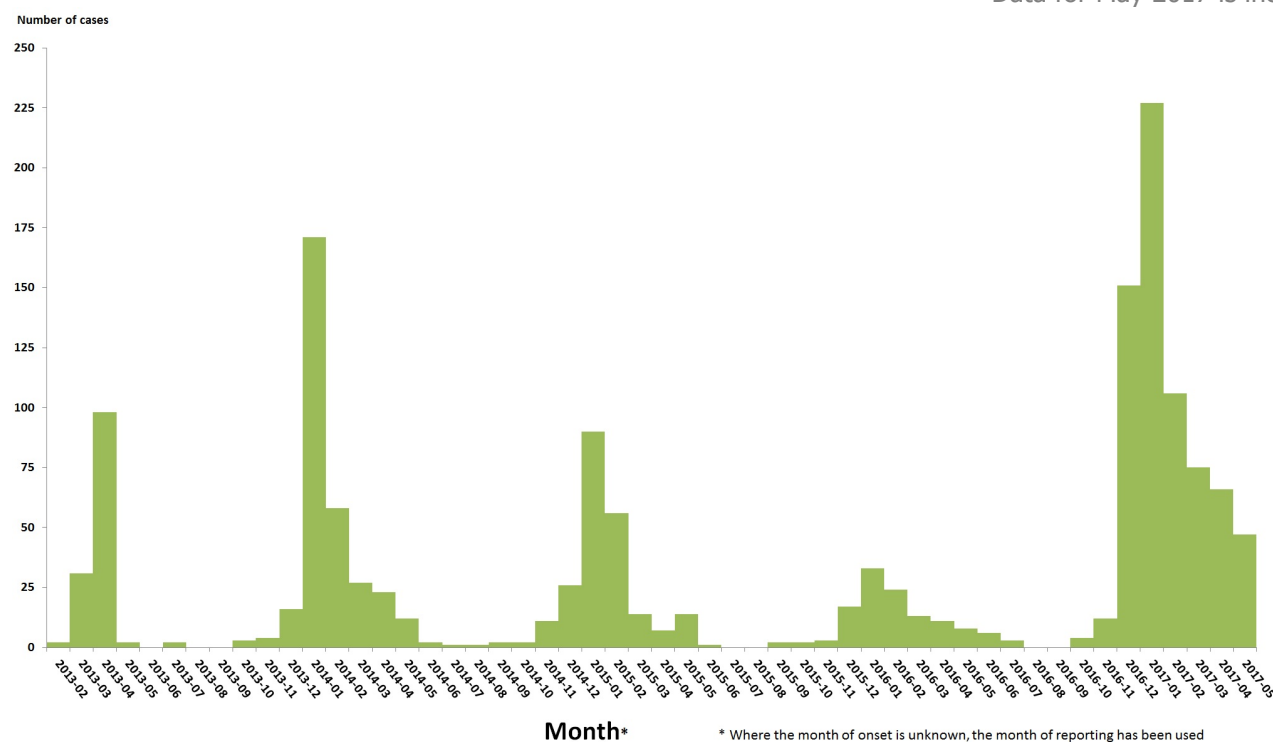
The possibility of humans infected with A(H7N9) returning to the EU/EEA cannot be excluded. However, the risk of the disease spreading within Europe via humans is still considered low, as there is no evidence of sustained human-to-human transmission.

Actions

ECDC published a sixth update of the [rapid risk assessment](#) on 9 March, addressing the genetic evolution of influenza A(H7N9) virus in China and the implications for public health.

