

This weekly bulletin provides updates on threats monitored by ECDC.

#### ECDC TECHNICAL REPORT

##### [Gap analysis on securing diphtheria diagnostic capacity and diphtheria antitoxin availability in the EU/EEA](#)

ECDC has published a gap analysis on securing diphtheria diagnostic capacity and diphtheria antitoxin availability in the EU/EEA. The analysis demonstrated that there are significant gaps in diphtheria diagnostic capacity within the EU/EEA, with only six Member States fulfilling the minimum criteria in terms of surveillance, laboratory diagnostic capability and expertise in laboratory diagnostics. The areas with the greatest gaps are related to training and surveillance for all three potentially toxigenic corynebacteria - *C. diphtheriae*, *C. ulcerans* and *C. pseudotuberculosis*, and the availability of diphtheria antitoxin.

The following areas were highlighted as requiring further action:

- Surveillance systems should be in place for the three pathogens, with appropriate methods to determine toxigenicity.
- EU/EEA MS diagnostic capability should be enhanced to isolate, detect toxigenicity, and undertake molecular characterisation of the above pathogens. Consequently there is an urgent need for a laboratory training workshop.
- The availability of updated guidelines (national and WHO) on laboratory diagnosis of diphtheria and other related infections caused by potentially toxigenic corynebacteria should be considered a priority.
- Risks relating to the lack of EU availability and procurement of diphtheria antitoxin should be addressed.

Although a rare disease, diphtheria remains a threat to public health in Europe. During periods of financial constraint, many countries may not have sufficient resources to maintain the necessary level of preparedness to diagnose diphtheria – e.g. through the loss of laboratory expertise, and laboratories not being able to maintain labour intensive diagnostic infrastructure (specific media, specialised assays, training of staff). Given the high proportion of adults with diphtheria toxin antibodies below protective levels due to waning immunity, the importance of good surveillance is crucial. Well-functioning surveillance systems, including careful investigation and follow-up of cases, are a reliable means of monitoring the disease and detecting new trends and changing epidemiology. The reliability of surveillance systems depends on good quality laboratory data. The gaps identified within this analysis can be used to inform options for better prevention and control of diphtheria in the EU.

Most importantly, EU/EEA Member States should maintain high levels of vaccination coverage, and promote and monitor equitable access to immunization across different groups in the population. High coverage can be achieved through a three-dose primary vaccination schedule within the first 12 months of life, followed by booster doses in later childhood and adolescence, and complemented by advice to travellers, specific risk groups and individuals with underlying medical conditions.

In the last two years, ECDC also published three rapid risk assessments addressing diphtheria related events:

[A case of diphtheria in Spain, 15 June 2015](#)

[Cutaneous diphtheria among recently arrived refugees and asylum seekers in the EU, 30 July 2015](#)

[A fatal case of diphtheria in Belgium, 24 March 2016](#)

## I. Executive summary

### EU Threats

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

Opening date: 9 February 2011

Latest update: 14 July 2017

Romania has been 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 07 July 2017, Romania reported 7 647 measles cases, including 31 deaths. In 2016, several other 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, there is an update from the following EU/EEA countries: Finland, Bulgaria, Germany, Italy, Spain and the United Kingdom.

On 12 July 2017, [WHO](#) issued a statement that the ongoing measles outbreaks in the WHO European Region have caused 35 deaths in the past 12 months. The most recent fatality was a 6-year-old boy in Italy, where over 3300 measles cases and two deaths have occurred since June 2016. Several other countries have also reported outbreaks; according to national public health authorities, these have caused 31 deaths in Romania, one death in Germany and another in Portugal.

#### WorldPride – Madrid – 2017

Opening date: 16 June 2017

Latest update: 14 July 2017

WorldPride Madrid 2017 is a festival that promotes lesbian, gay, bisexual and transgender issues at an international level and took place in Madrid between 23 June and 2 July 2017. ECDC monitored this event from 16 June to 9 July 2017.

→Update of the week

During the monitoring period no public health events were detected.

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

Opening date: 30 May 2017

During the West Nile virus transmission season from June to November, ECDC monitors the occurrence of cases of West Nile fever in the EU Member States and the 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 the neighbouring countries.

→Update of the week

During the past week no new human cases of West Nile fever have been reported in EU Member States or neighbouring countries. As of 13 July 2017, no human cases of West Nile fever have been reported in the EU. In the neighbouring countries, one probable case has been reported in Israel.

