

This weekly bulletin provides updates on threats monitored by ECDC.

NEWS

The European Union One Health 2018 Zoonoses Report Salmonella the most common cause of foodborne outbreaks in the European Union

In 2018, nearly one in three foodborne outbreaks in the EU were caused by *Salmonella*. This was one of the main findings of The European Union [One Health 2018 zoonoses report](#), published this week by the European Centre for Disease Prevention and Control (ECDC) and the European Food Safety Authority (EFSA).

EU Member States reported 5 146 foodborne outbreaks affecting 48 365 people. Slovakia, Spain and Poland accounted for 67% of the 1 581 *Salmonella* infection outbreaks, mainly linked to eggs. Salmonellosis was the second most commonly reported gastrointestinal infection in humans in the EU (91 857 cases reported), after campylobacteriosis (246 571).

The number of people affected by listeriosis in 2018 was similar to 2017 (2 549 in 2018 compared to 2 480 the previous year). However, there has been an upward trend over the past ten years. Listeriosis has the highest proportion of hospitalised cases (97%) and highest number of deaths (229), making it one of the most serious foodborne diseases.

West Nile virus and Shiga toxin-producing *E.coli* (STEC) infections at unusually high levels

Among the zoonotic diseases covered by the report, by far the highest increase was in the number of West Nile virus infections. Cases of this zoonotic mosquito-borne disease in 2018 were seven times higher than in 2017 (1 605 versus 212) and exceeded the total number of cases reported between 2011 and 2017. Most locally acquired West Nile virus infections were reported by Italy (610), Greece (315) and Romania (277). The Czech Republic and Slovenia reported their first cases since 2013. Italy and Hungary have also registered an increasing number of West Nile virus outbreaks in horses and other equine species in recent years.

Shiga toxin-producing *E. coli* (STEC) has become the third most common cause of foodborne zoonotic disease, with 8 161 reported cases, replacing yersiniosis with a 37% increase compared to 2017. This may be partly explained by the growing use of new laboratory technologies, making the detection of sporadic cases easier.

The report also includes data on *Mycobacterium bovis*, *Brucella*, *Yersinia*, *Trichinella*, *Echinococcus*, *Toxoplasma*, rabies, *Coxiella burnetii* (Q fever), and tularaemia.

I. Executive summary

EU Threats

New! Plasmodium vivax malaria introduced cases – Greece – 2019

Opening date: 12 December 2019

Latest update: 13 December 2019

In 2019, the Greek national public health organisation reported two introduced *P. vivax* cases in Greece.

→Update of the week

Measles – Multi-country (World) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 13 December 2019

Measles cases in the EU/EEA primarily occur among unvaccinated populations of both adults and children. Outbreaks are ongoing in countries that had previously eliminated or interrupted endemic transmission.

→Update of the week

Since the previous monthly measles update in ECDC's Communicable Disease Threats Report (CDTR) on 8 November 2019, updates have been provided for 17 EU/EEA countries: Austria, Belgium, Bulgaria, Croatia, the Czech Republic, Finland, France, Germany, Greece, Ireland, Italy, Poland, Romania, Slovakia, Slovenia, Spain and the United Kingdom. Other countries did not report new cases of measles.

Most of the cases in 2019 have been reported from Romania (3 161), France (2 561), Italy (1 605), Poland (1 488), and Bulgaria (1 198).

In 2019, 10 deaths have been reported in the EU/EEA: Romania (5), France (2), Italy (1), Hungary (1) and UK (1).

Relevant updates outside EU/EEA countries are available for WHO Regions (AFRO, PAHO) and for American Samoa, Japan, Fiji, Samoa, Switzerland, Tonga, Ukraine and New Zealand.

In May 2019, WHO classified measles outbreaks across the European Region as a [Grade 2 emergency](#).

On 29 August 2019, the [European Regional Verification Commission for Measles and Rubella Elimination \(RVC\)](#) determined that, for the first time since the verification process began in the Region in 2012, four countries (Albania, the Czech Republic, Greece and the United Kingdom) had lost their measles elimination status.

The monthly measles report published in the CDTR provides the most recent data available on cases and outbreaks. It is based on media reports and data reported on websites from the national public health authorities. This report is supplementary to ECDC's monthly measles and rubella monitoring report based on data routinely submitted by 30 EU/EEA countries to The European Surveillance System (TESSy). Data presented in the two monthly reports may differ.

Influenza – Multi-country – Monitoring 2019/2020 season

Opening date: 11 October 2019

Latest update: 13 December 2019

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

→Update of the week

Week 49/2019 (2–8 December 2019)

Influenza activity continued to increase across the region, with several countries reporting increases in intensity and geographic spread, including two countries with medium-level intensity.

The majority of reported influenza virus detections across the region were type A, although six countries reported type B virus dominance and two other countries co-dominance of types A and B virus.

Data from the 23 countries or areas reporting to the EuroMOMO project indicated that all-cause mortality was at expected levels for this time of the year.

