

This weekly bulletin provides updates on threats monitored by ECDC.

## News

### Staying healthy during Pride season

With the start of the [Pride season](#), including the upcoming [WorldPride in Madrid](#) with an expected three million participants, the main recommendations stated in the [ECDC risk assessment](#) for this event remain valid:

- Travellers to Pride events should ensure their routine vaccination courses and boosters are up to date as recommended in their country of residence, and discuss the need for additional vaccinations or booster doses with their healthcare provider.
- In addition, participants should get advice on prevention of sexually transmitted infections prior to attendance. Men who have sex with men (MSM) in particular should check their vaccination status against hepatitis A and B, in the context of the ongoing hepatitis A outbreaks mainly affecting MSM in EU countries. They should also ask their healthcare provider about national recommendations on HIV pre-exposure prophylaxis (PrEP).
- During the event, participants should follow standard hygiene measures and advice on the prevention of food and waterborne diseases to decrease the risk of gastrointestinal illness, and consider general hygiene practices when consuming food and drink. Participants should practice safer sex using condoms to prevent sexually transmitted infections, including HIV and hepatitis B and C. They should also avoid faecal-oral exposure during sexual activity and ensure proper personal hygiene to prevent other infections.
- Testing for sexually transmitted infections (including HIV and hepatitis) and healthcare provider evaluation in those experiencing symptoms or had engaged in unprotected sexual activity with casual partners is advised after return.

ECDC together with the health authorities in Spain will monitor the WorldPride event taking place in Madrid from 23 June until 2 July 2017. ECDC will report on CDTR only if events of interest are detected from next week to 9 July 2017.

### Read more

[ECDC Guidance HIV and STI prevention among men who have sex with men](#)

[ECDC Rapid Risk assessment Hepatitis A outbreaks in the EU/EEA mostly affecting men who have sex with men – second update, 19 May 2017](#)

[ECDC Rapid Risk assessment Potential public health risks related to communicable diseases at the WorldPride festival in Madrid, 23 June–2 July 2017](#)

### Annual Epidemiological Report:

[Hepatitis A – 2015 data](#)

## I. Executive summary

### EU Threats

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#### Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 16 June 2017

Romania is experiencing a large outbreak of measles since February 2016. Cases continue to be reported despite ongoing response measures implemented at national level through reinforced vaccination activities. Between 1 January 2016 and 9 June 2017, Romania has reported 6 743 measles cases, including 30 deaths. In 2016, several 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, the Czech Republic, Denmark, France, Germany, Hungary, Iceland, Italy, Portugal, Slovakia, Spain, Sweden and the United Kingdom.

#### West Nile virus - Multistate (Europe) - Monitoring season 2017

Opening date: 30 May 2017

Latest update: 15 June 2017

During the June-to-November West Nile virus transmission season, ECDC monitors the occurrence of cases of West Nile fever in the EU Member States and neighbouring countries in order to inform the blood safety authorities about areas with ongoing transmission. In 2016, 214 human cases of West Nile fever were reported in the EU Member States and 267 cases in neighbouring countries.

→Update of the week

No cases have been reported so far in 2017.

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

Opening date: 12 December 2016

Latest update: 16 June 2017

EU/EEA Member States are reporting an increase of hepatitis A virus infection cases in 2017. Among the cases, adult men who have sex with men (MSM) are indicated as an affected population. Since June 2016 and as of 11 June 2017, 1 188 confirmed hepatitis A cases infected with three distinct strains of sub-genotype IA virus have been reported by 15 EU/EEA countries. Most cases are reported among MSM.

→Update of the week

According to the health authorities in [Portugal](#), since 1 January and as of 11 June, there have been 327 reported hepatitis A cases of which 91% are male. Fifteen of the cases are linked to cluster VRD\_521\_2016. Currently there are 159 cases related to this cluster in Portugal.

### Non EU Threats

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

Opening date: 10 November 2016

Latest update: 16 June 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

A previously reported travel-associated Legionnaires' disease case, with a history of stay in Dubai during April 2017, has died. There are now two deaths reported among the 63 TALD cases having a history of stay in Dubai and onset of illness since 1 October 2016. In addition, laboratory analyses undertaken for a separate TALD case with history of travel to Dubai has identified a further case with *Legionella pneumophila* serogroup 2-14, sequence base type 1327.

