

This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary

### EU Threats

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#### **Poliomyelitis - facility-related infection with WPV 2 – Netherlands**

Opening date: 12 April 2017

Latest update: 21 April 2017

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

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

Opening date: 9 February 2011

Latest update: 21 April 2017

A measles outbreak in Romania has been ongoing since February 2016 and 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 14 April 2017, Romania reported 4 793 cases. In 2016, a number of 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 countries have been epidemiologically linked to the current outbreak in Romania.

→Update of the week

In EU, measles cases have been reported in Austria, Belgium, Bulgaria, Czech Republic, Denmark, France, Germany, Hungary, Iceland, Italy, Portugal, Spain and Sweden as well as in Romania, where 4 793 cases had been reported as of 14 April 2017.

#### **Influenza – Multistate (Europe) – Monitoring 2016/2017 season**

Opening date: 13 October 2016

Latest update: 21 April 2017

Influenza transmission in Europe shows a seasonal pattern, with peak activity during winter months. ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the [Flu News Europe website](#).

→Update of the week

During week 2017-15, influenza activity across the region remains low with 41 of 43 countries reporting low intensity.

## Non EU Threats

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### Detection of pathogenic bacteria in CRISPR Kit – Multistate

Opening date: 11 April 2017

Latest update: 21 April 2017

A do-it-yourself genetic engineering kit, 'The CRISPR Cas 9 Bacterial Genomic Editing Kit,' from a company in the US has been found positive for unexpected pathogenic microorganisms. This product is available to the general public and is for sale on the Internet.

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

Opening date: 31 March 2013

Latest update: 21 April 2017

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then and up to 20 April 2017, 1 393 cases have been reported to WHO, including at least 499 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. Since week 40/2016, 595 cases have been reported, representing a significant increase compared to previous seasons.

→Update of the week

Since the last update, 15 additional cases have been detected in [China](#), including the first case reported in Gansu.

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

Opening date: 10 November 2016

Latest update: 21 April 2017

The ECDC ELDSNet surveillance scheme on travel-associated Legionnaires' disease (TALD) has observed an increase in the number of Legionnaires' disease cases associated with travel to Dubai, United Arab Emirates (UAE), in the past few months. Since October 2016, ten EU Member States as well as Switzerland have reported 51 confirmed cases with a history of travel to Dubai.

→Update of the week

On 19 April 2017, the Netherlands reported a travel-associated case of Legionnaires' disease with travel to Dubai. The 59-year-old male fell ill on 10 April 2017 and had stayed in a hotel in Dubai from 31 March to 11 April 2017. The hotel in Dubai was not previously visited by other cases.

### Yellow fever – South America – 2016/2017

Opening date: 16 January 2017

Latest update: 21 April 2017

[Yellow fever](#) is a mosquito-borne viral infection present in some tropical areas of Africa and South America. On 6 January 2017, Brazil reported an outbreak of yellow fever that started in December 2016 and that has been going on since then. Bolivia, Colombia, Ecuador, Peru and Suriname have also reported cases of yellow fever in 2017.

→Update of the week

Between 6 and 12 April 2017, Brazil has reported 138 additional cases of yellow fever, including 19 confirmed. The additional confirmed cases have been reported in Minas Gerais and Espírito Santo. Between week 13 and week 14 of 2017, Peru has reported three additional cases of yellow fever, including one confirmed.

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

Opening date: 8 September 2005

Latest update: 21 April 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 7 February 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 14 March and as of 18 April, one wild poliovirus type 1 (WPV1) case has been reported in Afghanistan. No circulating vaccine-derived poliovirus (cVDPV) cases have been reported worldwide in 2017.

Over the next two weeks, key global meetings will take place to review the global polio epidemiology and examine what additional efforts must be implemented to achieve a lasting polio-free world. Next week, the Strategic Advisory Group of Experts on immunization (SAGE) will meet in Geneva, as well the next meeting of the International Health Regulations (IHR) Emergency Committee on the spread of poliovirus.

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

Opening date: 20 April 2006

Latest update: 21 April 2017

Cholera outbreaks are reported from several countries in Africa, Asia and the Americas. The current situation in Yemen and Somalia are 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 outbreaks during the first trimester of 2017.

## II. Detailed reports

### Poliomyelitis - facility-related infection with WPV 2 – Netherlands

Opening date: 12 April 2017

Latest update: 21 April 2017

#### Epidemiological summary

In early April 2017, a spill of poliovirus in a vaccine production plant in the Netherlands was reported. 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 are 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 2016. 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 will continue to monitor this event and await the outcome of ongoing investigations.