### Non EU Threats

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

Opening date: 31 March 2013

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. 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 one additional human case of avian influenza A(H7N9) from Xinjiang (1) which was fatal.

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

Opening date: 8 September 2005

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. The Fourteenth Meeting of the International Health Regulations (IHR) Emergency Committee for Polio will be convened by the WHO Director-General on 3 August 2017.

→Update of the week

Since the last weekly update, one new wild poliovirus type 1 (WPV1) was isolated from an acute flaccid paralysis case in Pakistan.

In Afghanistan one new WPV1-positive environmental sample was found.

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

Opening date: 20 April 2006

Latest update: 14 July 2017

Several countries in Africa, Asia and the Americas are reporting [cholera](#) outbreaks. The current situation in Yemen, Somalia, Ethiopia, South Sudan and the Democratic Republic of the Congo 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 Yemen, Somalia, Ethiopia, South Sudan and the Democratic Republic of the Congo reporting the majority of the cases.

## Yellow fever – South America – 2016/2017

Opening date: 16 January 2017

Latest update: 14 July 2017

[Yellow fever](#) is a mosquito-borne viral infection occurring in some of the tropical areas of Africa and South America. Brazil has been experiencing an outbreak of yellow fever since January 2017, that is still ongoing. Bolivia, Colombia, Ecuador, Peru and Suriname have also reported cases of yellow fever in 2017.

→Update of the week

Between 1 June and 10 July 2017, Brazil has reported 5 additional confirmed cases of yellow fever. During week 2017-25, Bolivia reported one additional case from Cochabamba Department. Ecuador reported two additional cases, one in week 2017-20 and one in week 2017-26. Since 1 June, Peru reported three additional cases.

## II. Detailed reports

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

Opening date: 9 February 2011

Latest update: 14 July 2017

#### Epidemiological summary

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

**Finland:** On 27 June 2017, [Finland](#) reported a case of measles in an Italian citizen who worked at an international camp in Finland from 19 to 25 June 2017. On 4 July 2017, [two cases](#) were reported in unvaccinated siblings also linked to the international camp. On 13 July 2017 [an additional case](#) was detected belonging to the same transmission chain.

**Bulgaria:** Since the CDTR on 7 July 2017, 14 cases have been reported. Since the beginning of 2017 and as of 9 July, Bulgaria reported 162 cases. During the same time period in 2016 Bulgaria reported one case.

**Germany:** Since the CDTR on 7 July 2017, 14 cases have been reported. Since the beginning of 2017 and as of 5 July, Germany reported 780 cases. In the same time period in 2016, Germany reported 146 cases.

**Italy:** Since 7 July 2017, 155 cases were reported. Since the beginning of 2017 and as of 11 July, Italy reported 3 501 cases, including two deaths. Among the cases, 255 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:** There is an increase by 156 cases since the CDTR on 7 July 2017. Between 1 January 2016 and 7 July 2017, Romania reported 7 647 cases, including 31 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, in the western part of the country closest to the border with Serbia, is the most affected district with 1 174 cases. Vaccination activities are ongoing in order to cover communities with suboptimal vaccination coverage.

**Spain:** Since the CDTR on 7 July 2017 one case was reported. From the beginning of 2017 and as of 9 July, Spain reported 138 measles cases.

**United Kingdom:** Since the beginning of June 2017 and as of 12 July 2017, [Public Health Wales](#) reported eight cases related to an outbreak affecting the Newport and Torfaen areas. On 12 July 2017, Public Health Wales reported three new cases in children who are too young for vaccination. Two of these cases caught measles from another patient while attending the accident and emergency department at a hospital in Newport on the evening of 14 June. During the first three months of 2017, England reported 17 confirmed cases, compared with 37 between October and December 2016. On 6 July 2017, [Public Health Agency \(PHA\) of Northern Ireland](#) has reported small number of cases. Scotland has reported no cases so far this year.

*In addition to the updates listed above ECDC produces a monthly measles and rubella monitoring report with surveillance data provided by the member states through TESSy. [The last report](#) was published on 11 July 2017 with data up to 31 May 2017.*

#### ECDC assessment

Measles outbreaks continue to occur in EU/EEA countries. As of 12 July 2017, the ongoing measles outbreaks in the WHO European Region have caused 35 deaths in the past 12 months. The most recent fatality was a 6-year-old boy in Italy, where over 3300 measles cases and two deaths have occurred since June 2016. Several other countries have also reported outbreaks; according to national public health authorities, these have caused 31 deaths in Romania, one death in Germany and another in Portugal.