The epidemic curve of reported cases remain unchanged.

## Ebola virus disease – Democratic Republic of the Congo – 2017

Opening date: 15 May 2017

Latest update: 15 June 2017

On 9 May 2017, the Democratic Republic of the Congo (DRC) notified the World Health Organization (WHO) of an outbreak of [Ebola virus disease](#) (EVD) in Likati Health Zone, Bas Uele Province, close to the border with the Central African Republic. Investigations and laboratory results confirmed an Ebola outbreak of subtype Zaire on 11 May.

→Update of the week

Between 5 and 12 June 2017, WHO reported one suspected case of EVD in DRC. This case has been reported in Mobenge, a sample is being analysed and results are pending. So far, the outbreak remains confined to Likati Health Zone. No new probable or confirmed cases have been reported and there are currently no contacts under follow-up.

## Influenza A(H7N9) – China – Monitoring human cases

Opening date: 31 March 2013

Latest update: 16 June 2017

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, cases continue to be reported from China and 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, China reported twelve additional human cases of avian influenza A (H7N9) in Beijing (3 cases), Anhui (2 cases), Chongqing (2 cases), Henan (2 cases), Jiangsu (1 case), Shaanxi (1 case) and Shandong (1 case).

## Cholera – Multistate (World) – Monitoring global outbreaks

Opening date: 20 April 2006

Latest update: 15 June 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 large scale humanitarian crises.

→Update of the week

Since the beginning of 2017, the Gulf of Aden and the Horn of Africa region continue to be the main affected areas with Somalia, Yemen and Ethiopia reporting the majority of cases. Since the last update in early May, Yemen reported an increase by 108 207 cases.

## Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 16 June 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 May and as of 14 June 2017, one new wild poliovirus type 1 (WPV1) and six circulating vaccine-derived poliovirus type 2 (cVDPV2) cases have been reported.

## II. Detailed reports

### Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 16 June 2017

#### Epidemiological summary

##### ***EU/EEA countries with updates since last week:***

**Bulgaria:** Since mid-March 2017 and as of 11 June, Bulgaria has reported 130 cases in [Plovdiv](#), an increase of 14 cases since the previous update. Bulgaria also reported also cases in [Pazardzhik](#) (10) and in [Montana](#) (4).

**Czech Republic:** As of 1 June 2017, the Moravian-Silesian region reported 126 measles cases, of which 119 were laboratory-confirmed.

**Germany:** Since the beginning of 2017 and as of 7 June, Germany has reported 698 cases. This is an increase of 30 cases since the previous update. In the same period in 2016, Germany reported 82 cases.

**Italy:** Since the beginning of 2017 and as of 11 June, Italy has reported 2 988 cases in 18 of the 21 regions. Among these, 237 are healthcare workers. The median age is 27 years, 89% of the cases were not vaccinated and 6% received only one dose of vaccine.

**Romania:** Between 1 January 2016 and 9 June 2017, Romania has reported 6 743 cases, including 30 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. Forty-one of the 42 districts have reported cases, Timis (west part of the country at the border with Serbia) is the most affected district with 1 072 cases. Vaccination activities are ongoing in order to cover communities with suboptimal vaccination coverage.

##### ***EU/EEA countries with no updates since last week:***

**Austria:** Since the beginning of 2017 and as of 8 June, Austria has reported 78 cases. This exceeds the cumulative number of cases reported in 2016.

**Belgium:** Since 20 December 2016 and as of 8 May 2017, Wallonia has reported 293 cases, of which 115 were hospitalised. The outbreak affects all provinces of Wallonia, with the exception of the province of Luxembourg. No deaths are reported. The index case of the outbreak in Wallonia travelled to Romania during the incubation period. After a peak of 40 cases per week in the beginning of March, the epidemic is gradually decreasing. 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 as identified in Romania, Italy and Austria at the end of 2016.

**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 30 April, France has reported 189 cases, an increase of 55 cases since the previous monthly update and nearly four times the number of reported cases in 2016 over the same period (47 cases). The cases are mainly linked with an outbreak in Lorraine (60 cases between February and April 2017). Two cases of encephalitis and 18 cases of severe pneumonia have been recorded since the beginning of the year. On 31 May, media reported 22 additional cases in Perpignan since the beginning of May.