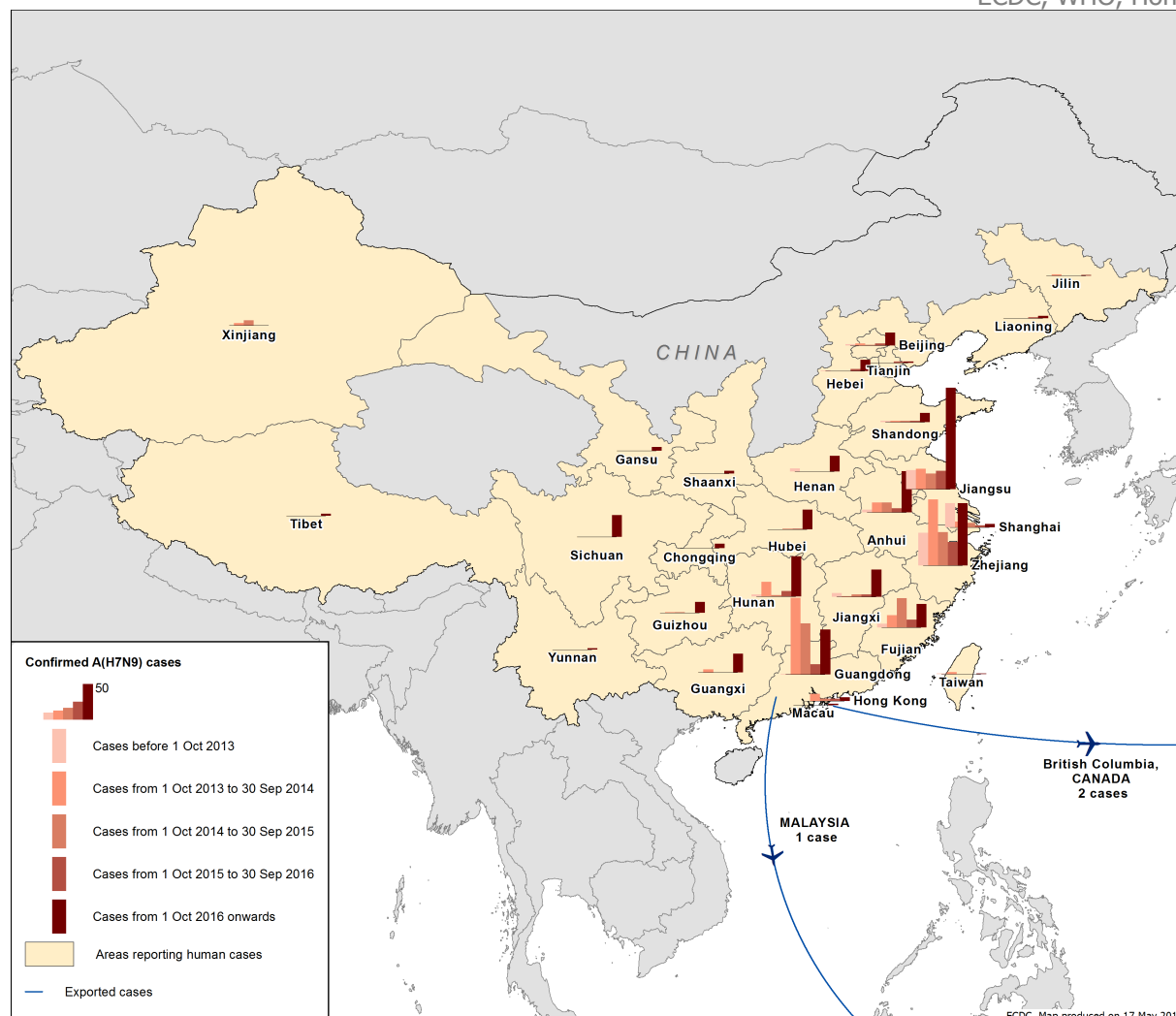
Distribution of confirmed cases of A(H7N9) by first available month, February 2013 to 17 May 2017

Data for May 2017 is incomplete



Distribution of confirmed cases of A(H7N9) by five periods (weeks 2013-7 to 2017-20)

ECDC, WHO, Hong Kong



Cholera – Multistate (World) – Monitoring global outbreaks

Opening date: 20 April 2006

Latest update: 19 May 2017

Epidemiological summary

EU
Czech Republic

On 16 May, the Czech Republic posted an EWRS message about two imported cases of cholera, one confirmed and one probable. The confirmed case is a 30-year-old woman who returned from Zanzibar via Dar Es Salaam and Dubai to Prague on 12 May. She resided for seven months in Zanzibar for business. She developed symptoms on 9 May and was diagnosed on 15 May for *Vibrio cholera* O1, serotype Ogawa. She was isolated the same day. The probable case is a 29-year-old man, partner of the confirmed case. He had the same travel history. He developed symptoms on 5 May and was isolated on 15 May. The laboratory results are pending. Czech authorities have implemented control measures.