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 deemed 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.

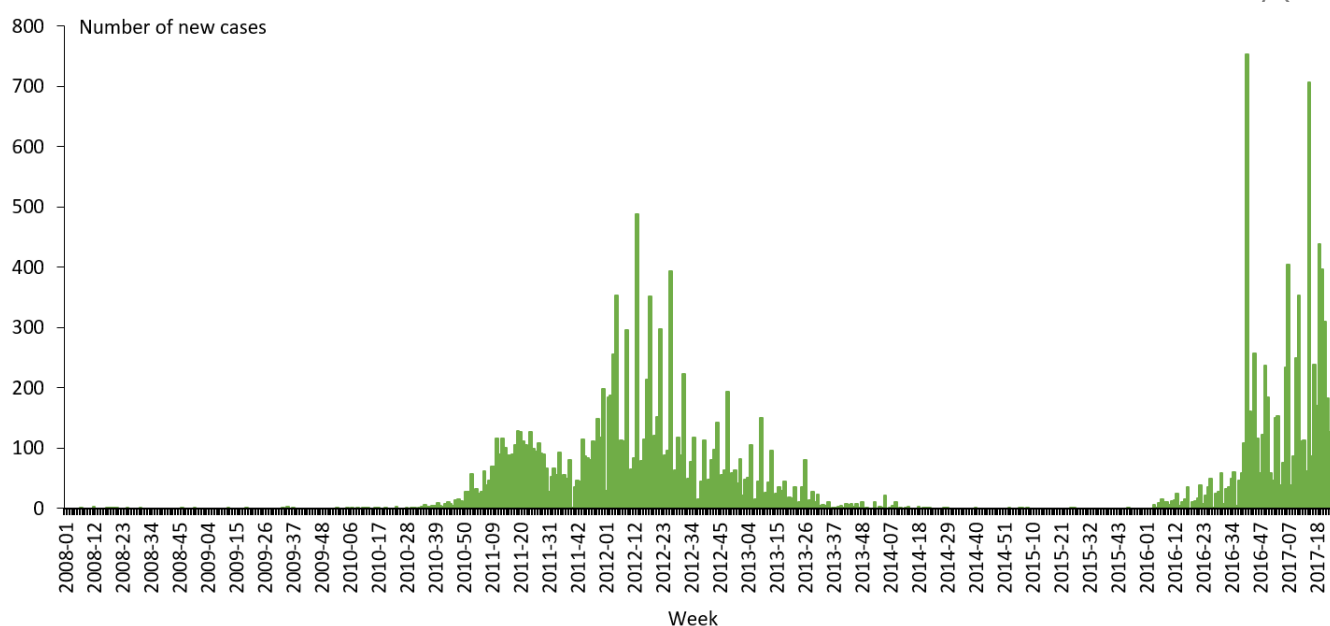
**ECDC link:** [Measles page](#)

## Actions

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. ECDC published a [rapid risk assessment](#) on 6 March.

## New measles cases per week of reporting, week 2008-1 to 2017-27, 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

## WorldPride – Madrid – 2017

Opening date: 16 June 2017

Latest update: 14 July 2017

### Epidemiological summary

During the monitoring period no public health events were detected.

### ECDC assessment

WorldPride Madrid 2017 is a festival that promotes lesbian, gay, bisexual and transgender issues at an international level. This festival took place in Madrid between 23 June and 2 July 2017.

## Actions

On 5 May 2017, ECDC has published a [RRA](#) on potential public health risks related to communicable diseases at the WorldPride festival in Madrid, 23 June–2 July 2017. ECDC will no longer monitor this event.

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

Opening date: 30 May 2017

### Epidemiological summary

Since the beginning of the 2017 transmission season and as of 13 July 2017, no cases of West Nile fever in humans have been reported in the EU Member States. One probable case has been reported by the neighbouring countries in Israel.