**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.

**Portugal:** Since the beginning of 2017 and as of 5 June, Portugal has reported 31 confirmed cases, of which 20 (65%) are older than 18 years of age, 19 (61%) were unvaccinated, 13 (42%) are health professionals, and 14 (45%) were hospitalised. Twenty-two cases have been confirmed in the regions of Lisbon and Vale do Tejo, followed by seven cases in the Algarve, one in the North and one in Alentejo. One death has been reported.

**Slovakia:** On 24 April 2017, Slovakia reported an imported case in a 25-year-old, unvaccinated Italian who studies in Kosice, Slovakia. 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, related 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:** Since mid-April and as of 31 May, Sweden has reported four cases in the south-western part of the country. Earlier in 2017, Sweden reported 15 cases in the Stockholm area, including three imported cases.

**United Kingdom:** On 6 June, [Public Health Wales](#) reported four cases in a high school in Newport, Wales. During the first three months of 2017, England reported 17 confirmed cases, compared with 37 between October and December 2016. Northern Ireland has reported one case and Scotland has reported no cases so far this year.

## 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.

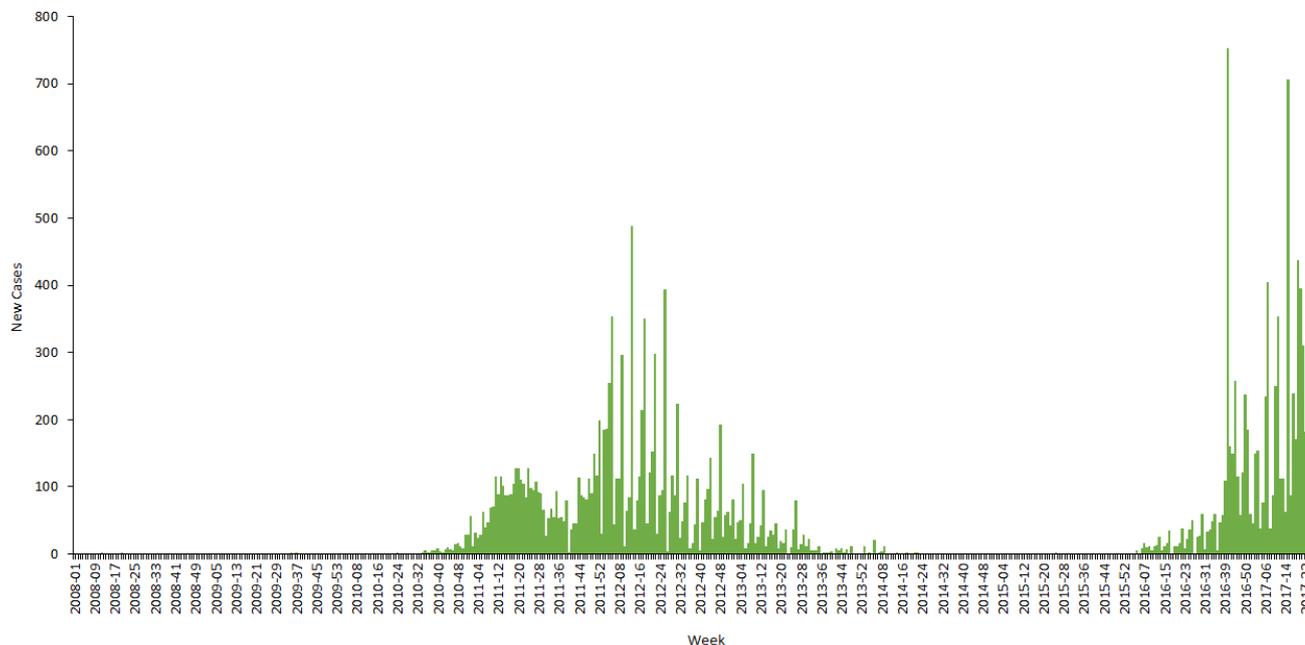
More information on strain sequences would allow further insight into the epidemiological investigation. All EU/EEA countries report measles cases on a monthly basis to ECDC and these data are published every month. Since 10 March 2017, ECDC has been reporting on measles outbreaks in Europe on a weekly 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 2008-1 to 2017-23, Romania

Data source: National Institute of Public Health Romania and TESSy (ECDC)



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

## West Nile virus – Multistate (Europe) – Monitoring season 2017

Opening date: 30 May 2017

Latest update: 15 June 2017

### Epidemiological summary

Since the beginning of the 2017 transmission season and as of 15 June 2017, no cases of West Nile fever in humans have been reported in the EU Member States and the neighbouring countries.