Americas:

Haiti: From 1 January to 6 May 2017, Haiti has reported 5 928 cholera cases, including 74 deaths (CFR: 1.2%), in all 10 departments. Among these cases, 379 have been notified during week 2017-18. The weekly number of reported cholera cases in

12/17

Haiti remains stable since the beginning of year 2017 with 200 to 600 cases being notified weekly.

Dominican Republic: Since the beginning of 2017 and as of week 2017-14, the Dominican Republic has reported 62 cholera cases, including two deaths (CFR: 3.2%), in 10 of the 32 provinces. This represents an increase by 53 cases since the last update in early March, as well as a 91% decrease compared to the same period in 2016.

Africa:

Somalia: During week 2017-17 (24-30 April), OCHA is reporting 3 475 cases and 43 deaths, which is comparable to week 2017-16. Since the beginning of the year to 30 April, Somalia reported 36 066 cases including 697 deaths (CFR: 1.9%). The main affected regions are in South West State (Bay, Bakol and Lower Shabelle regions), as well as Middle Juba and Gedo regions of Jubbaland.

According to OCHA, moderate to heavy rainfall has been recorded in some parts of the country, as well as flooding.

Ethiopia: Since the beginning of 2017 and as of 7 May, Ethiopia has reported 32 689 AWD cases, including 776 deaths (CFR: 2.4%). This represents an increase by 5 723 cases since the last update in late April. The Ethiopian Somali Regional State continues to be the worst affected region reporting 91% of the cases and 99% of the deaths.

South Sudan: New cholera outbreaks were confirmed in Yirol West, Mayom and Fashoda counties. Since the start of the outbreak in June 2016 and as of 28 April 2017, South Sudan has reported 6 900 cholera cases, including 222 deaths (CFR: 3.2%), in 10 of the 28 states. This represents an increase by 753 cases since the last update in early April. The case-fatality rate is particularly high in the islands of the Nile and cattle camps that lack immediate access to basic healthcare.

Tanzania: From 15 August 2015 to 23 March 2017, authorities reported 25 115 cases, including 390 deaths (CFR: 1.6%) in Tanzania mainland. In Zanzibar archipelago, from 19 September 2015 to 24 July 2016, authorities have recorded 4 330 cases including 68 deaths (CFR: 1.6%) from all its five regions.

Since the beginning of the year, Zanzibar reported two cases, one in week 2017-16 and one in week 2017-17. The most recent update from WHO AFRO published on 13 May 2017, acknowledged 11 cholera cases in Dar Es Salaam region for the week 2017-18.

Kenya: According to OCHA, 303 cholera cases including five deaths have been reported from the beginning of 2017 to 15 May.

DR Congo: Since the beginning of 2017 and as of 8 April, DR Congo has reported 8 743 cholera cases, including 345 deaths (CFR: 3.9%). This represents an increase by 2 914 cases since the last update in early March, as well as a 20% increase compared to the same period in 2016.

Other countries in Africa: Other countries in [Central and West Africa](#) that have reported cholera cases since the beginning of 2017 and as of 8 April include Nigeria (46 cases), Liberia (39), Cameroon (17), Ivory Coast (16), Ghana (8) and Sierra Leone (2). Other countries in [Southern Africa](#) that have reported cholera cases since the beginning of 2017 and as of early May include Mozambique (2 131 cases, an increase by 500 cases since early April), Malawi (48), Zimbabwe (7), Tanzania and Zambia. [Sudan](#) has also reported cases in 2017.

Asia:

Yemen: From October 2016 to 25 April 2017, WHO reported a first cholera wave of 24 000 cases. In the WHO statement published in April 2017, WHO acknowledged a decreasing trend.