Source: [ECDC WNF page](#)

### ECDC assessment

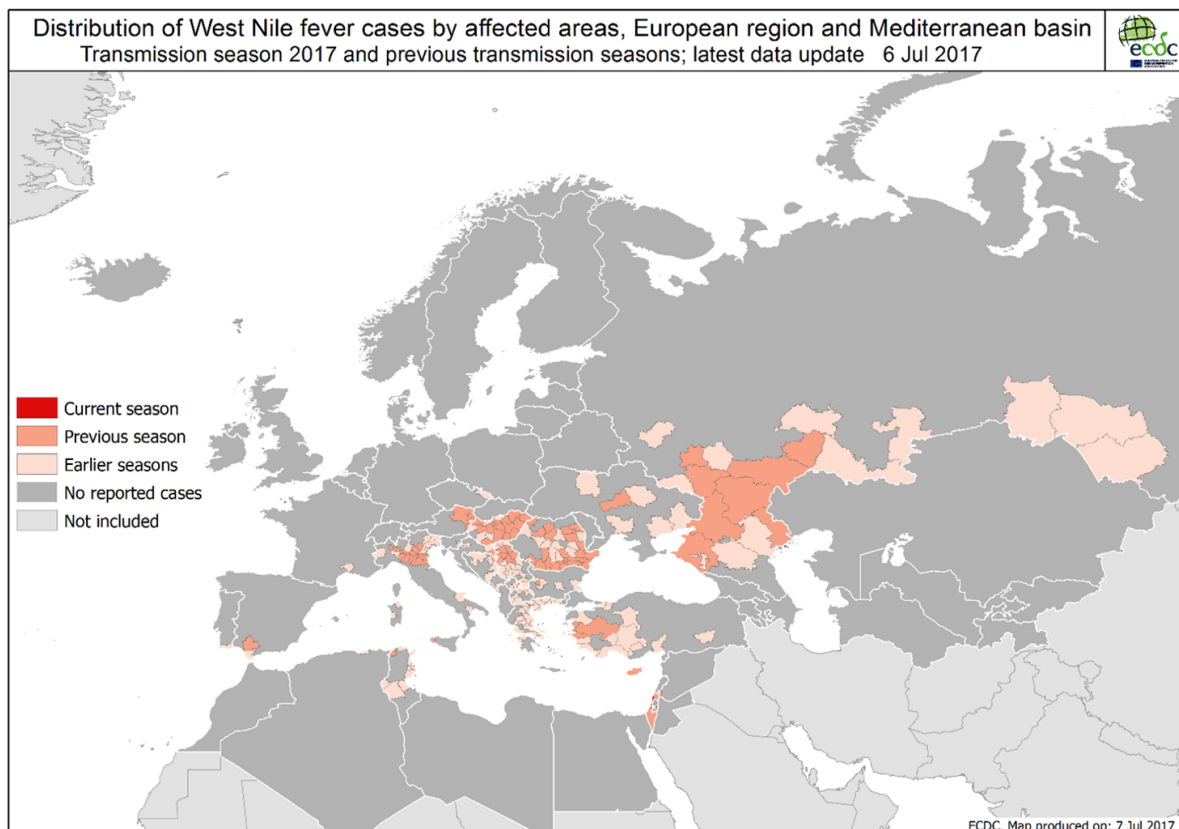
No human cases in EU Member States have been notified at this stage of the transmission season.

### Actions

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

### Reported cases of West Nile fever, transmission season 2017 and previous transmission season, as of 6 July 2017

ECDC





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

Opening date: 31 March 2013

### Epidemiological summary

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then and up to 13 July 2017, 1 555 cases have been reported, including 566 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 757 cases as of 13 July 2017.

The 1 555 cases were reported from Zhejiang (310), Guangdong (258), Jiangsu (250), Fujian (107), Anhui (99), Hunan (93), Shanghai (57), Jiangxi (52), Sichuan (38), Beijing (35), Guangxi (31), Hubei (31), Hebei (29), Henan (28), Shandong (28), Hong Kong (21), Guizhou (20), Xinjiang (11), Chongqing (9), Gansu (5), Shaanxi (7), Taiwan (5), Tianjin (5), Liaoning (4), Jilin (3), Tibet (3), Inner Mongolia (2), Macau (2), Shanxi (3), Yunnan (6) and three imported cases were reported in Canada (2) and Malaysia (1).

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

### ECDC assessment

This is the fifth winter season in the northern hemisphere with human cases caused by influenza 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 contrast to the situations observed during the summer months in previous years, influenza A(H7N9) viruses are continuously circulating in the poultry population, with transmission to humans causing a substantial number of cases.