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

Opening date: 9 February 2011

Latest update: 21 April 2017

#### Epidemiological summary

##### Countries with updates since last week

##### Austria

Since the beginning of 2017 and as of 12 April, Austria has reported 71 cases, which exceeds the cumulative number of cases reported in 2016.

##### Bulgaria

Since mid-March 2017 and as of 19 April, according to media [Bulgaria](#) reported 61 cases in the city of Plovdiv, an increase of 16 cases since the last report. Twenty-six cases are confirmed. Most cases have been registered in Plovdiv (30), followed by the Municipality Rodopi, Sadovo and Krichim. On 9 April 2017, [Bulgaria](#) reported the first death, a 10-month-old unimmunised child.

##### France

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

##### Germany

According to the national public health institute as of 2 April 2017, 410 cases have been reported in Germany since the beginning of 2017 representing an increase of 138 cases compared with the previous update. In the same period in 2016, Germany reported 26 cases.

##### Italy

Since the beginning of 2017 and as of 19 April, Italy reported 1 603 cases, with 152 cases among healthcare workers. The cases are reported from 18 of the 21 regions in Italy. Most of the cases are above the age of 15 years and 88% of the cases were not vaccinated. During March 2016, 75 cases of measles were reported compared to 727 in March 2017.

### Portugal

Since the beginning of 2017 and as of 19 April 2017, Portugal reported 21 measles cases including one death, a 17-year-old girl who was not vaccinated. Further cases are under investigation. Contact tracing is ongoing as part of the epidemiological investigation.

### Romania

Between 1 January 2016 and 14 April 2017, Romania has reported 4 793 cases of measles, including 21 deaths. Cases are either laboratory-confirmed or have an epidemiological link to a laboratory-confirmed case. Infants and young children are the most affected population. Thirty-eight of the 42 districts report cases, Caras Severin (West part of the country, at the border with Serbia) being the most affected district with 943 cases. Vaccination activities are ongoing in order to cover communities with suboptimal vaccination coverage. On 19 April, [media](#) quoting the National Institute of Public Health reported that an additional case has died, bringing the total to 22 deaths.

### Countries with no updates since the last week

#### Belgium

Since 20 December 2016 and as of 31 March 2017, Wallonia has reported 266 cases. The outbreak affects all provinces of Wallonia, with the exception of the province of Luxembourg. All age groups are affected, 52.5% of the cases are over 15 years. Most of the cases were not vaccinated or did not know their vaccination status. Nearly 40% were hospitalised. No deaths have been reported. The index case of the epidemic 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 epidemic 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.

#### Denmark

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

#### Czech republic

As of 10 April 2017, 38 cases of measles have been reported in the Moravian-Silesian region of the Czech Republic. Twenty of the cases are children below the vaccination age and 18 are adults. Of the 18 adults, six are healthcare workers. According to media, a hospital has been closed due to hospital staff being infected.

#### Hungary

Between 21 February and 22 March 2017, Hungary reported 54 cases of measles. The 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, Iceland reported two cases in two 10-month-old twin siblings. The infants were unvaccinated. 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.

#### Spain

An outbreak started in the first week of January in Barcelona metropolitan area in Spain, due to an imported measles case from China. As of 27 March, 44 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 the beginning of 2017 and as of 21 March 2017, [Sweden](#) reported 15 cases of measles, including three imported cases.

#### Switzerland

Since the beginning of 2017 and as of 21 March 2017, [Switzerland](#) reported 52 cases of measles. In February 2017, a vaccinated man died of measles in Switzerland. He was undergoing strong immunosuppressive treatment for leukaemia, which explains why the measles vaccination did not protect him. This is the first measles death in Switzerland since 2009.

### ECDC assessment

Measles outbreaks continue to occur in EU/EEA countries, and there is the 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 EU/EEA) were declared to have reached the elimination goal for measles, and an additional 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 of measles: 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.