According to WHO, from 27 April to 14 May, Yemen is facing a second wave of cholera. During this period, authorities reported 11 046 cases, including 124 deaths (CFR: 1.1%). Among these cases, 208 have been confirmed. The cases are reported in 18 governorates out of 21: Sana'a (13%), Amanat Al-Asimah (38%), Amran (9%), Dhamar (4%), Al-Mahweet (5%), Ibb (6%), Al-Dhale'a (3%), Hajjah (9%), Al-Hudaydah (1%), Taiz (3%), Abyan (2%), Raymah (1%), Aden (1%), Sa'adah (1%) and Al-Bayda (4%) governorates.

According to the health cluster report, the main causes of this increase are the very poor access to safe water and sanitation as well as the recent heavy rains. WHO estimates that 7.6 million people live in areas at high risk of cholera transmission.

Other countries in Asia: [India](#) has reported cholera cases.

Source: [Cholera platform](#) | [WHO EMRO](#) | [Health cluster Yemen](#) | [media](#) | [reliefWeb](#) | [FEWS.net](#)

ECDC assessment

Somalia, Yemen and Ethiopia have reported almost 100 000 cholera cases since October 2016. The lack of access to safe water and sanitation, the poor infrastructure and healthcare offered in Somalia and Yemen, the conflicts and the related displacement of population as well as the heavy rain in Somalia and Yemen, contribute to the exacerbation of the cholera outbreak in the Gulf of Aden area.

Travel-associated cholera cases reported in the EU/EEA are rare and usually associated with travel to Pakistan and India, where outbreaks frequently affect local populations and infection is endemic. Among the countries of the Horn of Africa and the Gulf of Aden, Ethiopia, Kenya and Tanzania are the countries that attract the most tourists. Despite the large number of tourists visiting those countries, very few cases are reported each year among EU/EEA travellers. With the recent increase in number of cases, the number of imported cases notified in the EU/EEA may increase. However the risk of cholera infection in travellers visiting these countries remains low.

Travellers visiting or living in areas where cholera is endemic or epidemic should apply sanitary-hygienic precautionary measures to prevent infection.

Actions

ECDC monitors cholera outbreaks globally through its epidemic intelligence activities in order to identify significant changes in epidemiology. Reports are published on a monthly basis.

Travel-associated Legionnaires' disease – Dubai, UAE – 2016/2017

Opening date: 10 November 2016

Latest update: 19 May 2017

Epidemiological summary

As of 16 May 2017, 12 EU Member States as well as Switzerland have reported 59 TALD cases with onset of symptoms since 1 October 2016 and with travel history to Dubai within two to ten days prior to illness. Cases were reported by the United Kingdom (28), Sweden (8), the Netherlands (6), Denmark (4), France (3), Germany (3), Austria (1), Belgium (1), the Czech Republic (1), Hungary (1), Ireland (1), Spain (1) and Switzerland (1). Fifty-one cases are associated with commercial accommodation sites and six with private accommodation sites. For two cases, the information was not available. Ten cases spent time in another location in UAE or in a country other than their home country during their incubation period. One case was reported as fatal.

All cases but one are laboratory confirmed. Three cases had their infection further characterised as *Legionella pneumophila* serogroup 1, sequence base type 616, and one as *Legionella pneumophila* serogroup 1, sequence base type 2382. Sequence base type 616 is uncommon in Europe and has been associated with other cases of Legionnaires' disease returning from Dubai in previous years. Sequence base type 2382 is the first such identification worldwide and appears to be closely-related to type 616. One case has been characterised as serogroup 13. UAE authorities have informed ECDC that no increase in cases of statutory notifiable pneumonia was observed in Dubai between October and December 2016.