**Source:** [ECDC WNF page](#)

### ECDC assessment

As expected at this early time of the West Nile fever transmission season, no human cases in EU Member States have been yet notified.

### Actions

Since 2011, ECDC produces weekly West Nile fever maps during the transmission season to inform blood safety authorities of West Nile fever affected areas.

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

Opening date: 12 December 2016

Latest update: 16 June 2017

### Epidemiological summary

Between 1 June 2016 and 12 June 2017, 15 EU/EEA countries, Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Slovenia, Spain, Sweden and the United Kingdom have reported 1 188 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 June 2017, 15 EU/EEA Member States have reported 691 cases associated with this cluster initially reported by the United Kingdom on 6 December 2016 through an EPIS FWD urgent inquiry. Most cases have been reported by Spain (223), Portugal (159), 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/EEA Member States have reported 388 cases associated with this cluster initially reported by the Netherlands on 14 October 2016 through the Early Warning and Response System (EWRS). 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/EEA 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), the 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 outbreaks of hepatitis A in EU Member States affecting MSM

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

Between July 2016 and 2 April 2017, the United Kingdom reported 266 cases belonging to the three above-mentioned circulating strains. Most cases (74%) were among MSM and geographically clustered (63%) in London.

Between 1 January and 11 June 2017, Portugal reported 327 HAV cases of which 91% are men and 78% are from Lisbon and Vale do Tejo region. Infection through sexual transmission was indicated by 54% of the cases. Hepatitis A vaccine is recommended to people at risk.

#### Other EU Member States reporting cases

Between January and May 2017, six EU/EEA Member States have notified an increase in the number of HAV infection cases compared with the same period in 2016: Belgium has reported 203 cases in 2017 compared with 37 cases in the same period for 2016, Estonia has reported ten cases in 2017 compared with two in 2016, Finland has reported 14 in 2017 compared with two in 2016, Italy has reported 20 cases in 2017 compared with 11 in 2016, Spain has reported 1 539 cases in 2017 compared with 236 in 2016, and Sweden has reported 45 cases in 2017 compared with 33 in 2016.

Furthermore, between August 2016 and April 2017, Italy reported 1 247 cases of hepatitis A, which is a five-fold increase compared with 2015.

### ECDC assessment

The highly interconnected sexual networks among MSM in Europe may contribute to the multinational dimension of these clusters. In at least two EU/EEA 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 the 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

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.

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 the second update of the [rapid risk assessment](#) on 19 May 2017.

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

Opening date: 10 November 2016

Latest update: 16 June 2017

### Epidemiological summary

As of 15 June 2017, 13 EU Member States have reported 63 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 (30), Sweden (8), the Netherlands (6), Germany (5), Denmark (4), France (3), Austria (1), Belgium (1), the Czech Republic (1), Hungary (1), Ireland (1), Spain (1) and Switzerland (1). Fifty-seven cases are associated with commercial accommodation sites and six with private accommodation sites. Twelve cases spent time in another location in the UAE or in a country other than their home country during their incubation period. Two cases were reported as fatal.

All cases are laboratory confirmed. Four cases had their infection further characterised as *Legionella pneumophila* serogroup 1, sequence base type 616, one as *Legionella pneumophila* serogroup 1, sequence base type 2382, one as *Legionella pneumophila* serogroup 13, sequence base type 1327 and one as *Legionella pneumophila* serogroup 2-14, sequence base type 1327. 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. UAE authorities have informed ECDC that no increase in cases of statutory notifiable pneumonia was observed in Dubai between October and December 2016.