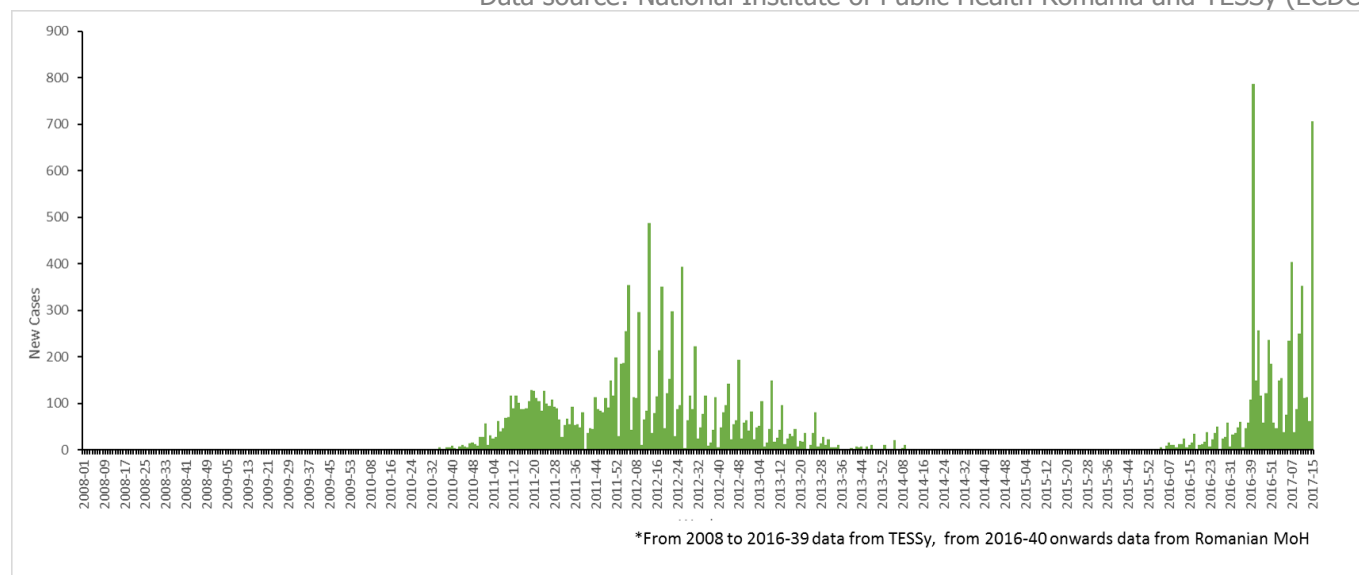
**Source:** WHO/Europe

## 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 2017-15, Romania

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



## Influenza – Multistate (Europe) – Monitoring 2016/2017 season

Opening date: 13 October 2016

Latest update: 21 April 2017

### Epidemiological summary

In week 2017-15, influenza activity across the region decreased further with 41 of 43 countries reporting low intensity. The proportion of sentinel specimens testing positive for influenza virus was 14%, lower than the previous week (17%). The proportion of type B viruses exceeded the proportion of type A viruses in sentinel detections, similar to recent weeks. However, the overall number of type B virus detections remained low.

### ECDC assessment

Influenza activity started early this season in week 46/2016, which is the earliest week that the overall influenza-positivity rate in sentinel specimens reached 10% since the emergence of A(H1N1)pdm09 viruses in 2009/10. The progression of the season confirms the conclusions of ECDC's [risk assessment](#) published on 25 January 2017.

## Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the [Flu News Europe website](#). Risk assessments for the season are available on [ECDC website](#) and on [WHO Regional Office for Europe website](#).

## Detection of pathogenic bacteria in CRISPR Kit – Multistate

Opening date: 11 April 2017

Latest update: 21 April 2017

### Epidemiological summary

In March 2017, Germany acknowledged the detection of pathogenic microorganisms in the DIY Bacterial Gene Engineering CRISPR Kit®, in addition to the non-pathogenic *E. coli* strain declared to be in the kit by the manufacturer. The kit is produced by a US-based company. Pathogenic microorganisms, some with an antibiotic resistance profile, were identified in the kit that is marketed as safe for home use. The kit is sold over the Internet, targeting non-professional microbiology hobbyists. The detection of the pathogenic microorganisms was made as part of the control implemented by local health and food safety authorities. WHO Health Information Management teams in HQ, EURO and PAHO are closely monitoring the event.

On 24 March, the [Bavarian Health Authorities](#) had issued a press statement of the potential contamination through the use of these kits.

**Source:** [media](#), [media](#), [Bayern Authorities](#), [German authorities](#)

### ECDC assessment

The contamination of the implicated products poses a risk to human health. Given that the product is available to order on the Internet and that there is no information on current distribution, there is a potential that diseases may occur among the users of these kits.

## Actions

ECDC is preparing an RRA for beginning of May.