During the current wave a new influenza A(H7N9) virus with mutations in the haemagglutinin gene indicating high pathogenicity in poultry was detected. This new variant was detected in 25 human cases in three provinces of China and 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 influenza A(H7N9) may have implications for poultry in terms of pathogenicity, there is no evidence to date of increased transmissibility to humans or sustainable human-to-human transmission.

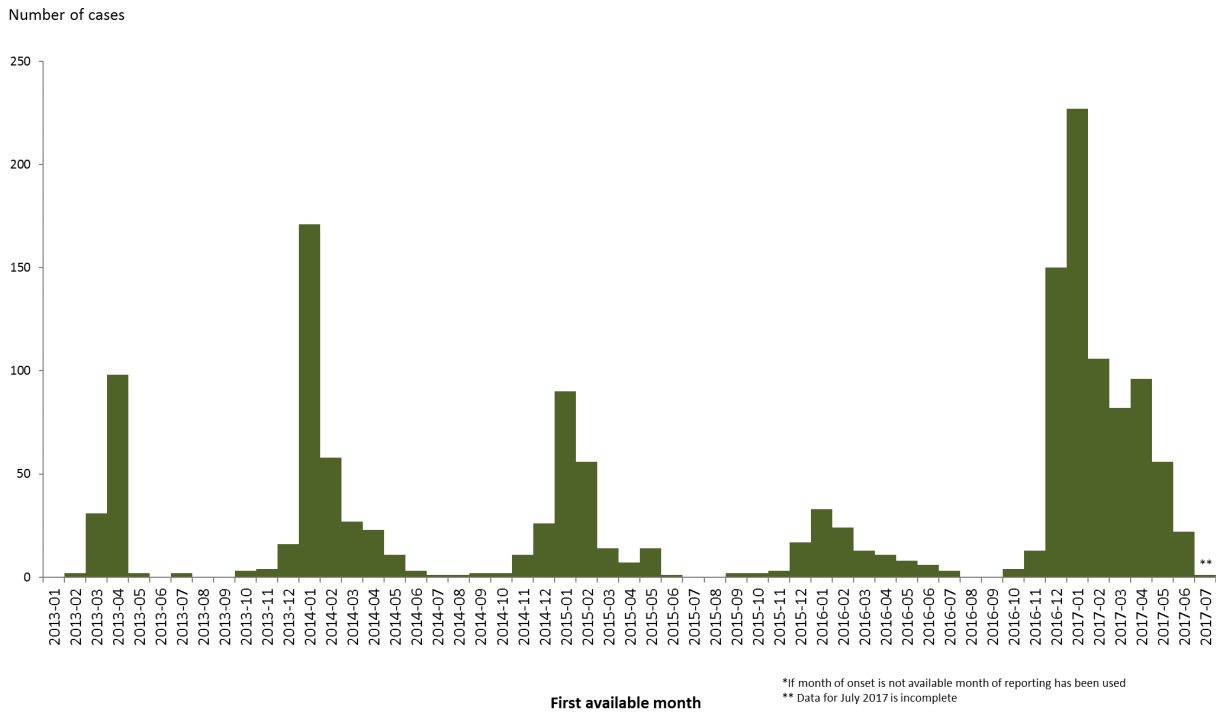
The possibility of humans infected with influenza A(H7N9) returning to the EU/EEA cannot be excluded. However, the risk of the disease spreading within Europe via humans is still considered low, as there is no evidence of sustained human-to-human transmission.

### Actions

ECDC published the seventh update of its [rapid risk assessment](#) on 3 July 2017, 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 5 July 2017