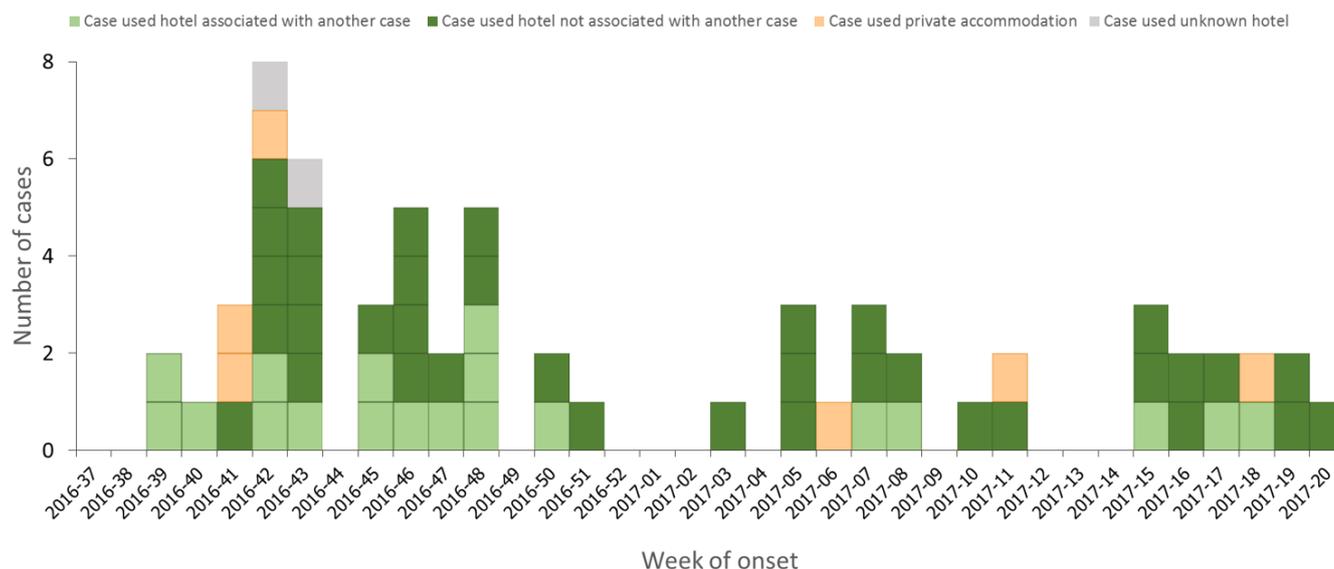
### ECDC assessment

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 24 May, which will be updated next week.

## Distribution of travel-associated Legionnaires' disease cases with history of stay in Dubai, United Arab Emirates, by week of onset from 37-2016 and 20-2017, as reported to ELDSNet by 2 June 2017 (n=63 cases)



## Ebola virus disease – Democratic Republic of the Congo – 2017

Opening date: 15 May 2017

Latest update: 15 June 2017

### Epidemiological summary

Between 5 and 12 June 2017, WHO reported one suspected cases of EVD in DRC. As of 12 June, WHO has reported five confirmed, three probable and one suspected case, including four deaths (CFR: 50%), from Nambwa (four confirmed and two probable), Ngayi (one probable), Mabongo (one confirmed) and Mobenge (one suspected). As of 12 June, all contacts have completed the 21-day monitoring period, there are currently no contacts under follow-up. So far, the outbreak remains confined to Likati Health Zone.

Source: WHO | WHO

### ECDC assessment

This is the eighth outbreak of EVD in 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 the Global Outbreak Alert and Response Network (GOARN) partners are supporting the national health authorities in the response.

The outbreak is occurring in an extremely remote area. For EU/EEA citizens living in or travelling through DRC, the risk of exposure is negligible. For people entering the affected area, such as healthcare workers responding to the outbreak, the risk of infection remains very low, assuming they follow the recommended precautions. The risk of introduction into the EU/EEA would most probably be related to an infected traveller coming from the affected area. Although unlikely given the remote location of the outbreak, this cannot be excluded. The overall risk of introduction and further spread of Ebola virus within the EU/EEA is therefore currently considered to be extremely low.

### Actions

ECDC published a rapid risk assessment on this event on 19 May 2017.

## Influenza A(H7N9) – China – Monitoring human cases

Opening date: 31 March 2013

Latest update: 16 June 2017

### Epidemiological summary

During the past week, China reported twelve additional human cases of avian influenza A (H7N9) in Beijing (3 cases), Anhui (2 cases), Chongqing (2 cases), Henan (2 cases), Jiangsu (1 case), Shaanxi (1 case) and Shandong (1 case).