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

Opening date: 31 March 2013

Latest update: 21 April 2017

### Epidemiological summary

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then and up to 20 April 2017, 1 393 cases have been reported to WHO, including at least 499 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) 224 cases, and the fourth wave (weeks 2015-41 to 2016-40) 119 cases. A fifth wave started in October 2016 (week 2016-41), with 595 cases as of 20 April 2017.

The 1 393 cases were reported from Zhejiang (304), Guangdong (256), Jiangsu (243), Fujian (105), Anhui (94), Hunan (84), Shanghai (56), Jiangxi (49), Guangxi (28), Hubei (28), Henan (21), Hong Kong (21), Guizhou (17), Shandong (17), Beijing (15), Sichuan (14), Xinjiang (10), Taiwan (5), Hebei (4), Chongqing (3), Liaoning (3), Tianjin (3), Tibet (3), Jilin (2), Macau (2), Yunnan (2), Gansu (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

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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; and
- 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.

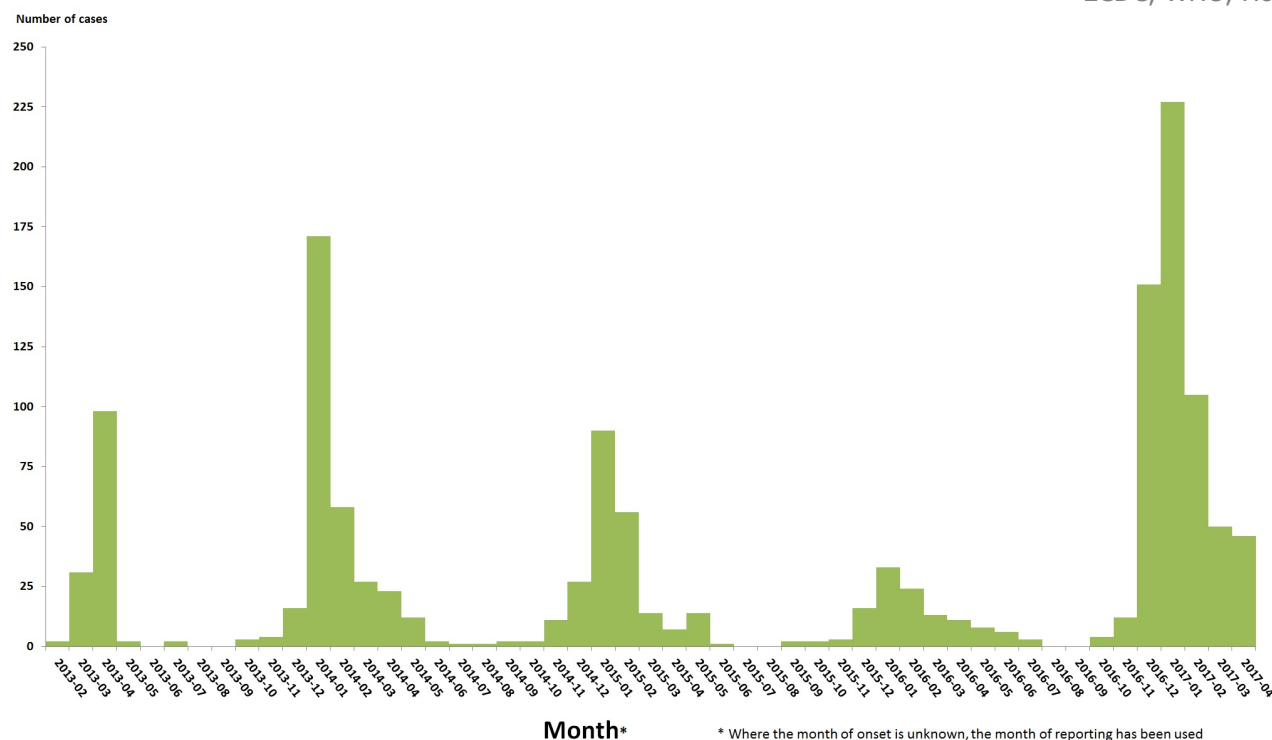
The possibility of humans infected with A(H7N9) returning to the EU/EEA cannot be excluded. However, the risk of the disease spreading within Europe via humans is still considered low, as there is no evidence of a sustained human-to-human transmission.