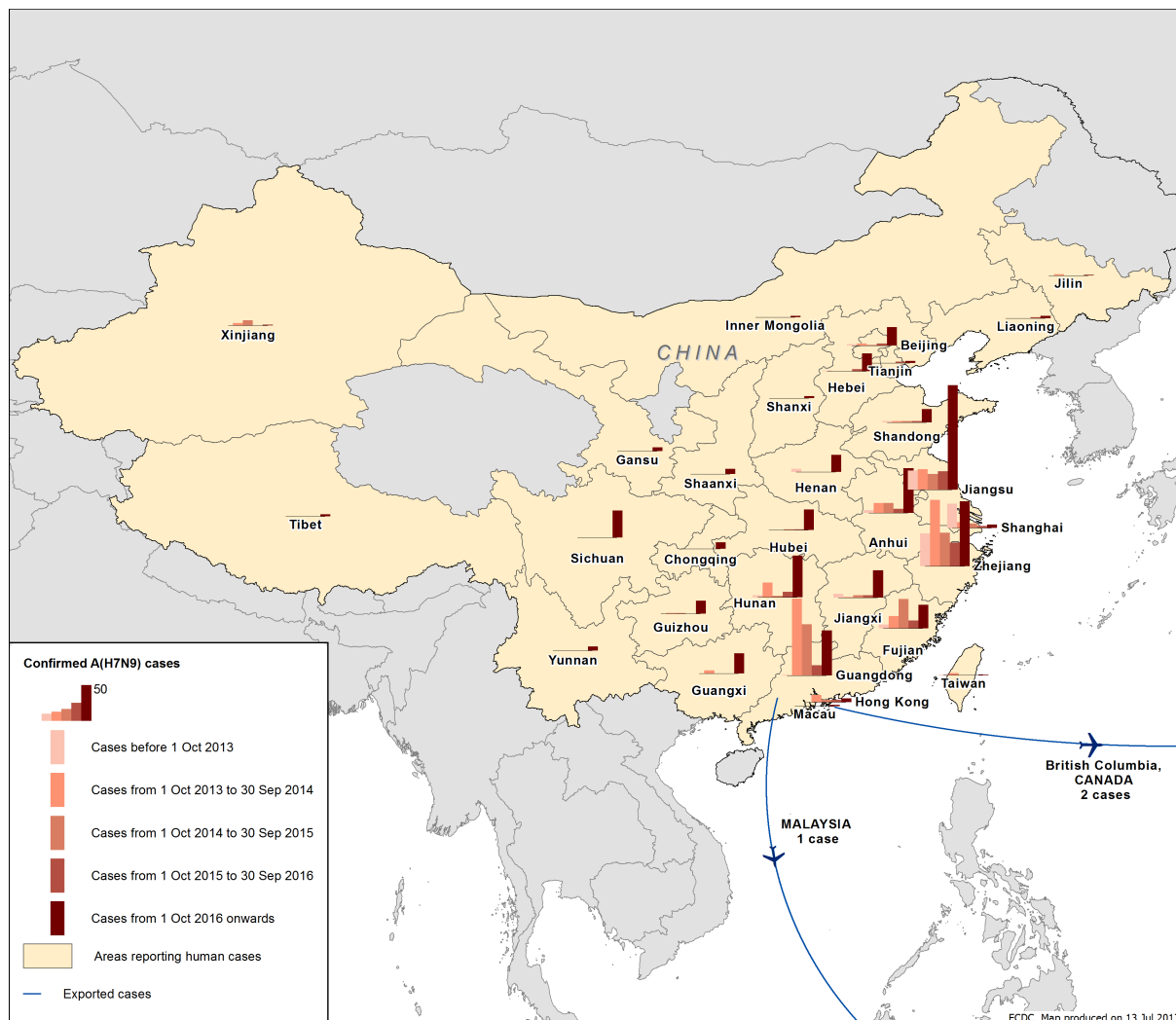
ECDC, WHO, Hong Kong MoH





## Distribution of confirmed cases of A(H7N9) by five seasons, February 2013 to 5 July 2017

ECDC



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

Opening date: 8 September 2005

### Epidemiological summary

As of 12 July 2017, seven wild poliovirus cases were reported in 2017. In 2016, 37 cases were reported during the same period. In 2017, Afghanistan has reported four cases and Pakistan three cases. Twenty-seven circulating vaccine-derived poliovirus type 2 (cVDPV2) cases have been reported in 2017, four from the Democratic Republic of Congo (DRC) and 23 from the Syrian Arab Republic. Of the 23 cases in Syria, 22 cases are from Mayadeen (Al Mayadin) district, Deir-Al-Zour (Dayr Az Zawr) governorate, and one case from Talabyad district, Raqqa governorate. All cases had onset of paralysis between 3 March and 28 May. A previously reported case from Raqqa was confirmed as negative when re-tested, and removed from the list of positive cases.