ECDC assessment

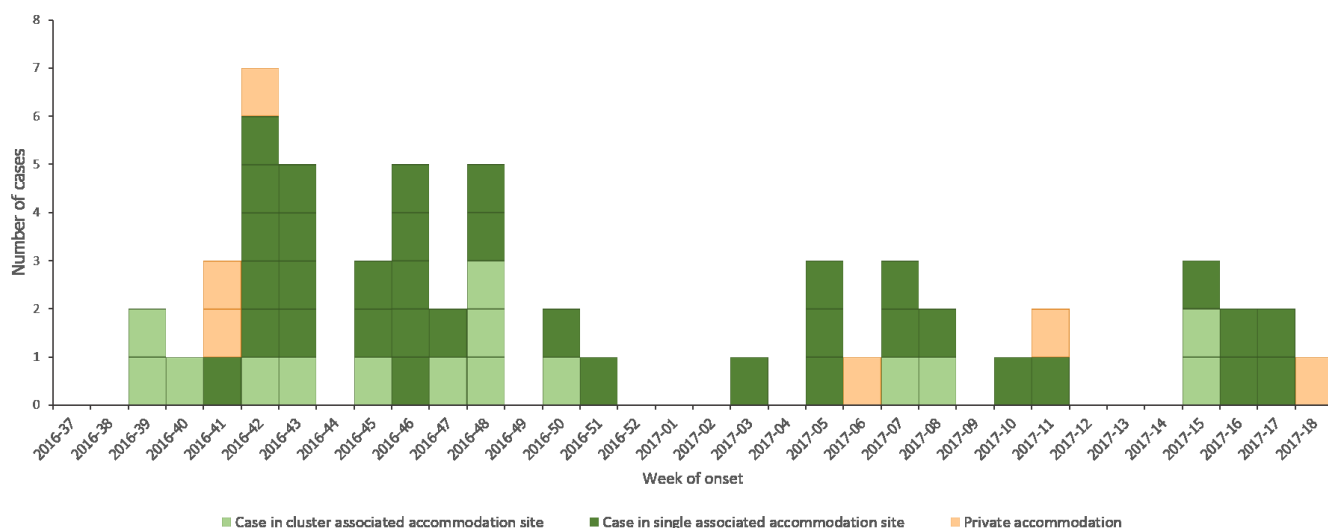
Cases continue to be reported with onset of symptoms in recent weeks, indicating that there is a persistent source of *Legionella* exposure common to travellers with travel history to Dubai. However, it cannot be ruled-out that some travellers may have acquired their infection elsewhere if their travel stay in Dubai was shorter than the range of the incubation period. The increase in cases observed between October 2016 and May 2017 is above that observed in previous years.

Actions

ECDC monitors this event through ELDSNet. ECDC is in contact with EU Member States, the ELDSNet network, the World Health Organization and UAE for information sharing. ECDC published a [rapid risk assessment](#) on its website on 23 December 2016 and shared an updated rapid risk assessment with the European Commission and EU Member States on 13 January 2017. The conclusions of the rapid risk assessment remain valid. ECDC also posted an [epidemiological update](#) on 7 April.

Distribution of travel-associated Legionnaires' disease cases with history of stay in Dubai, United Arab Emirates, by week of onset from 37-2016 and 18-2017, as reported to ELDSNet by 16 May 2017 (n=59 cases)

ECDC



Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 19 May 2017

Epidemiological summary

As of 18 May 2017, five wild poliovirus cases were reported in 2017. In 2016, 15 cases were reported during the same period. In 2017, Afghanistan has reported three cases and Pakistan two cases. No circulating vaccine-derived poliovirus (cVDPV) cases have been reported worldwide in 2017.

Web sources: [Polio eradication: weekly update](#) | [ECDC poliomyelitis factsheet](#) | [Temporary Recommendations to Reduce International Spread of Poliovirus](#) | [WHO Statement on the Seventh Meeting of the International Health Regulations Emergency Committee on Polio](#)

ECDC assessment

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

References: [ECDC latest RRA](#) | [Rapid Risk Assessment on suspected polio cases in Syria and the risk to the EU/EEA](#) | [Wild-type poliovirus 1 transmission in Israel - what is the risk to the EU/EEA?](#) | [RRA Outbreak of circulating vaccine-derived poliovirus type 1 \(cVDPV1\) in Ukraine](#)

Actions

ECDC monitors reports of polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identify events that increase the risk of wild poliovirus being reintroduced 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.

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