## 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 20 April 2017 (n=1 393)

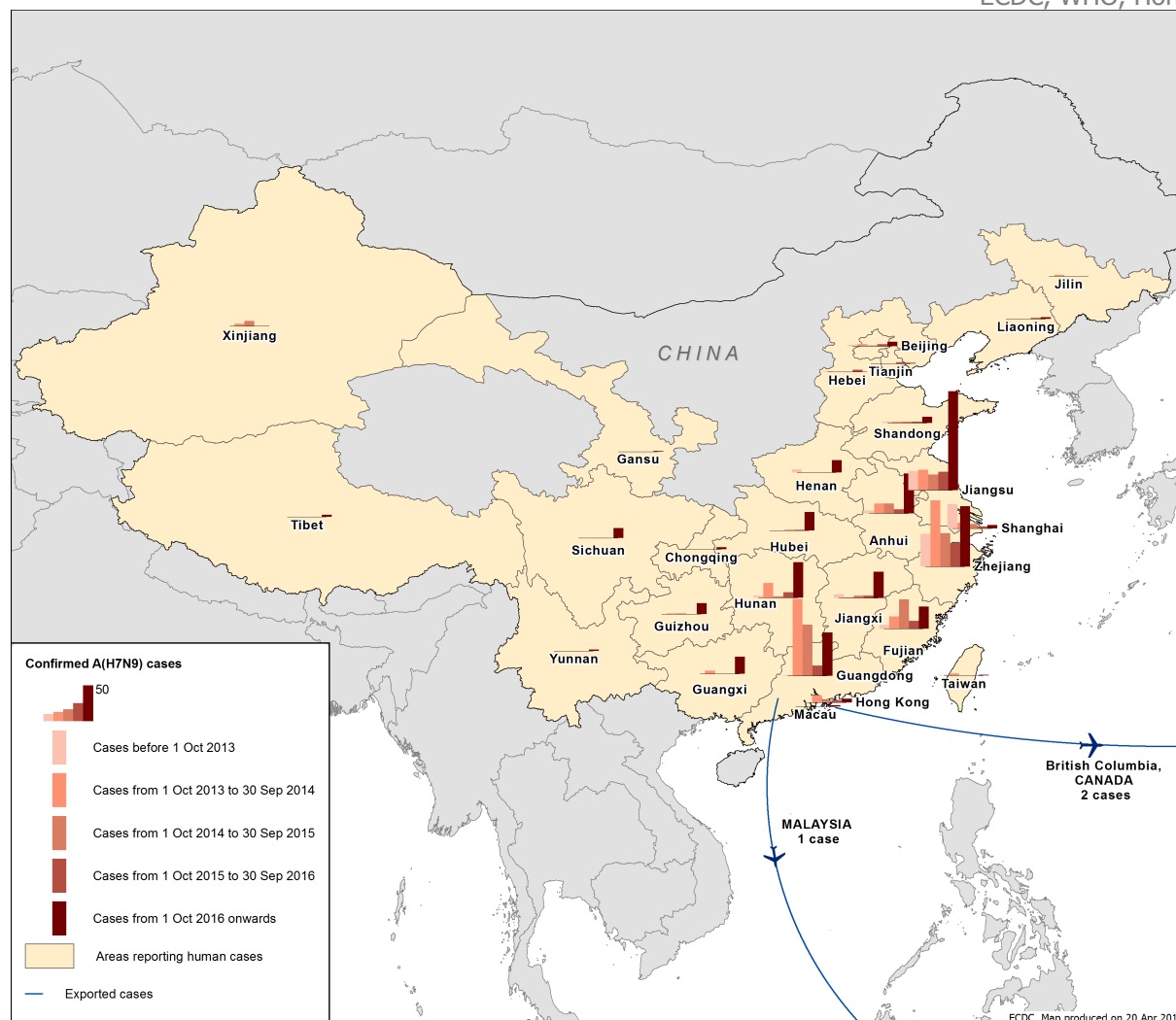
ECDC, WHO, Hong Kong





## Distribution of confirmed cases of A(H7N9) by five periods (weeks 2013-7 to 2017-16)

ECDC, WHO, Hong Kong



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

Opening date: 10 November 2016

Latest update: 21 April 2017

## Epidemiological summary

As of 20 April 2017, 51 TALD cases with a history of travel to Dubai within two to ten days prior to illness and with onset since 1 October 2016, have been reported to ECDC by EU Member States and one European Free Trade Association (EFTA) country. Forty-five cases associated with commercial accommodation sites were reported through the ELDSNet TALD surveillance scheme and five cases associated with private accommodation sites in Dubai were reported by the United Kingdom (UK). Cases were reported by the UK (24), Sweden (6), the Netherlands (6), Denmark (4), France (3), Germany (3), Austria (1), Belgium (1), Hungary (1), Spain (1) and Switzerland (1).