Although access to Deir-Al-Zour is compromised due to insecurity, the Governorate has been partially reached by several vaccination campaigns against polio and other vaccine-preventable diseases since the beginning of 2016. Most recently, two campaigns have been conducted in March and April 2017 using the bivalent oral polio vaccine (OPV). However, only limited coverage was possible through these campaigns. In response to the isolation of cVDPV2 from Raqqa governorate, the Syrian

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Ministry of Health in collaboration with WHO and UNICEF is considering adding the area to the outbreak response, depending on whether local spread of the virus is occurring.

Web sources: [UNOG](#) | [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 had 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: 14 July 2017

### Epidemiological summary

#### Americas

**Haiti:** Since 1 January and as of 25 June 2017, Haiti has reported 7 418 cholera cases, including 84 deaths (CFR: 1.1%), in all 10 departments. This represents an increase by 405 cases since the last update in early June. In 2016 during the same period, 20 194 cases including 182 deaths were reported.

#### Africa

##### Nigeria:

On 7 June 2017, WHO was notified of a cholera outbreak in Kwara state, in the west of Nigeria, where the event remains localised. The first cases of acute watery diarrhoea presented during the last week of April 2017. An increase in the number of cases and deaths was observed since 1 May 2017. The number of new cases reported has shown a decline over the last four reporting weeks. As of 30 June 2017, 1 558 suspected cases have been reported, including 11 deaths (CFR: 0.7%). Thirteen of these cases were confirmed by culture. The disease is affecting all age groups. The cases consist of 760 females, 782 males and 16 cases with gender information missing. Since 1 May and as of 30 June 2017, suspected cholera cases in Kwara State were reported from five local government areas: Asa (18), Ilorin East (450), Ilorin South (215), Ilorin West (780), and Moro (50) (information for local government areas is missing for 45 of the suspected cases).

**Angola:** Since the beginning of the outbreak in December 2016 and as of 28 June 2017, 455 cases including 24 deaths (CFR: 5.3%) have been reported. The cases occurred in Cabinda (225 cases), Soyo (225 cases), and Luanda (five cases). Of the cases where age is known, adults aged 25 to 49 years represent 38%.

**DR Congo:** Since the beginning of 2017 and as of 24 June 2017, DR Congo has reported 13 721 cholera cases, including 403 deaths (CFR: 2.9%). Tanganyika province accounted for 20% of all the cases this year, where the disease mainly spreads among internally displaced populations.

**Tanzania:** Since the start of the outbreak in August 2015 and as of 30 June 2017, 30 121 cases including 466 deaths (CFR: 1.5%) have been reported: 25 478 cases including 393 deaths on Tanzania mainland, and 4 643 including 73 deaths from Zanzibar. An increase in suspected cholera cases was observed on the Tanzanian mainland this past week. The increases were most notable in the Iringa and Rukwa regions in the central and the western part of the country, respectively, where the outbreak had been previously controlled. Of 160 cases reported during week 25 (week ending 24 June 2017) on the mainland, 126 were

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from Iringa, 22 from Rukwa (Kalambo District), and the remainder from four municipalities of the Dar es Salaam Region. Concurrently, the outbreak is continuing on Unguja Island in the Zanzibar archipelago, with 52 cases notified during week 25. The outbreak in Zanzibar is ongoing but appears to be under control, with far fewer cases observed each week, compared to early 2016.

**Kenya:** Since the beginning of 2017 and as of 27 June 2017, Kenya reported 924 cases including nine deaths (CFR: 1.0%). In recent weeks, cholera cases occurred with three main clusters of transmission. The first cluster, which started on 16 June 2017, was a point-source transmission among participants attending a conference in a Nairobi hotel. Authorities reported 146 patients associated with this event. Between 16 April and 23 June 2017, 293 cases including 2 deaths (CFR: 0.7%) have been reported in Nairobi. The second cluster is related to displaced persons. Between 2 April and 23 June 2017, 330 cases including two deaths were reported from Dadaab Camp in Garissa County. In Kakuma Camp in Turkana County, the outbreak began on 20 May 2017 and by 21 June 2017, 125 cases have been reported. The third cluster is reported in the west of Kenya. Between 14 May and 12 June 2017, 103 cases were reported there. A small cluster of two cases was also reported in the tourist area of Mombasa.