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then and up to 13 June 2017, 1 533 cases have been reported, including 562 deaths. The 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 735 cases as of 13 June 2017.

The 1 535 cases were reported from Zhejiang (309), Guangdong (258), Jiangsu (250), Fujian (107), Anhui (100), Hunan (92), Shanghai (56), Jiangxi (50), Sichuan (36), Guangxi (31), Hubei (31), Beijing (32), Hebei (28), Henan (28), Shandong (27), Hong Kong (21), Guizhou (17), Xinjiang (10), Chongqing (7), Gansu (5), Shaanxi (7), Taiwan (5), Liaoning (4), Tianjin (4), Jilin (3), Tibet (3), Macau (2), Yunnan (2), Shanxi (2), Inner Mongolia (1) 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 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.

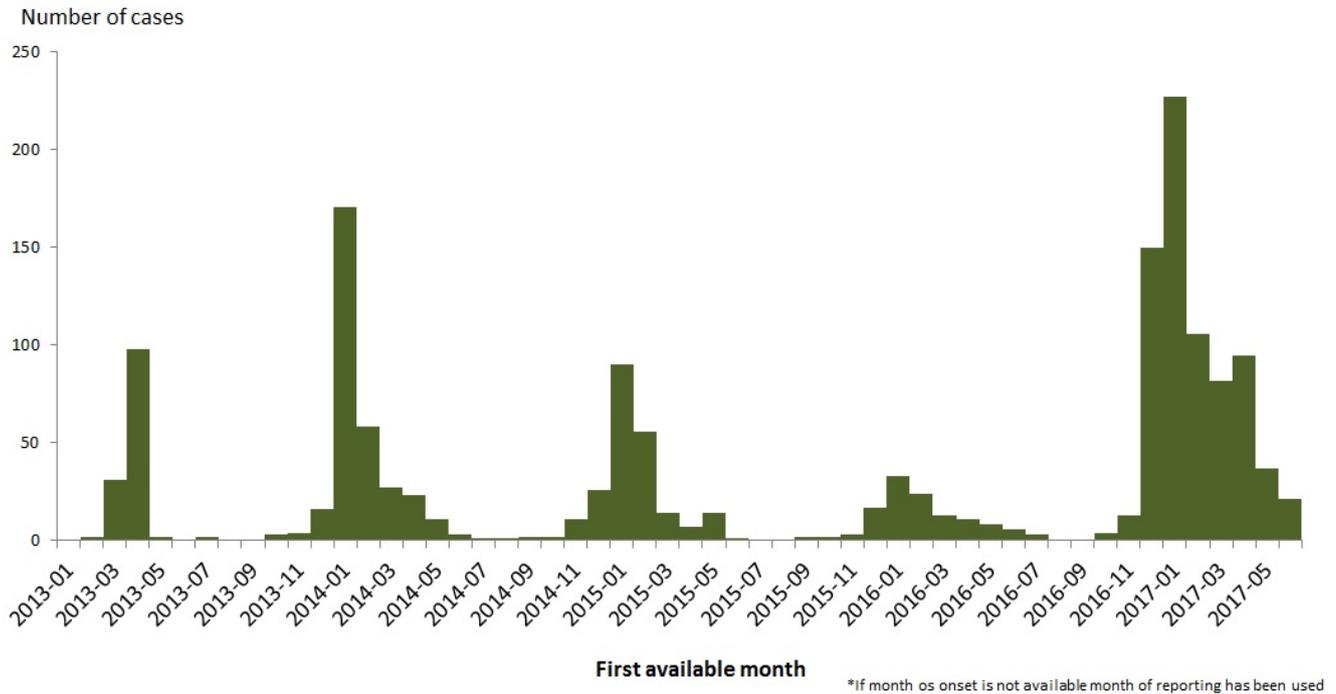
The possibility of humans infected with A(H7N9) returning to the EU/EEA cannot be excluded. However, the risk of the disease spreading within Europe via humans is still considered low, as there is no evidence of sustained human-to-human transmission.