All cases are laboratory confirmed. Thirty-nine were diagnosed with a urinary antigen test (UAT), four with PCR, five with both UAT and PCR, and three by culture, UAT and PCR. Three of the 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 Legionnaires' disease cases returning from Dubai in previous years. Sequence base type 2382 is the first such identification worldwide and appears to be closely-related to

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type 616. The UAE authorities have informed ECDC that there was no increase observed in statutory notifiable pneumonia cases in Dubai during the period October to December 2016.

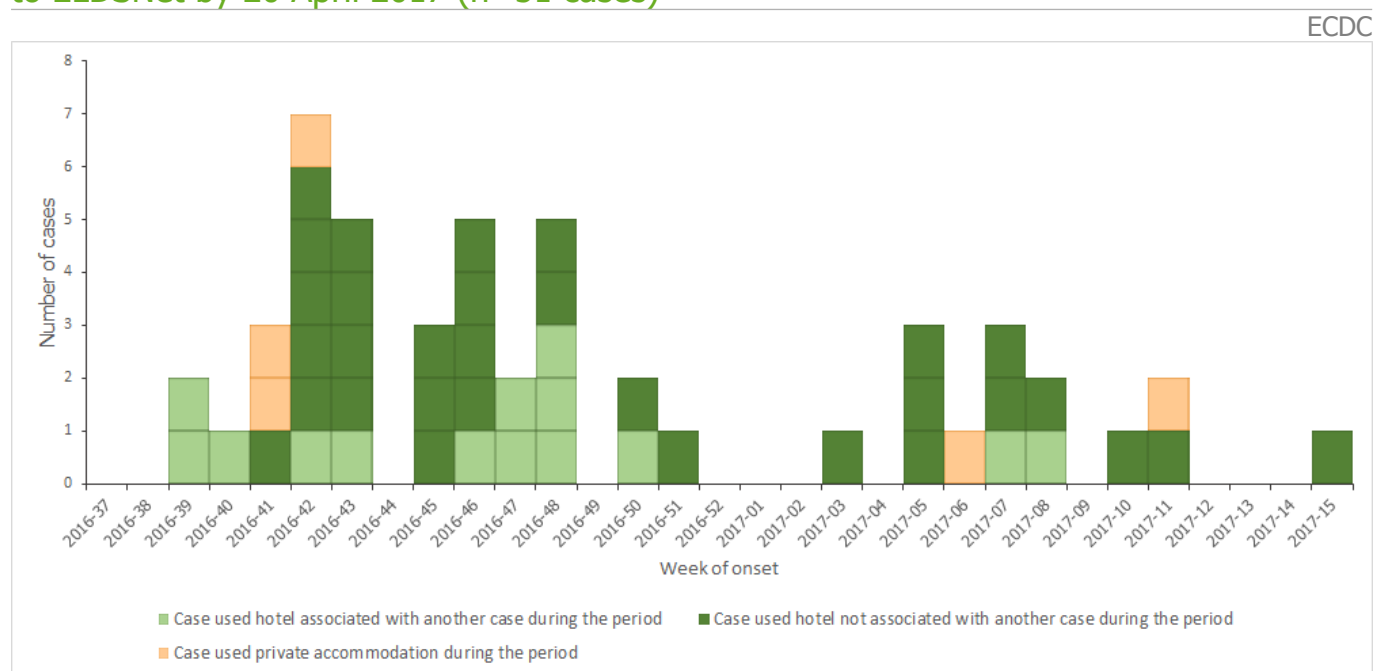
### ECDC assessment

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 a history of travel to Dubai. However, it cannot be ruled out that some of these 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 March 2017 is above that observed in previous years.

### Actions

ECDC monitors this event through ELDSNet. ECDC is collating supplementary case questionnaires and is in contact with EU Member States, the ELDSNet network, WHO and UAE for information sharing. ECDC posted an [epi-update](#) on 7 April 2017. ECDC published a [rapid risk assessment](#) 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 RRA remain valid.

### Distribution of travel-associated Legionnaires' disease cases with history of stay in Dubai, United Arab Emirates, by week of onset from 37-2016 and 15-2017, as reported to ELDSNet by 20 April 2017 (n=51 cases)



### Yellow fever – South America – 2016/2017

Opening date: 16 January 2017

Latest update: 21 April 2017

### Epidemiological summary

#### **Brazil:**

Between 6 January and 12 April 2017, Brazil has reported 1 294 cases of yellow fever (671 suspected and 623 confirmed), including 273 deaths (64 suspected and 209 confirmed).