**South Sudan:** Since the start of the current outbreak on 18 June 2016 and as of 2 July 2017, South Sudan reported 17 242 cases and 320 deaths (CFR: 1.8%). During the week ending 2 July 2017, 304 new cholera cases and 0 deaths (CFR: 0%) were reported across South Sudan. As part of the ongoing cholera response, cholera vaccines have been deployed. Out of the 544 140 doses secured by WHO in 2017, 384 971 doses have been deployed. There are no cholera cases reported from any of the sites where the oral cholera vaccines have been deployed in 2017.

**Sudan:** Media quoting the National Epidemiological Corporation, report 23 930 cases, including 940 deaths, from August 2016 and as of 9 July 2017. Among these cases, 878 were reported in the capital Khartoum.

**Ethiopia:** Since the beginning of 2017 and as of 30 June, Ethiopia has reported 37 989 acute watery diarrhoea (AWD) cases, including 791 deaths (CFR: 2.1%). This represents an increase by 4 358 cases since the last update in mid of May.

**Somalia:** Since the beginning of 2017, Somalia reported 53 015 cases including 795 deaths (CFR: 1.5%). This represents an increase of 7 615 cases since a month ago. The most affected areas are in the south of the country including the capital Mogadishu. The outbreak has also spread to the northern region, which had previously been cholera-free for more than 10 years. The current outbreak represents a significant increase compared to cases reported during the same period last year.

**Other countries** in Central and West Africa that have reported cholera cases since the beginning of 2017 and as of 4 June include Liberia (123), Cameroon (18), Ivory Coast (19), Ghana (10) and Sierra Leone (5).

## Asia

**Yemen:** Since 27 April and as of 7 July 2017, Yemen reported 297 438 suspected cholera cases, including 1 706 deaths (CFR: 0.6%). While cholera is endemic in Yemen, the country has experienced a major cholera outbreak since April, with nearly 5 000 cases reported per day. Cholera has affected 22 of the 23 governorates across the country. The four most affected governorates were Amanat Al Asimah, Al Hudaydah, Hajjah and Amran in the western part of the country, with 47% of the cases reported since 27 April 2017.

**India:** In early July, media reported that several districts in Gujarat state and Punjab state are affected by cholera.

**Philippines:** According to [media](#) the National Reference Laboratory for Enteric Bacterial Diseases in the Philippines has tested 17 rectal swabs from Medina, Misamis Oriental province, positive for *Vibrio cholerae*. According to the [local media](#), the outbreak started on 29 June 2017 and there are more than 400 cases reported with acute watery diarrhoea.

## 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 continues to monitor cholera outbreaks globally through its epidemic intelligence activities in order to identify significant changes in epidemiology and to facilitate the proper updates to public health authorities. Reports are published on a monthly basis.

## Yellow fever – South America – 2016/2017

Opening date: 16 January 2017

Latest update: 14 July 2017

### Epidemiological summary

**Brazil:** Between 6 January and 10 July 2017, Brazil has reported 1 316 cases of yellow fever (519 suspected and 797 confirmed), including 311 deaths (37 among suspected and 274 among confirmed cases). The case-fatality rate is 23.6% overall and 34.5% among confirmed cases. Nine states have reported confirmed autochthonous transmission: Distrito Federal, Espírito Santo, Goiás, Mato Grosso, Minas Gerais, Pará, Rio de Janeiro, São Paulo and Tocantins. Eight states have reported suspected autochthonous transmission: Amapá, Bahia, Maranhão, Mato Grosso do Sul, Paraná, Rio Grande do Sul, Rondônia and Santa Catarina.

**Other countries in South America:** From the beginning of 2017 to 28 May, five other countries have reported suspected and/or confirmed cases of yellow fever: Peru (20), Colombia (6), Bolivia (2), Ecuador (2) and Suriname (1).

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

### ECDC assessment

In Brazil, the decrease of the vector activity and the ongoing vaccination campaign has resulted in a reduction in the monthly number of reported yellow fever cases.

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. The risk of the virus being introduced into local competent vector populations in the EU through viraemic travellers from Brazil is considered to be low.

## Actions






ECDC closely monitors this event in collaboration with the World Health Organization. ECDC updated its [rapid risk assessment](#) on 13 April 2017. ECDC is also producing a [map for travel advice](#). ECDC is closing this threat.

Distribution of confirmed human cases of yellow fever in Brazil by week of reporting from 6 January to 7 July 2017

ECDC



Confirmed cases of locally-acquired yellow fever, as of 07 July 2017

-  States 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: 13 Jul 2017  
 ECDC map maker: <https://emma.ecdc.europa.eu>

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