### Actions

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

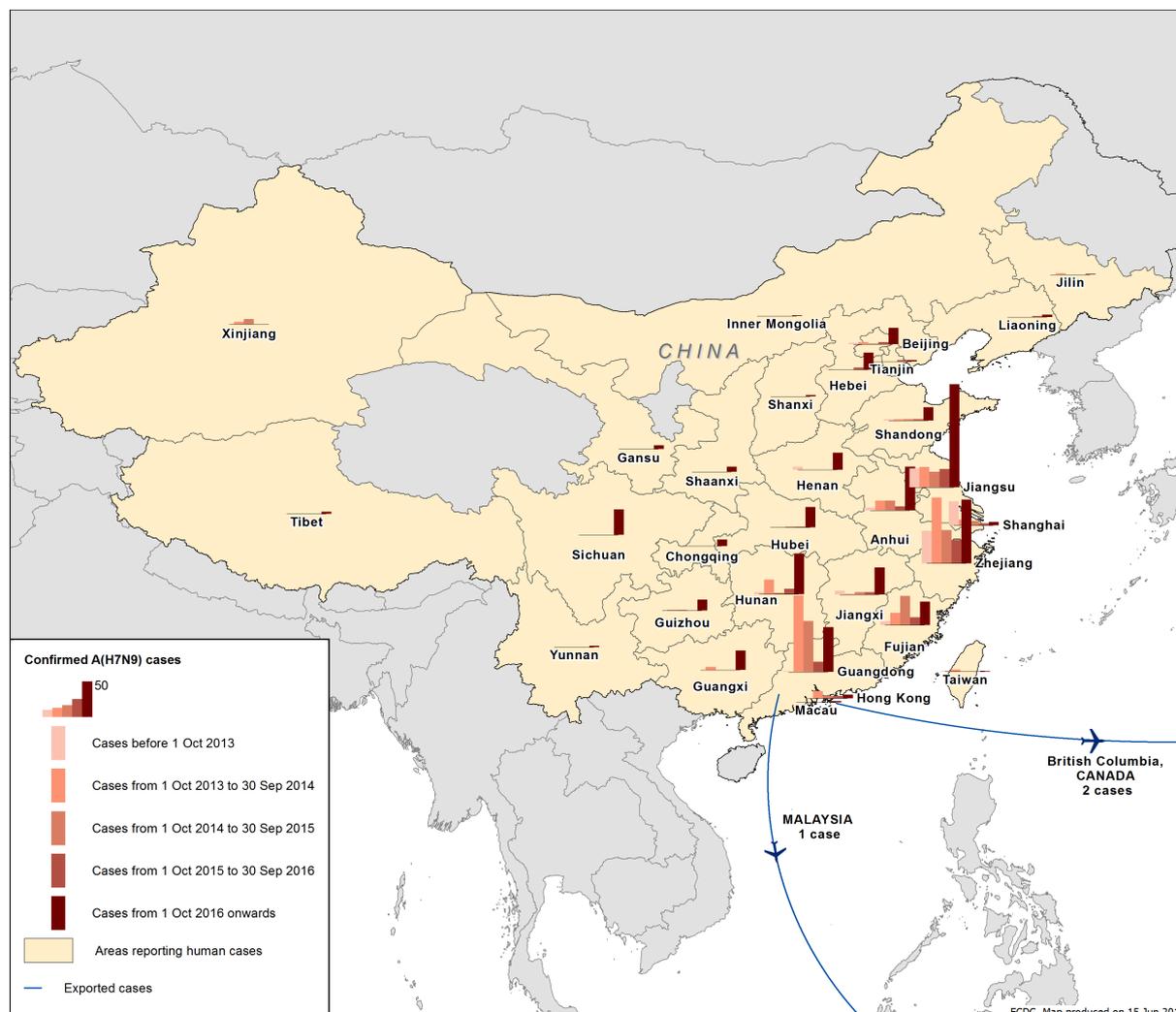
## Distribution of confirmed cases of A(H7N9) by first available month, February 2013 to 15 June 2017

ECDC, WHO, Hong Kong MoH



## Distribution of confirmed cases of A(H7N9) by five seasons, February 2013 to 15 June 2017

ECDC



## Cholera – Multistate (World) – Monitoring global outbreaks

Opening date: 20 April 2006

Latest update: 15 June 2017

### Epidemiological summary

#### Americas

**Haiti:** From 1 January to 3 Jun 2017, Haiti has reported 7 013 cholera cases, including 81 deaths (CFR: 1.1%), in all ten departments. Since the last update in early May, there has been an increase by 1 918 cases.