States reporting suspected and confirmed autochthonous cases:

- Minas Gerais has reported 754 cases (305 suspected and 449 confirmed), including 188 deaths (37 suspected and 151

confirmed).

- Espírito Santo has reported 469 cases (314 suspected and 155 confirmed), including 72 deaths (24 suspected and 48 confirmed).
- Rio de Janeiro has reported 32 cases (22 suspected and 10 confirmed), including three deaths (one suspected and two confirmed).
- São Paulo has reported 13 cases (eight suspected and five confirmed), including five deaths (one suspected and four confirmed).
- Pará has reported seven cases (three suspected and four confirmed), including four confirmed deaths.

States reporting suspected autochthonous cases:

Five states have reported 19 suspected cases: Bahia (12), Rio Grande do Sul (4), Amapá (1), Goiás (1) and Tocantins (1, fatal).

#### ***Other countries in South America:***

From the beginning of 2017 until 17 April, five other countries have reported suspected and/or confirmed cases of yellow fever: [Peru](#) (12), [Colombia](#) (2), [Bolivia](#) (1), [Ecuador](#) (1) and [Suriname](#) (1).

**Sources:** [Brazil MoH](#) | [PAHO](#) | [WHO vaccination recommendations](#)

### ECDC assessment

The ongoing outbreak should be carefully monitored, as the establishment of an urban cycle of yellow fever would have the potential to quickly affect a large number of people. EU/EEA citizens who travel to or live in areas where there is evidence of yellow fever virus transmission should check their vaccination status and obtain medical advice about getting vaccinated against yellow fever.

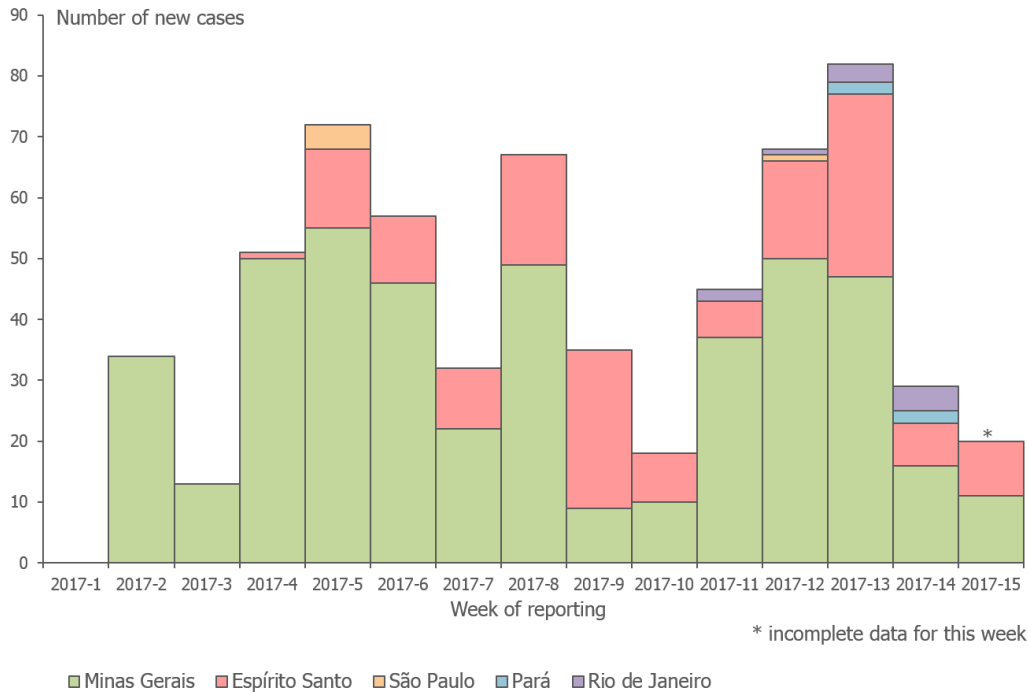
In Europe, *Aedes aegypti*, the primary vector of yellow fever in urban settings, is present in Madeira. Recent studies have shown that *Aedes albopictus* can potentially transmit the yellow fever virus. However, the risk of the virus being introduced into local competent vector populations in the EU through viraemic travellers from Brazil is considered to be very low, as the current weather conditions in Europe are not favourable for vector activity.