#### Africa

**Somalia:** Since the beginning of 2017, Somalia reported an upsurge in number of cases of acute watery diarrhoea (AWD) and cholera with 45 400 cases including 738 deaths (CFR: 1.6%). Cases were reported from 15 of the 18 regions of Somalia. Most of the cases were reported in Banadir region in Wadajir district, Luq in Gedo, Dusamareb, Galgadud and Baidoa in Bay region and Buhodle Ayn region from Puntland.

13/15

When compared with the same period last year, the trend of cases shows a significant increase.

**Ethiopia:** Since the beginning of 2017 and as of 14 May, Ethiopia reported 33 631 acute watery diarrhoea (AWD) cases, including 769 deaths (CFR: 2.3%). This represents an increase by 6 665 cases since the last update in April.

**Kenya:** From 22 May to 6 June 2017 Kenya reported 90 cases. Cases are registered in Kakuma refugee camp (n=55) and Kalobeyei settlement (n=35). Both locations are in the northern part of Kenya near Sudan.

**South Sudan:** Since the start of the outbreak in June 2016 and as of 5 May 2017, South Sudan has reported 7 735 cholera cases, including 246 deaths (CFR: 3.1%). This represents an increase by 835 cases since the last update in early May.

**DR Congo:** Since the beginning of 2017 and as of 21 May, DR Congo has reported 11 119 cholera cases, including 349 deaths (CFR: 3.1%). This represents an increase by 2 376 cases since the last update in early May, as well as a 10% increase compared to the same period in 2016.

**Sudan:** Media quoting the health minister, report 16 121 cholera cases including 265 (1.6%) deaths from August 2016 to 2 June 2017. Among these cases, 878 are reported in the capital Khartoum.

**Other countries in Central and West Africa** that have reported cholera cases since the beginning of 2017 and as of 20 May include Liberia (118), Nigeria (80), Cameroon (18), Ivory Coast (16), Ghana (10) and Sierra Leone (4).

## Asia

**Yemen:** Since the start of the outbreak in October 2016 and as of mid-June 2017, Yemen has reported 135 207 suspected cholera cases, including 974 deaths (CFR: 0.7%). This represents an increase by 108 207 cases since the last update in early May. While cholera is endemic in Yemen, the country has experienced a surge in cholera cases since 27 April 2017. Cholera has affected 277 districts in 20 governorates mainly in the western part of the country. The four most affected governorates were Amanat Al Asimah, Al Hudaydah, Hajjah and Amran with almost 50% of the cases reported since 27 April 2017.

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

## ECDC assessment

There has been an unusual increase in the number of cases of cholera in the Horn of Africa and the Gulf of Aden in recent years. Despite the large number of travellers from the EU/EEA visiting countries in the Horn of Africa and the Gulf of Aden, particularly Ethiopia, Kenya and Tanzania, very few cases are reported each year among returning EU/EEA travellers. In this context, the risk of cholera infection in travellers visiting these countries remains low, even though the likelihood of sporadic importation of cases may increase in the EU/EEA.

According to the World Health Organization, vaccination should be considered for travellers at higher risk such as emergency/relief workers who are likely to be directly exposed. Vaccination is generally not recommended for other travellers.

Travellers to cholera endemic areas should seek advice from travel health clinics to assess their personal risk and apply precautionary sanitary and hygiene measures to prevent infection. These can include drinking bottled water or water treated with chlorine, carefully washing fruits and vegetables with bottled or chlorinated water before consumption, regularly hand washing with soap, eating thoroughly cooked food and avoiding consumption of raw seafood products.

## 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.

## Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 16 June 2017

## Epidemiological summary

As of 14 June 2017, six wild poliovirus cases were reported in 2017. In 2016, 17 cases were reported during the same period. In 2017, Afghanistan has reported four cases and Pakistan two cases. Six circulating vaccine-derived poliovirus type 2 (cVDPV2) cases have been reported in 2017, four from the Democratic Republic of Congo (DRC) and two from the Syrian Arab Republic.

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.