### Actions

ECDC closely monitors this event in collaboration with the World Health Organization. ECDC published its [updated rapid risk assessment](#) on 14 April 2017. ECDC is also producing [epidemiological updates](#) and a [map for travel advice](#).

Distribution of confirmed human cases of yellow fever in Brazil by week of reporting from 6 January to 12 April 2017

ECDC





## Distribution of confirmed human cases of locally-acquired yellow fever in Brazil, as of 20 April 2017


ECDC



Confirmed cases of locally-acquired yellow fever, as of 20 April 2017

 Municipalities with confirmed locally-acquired cases since 6 January 2017

 Area at risk for yellow fever transmission

 Area considered at no risk for yellow fever transmission

 Federal state      \* *State capital city*



ECDC. Map produced on: 21 Apr 2017  
ECDC map maker: <https://emma.ecdc.europa.eu>

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

Opening date: 8 September 2005

Latest update: 21 April 2017

### Epidemiological summary

As of 18 April 2017, five wild poliovirus cases were reported in 2017. In 2016, eleven 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

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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.

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

Opening date: 20 April 2006

Latest update: 21 April 2017

### Epidemiological summary

#### **Americas:**

From beginning of the year to week 2017-15, authorities in [Haiti](#) have reported 5 095 cases, including 69 deaths. The most affected provinces are Port-au-Prince and Artebonite for the week 2017-15. According to the [MSPP](#), the number of weekly new cases reported since the beginning of the year is significantly lower than the figures reported during the same time period in 2016 and 2015.

#### **Africa:**

In [Ethiopia](#), since the beginning of 2017, 24 578 cases including 667 deaths (case fatality rate of 2.7%) are reported from six regions: Amhara, Afar, Oromia, SNNP, Somali and Tigray. Eighty-nine percent of these cases and 96% of the deaths occurred in the Somali region. During week 2017-14 (week ending 9 April 2017), 4 200 new cases of acute watery diarrhoea/cholera were reported, and in the past three weeks, the epidemic trend has plateaued, with 4 104 cases reported in week 2017-13 (week ending 2 April 2017) and 4 358 cases in week 2017-12 (week ending 26 March 2017).

Since the beginning of the year and as of 4 April 2017, [Somalia](#) has recorded over 20 000 cholera cases and 469 deaths. These numbers are set to rise once the rainy season begins later this month.

In [South Sudan](#), cholera transmission associated with overuse and contamination of the scarce remaining water sources continues through the dry season. During week 2017-14, cholera outbreak was confirmed in Ayod county in Fangak state. This increases the number of affected counties to fourteen in 9 states. As of 9 April 2017, 6 147 cholera cases including 171 deaths (65 in the facilities and 106 in the community) with a case fatality rate of 2.8%, were reported.

[Democratic Republic of the Congo \(DRC\)](#) continues to report cholera cases. Since the beginning of the year and as of 31 March 2017, the cases are found in the provinces of Tanganyika, South Kivu, Maniema, Ecuador, Mongala, Bas Uélé, Tshopo and Maniema.

[Zambia](#) reports 67 cases from week 2017-7 to week 2017-12 in districts bordering with the DRC.

[Mozambique](#) reports 1 622 cases from the beginning of 2017 to week 2017-12. The most affected region is Maputo.

The outbreak in [Tanzania](#) continues but with a decreasing trend. During past weeks, 14 cases were reported in week 2017-12 and 18 cases in week 2017-11. Since the beginning of 2017, Tanzania reports 1 134 cases.

On 25 March 2017, [Liberia](#) reported a suspected cholera case, a 16-year-old female from Tapitta district, who died. On 6 April, six additional suspected cases, including two deaths, were linked to a common drinking water source (Nahlah creek). One case tested positive for *Vibrio cholerae*.

[Zimbabwe](#) reports four cases from week 2017-9 to week 2017-11.

#### **Asia**

Since the start of the outbreak in October 2016 and as of 21 March 2017, [Yemen](#) reported 23 506 suspected cases of cholera, including 108 associated deaths and a case-fatality rate of 0.46%. Of the reported cases, *Vibrio cholerae* 01 has been laboratory-

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confirmed in 198 stool samples collected from 15 governorates. One third of all suspected acute watery diarrhoea/cholera cases were children under 5 years of age.

Source: [Cholera platform](#) | [Haitian MoH](#) | [media](#)

### ECDC assessment

European travellers should seek information on how to prevent cholera infection prior to visiting affected areas.

### Actions

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

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