Rabies imported cases - EU/EEA - 2019

Opening date: 5 December 2019

Latest update: 13 December 2019

Between 5 and 11 December 2019, three imported rabies cases were reported in the EU. These cases were notified by Latvia, Spain and Italy. In May 2019, Norway also reported an imported case.

Non EU Threats

New! Poliomyelitis – Multi-country (World) – Monitoring global outbreaks

Opening date: 9 December 2019

Latest update: 13 December 2019

Global public health efforts are continuing to eradicate polio by immunising every child until transmission of the virus has stopped and the world becomes polio-free. Polio was declared a public health emergency of international concern (PHEIC) by WHO on 5 May 2014 due to concerns over the increased circulation and international spread of wild poliovirus in 2014 and the PHEIC is still in place. In June 2002, the WHO European Region was officially declared polio-free.

→Update of the week

Since the last polio update published on 8 November 2019 and as of 12 December 2019:

Wild poliovirus:

16 new cases of wild poliovirus type 1 have been reported in Pakistan (14) and Afghanistan (2). The last case of WPV3 was detected in 2012.

Circulating vaccine-derived poliovirus (cVDPV):

Two new case of cVDPV1 have been reported, one in the Philippines and one in Malaysia.

Ninety-seven new cases of cVDPV2 have been reported in Angola (36), Democratic Republic of Congo (18), Pakistan(11), Philippines (6), Benin (4), Ghana (4), Central African Republic (2), Nigeria(2), Togo (2), Ethiopia(2).

No new cases of cVDPV3 have been reported.

Poliomyelitis - Philippines and Malaysia - 2019

Opening date: 9 October 2019

Latest update: 13 December 2019

On 19 September 2019, a laboratory-confirmed case of circulating vaccine-derived poliovirus type-2 (cVDPV2) was reported in the Philippines. Following this event, the Department of Health in the Philippines declared an outbreak. Since this first case and as of 12 December, 12 cases have been reported in the Philippines and one case in Malaysia.

→Update of the week

In Philippines: Four new human cases were reported since the last CDTR published on the 29 November. One of them has been identified as VDPV1 in Sultan Kudarat and is pending genetic analysis. The remaining three are cVDPV2 cases on the island of Mindanao.

The presumed vaccine-derived polio case from Basilan island, BARMM, reported in the previous CDTR has tested positive for cVDPV1. The virus had 3.3% nucleotide divergence from Sabin1 and is not closely linked to the environmental samples detected in Manila, which are pending additional testing to establish possible genetic linkage.

In Malaysia: On 8 December 2019, the Malaysian Ministry of Health published a press release describing a three-month-old boy with acute flaccid paralysis (AFP) from Tuaran District, Sabah State, Borneo Island. On 6 December, the case was confirmed as a VDPV1 by the Polio Regional Reference Laboratory for the Western Pacific in Australia. The virus appears to be genetically linked to the poliovirus detected in the Basilan area of the Philippines and thus was classified as cVDPV1 according to the Ministry of Health press release. Media reports are conflicting regarding the vaccination status of the child.

Ebola virus disease - tenth outbreak - Democratic Republic of the Congo - 2018-2019

Opening date: 1 August 2018

Latest update: 13 December 2019

On 1 August 2018, the Ministry of Health of the Democratic Republic of the Congo declared the tenth outbreak of Ebola virus disease in the country. The outbreak is affecting North Kivu, South Kivu and Ituri Provinces in the north-east of the country, close to the border with Uganda. In 2019, several imported cases from the Democratic Republic of the Congo were detected in Uganda. However, no autochthonous cases have been reported in Uganda as of 11 December 2019. On 17 July 2019, the [International Health Regulations \(IHR\) Emergency Committee](#) convened, and WHO's Director-General later declared that the outbreak met all the criteria for a public health emergency of international concern (PHEIC) under the International Health Regulations. On 18 October 2019, the Emergency Committee for Ebola virus disease in the DRC confirmed that the outbreak still constitutes a PHEIC.

→Update of the week

Since the previous CDTR and as of 11 December 2019, the [Ministry of Health of the Democratic Republic of the Congo](#) (DRC) has reported 25 additional confirmed cases. During the same period, three deaths were reported among confirmed cases. Among the new cases were five traditional healers.

An increase in cases has been observed this week, following the recent violence and disrupted response activities. The probable cases reported between 27 November and 1 December, are still pending inclusion in case data. One fatal case of re-infection or relapse was detected last week in a case in Mabalako, who recovered from his initial Ebola infection about six months ago. [Sequencing](#) is currently underway to determine the cause of the second EVD illness in this case.

On 6 December 2019, a dead body being transported from Lwemba was discovered at the Makeke Checkpoint, which later tested [positive](#) for Ebola.

On 8 December 2019, the Rwandan Ministry of Health officially [launched](#) the Ebola vaccination programme –UMURINZI- a voluntary vaccination campaign targeting 200 000 people over a period of one year, starting with the Rubavu and Rusizi districts that border the DRC. Johnson & Johnson announced that its Janssen Pharmaceutical Company is [providing](#) the vaccine regimens to the Republic of Rwanda.

On 11 December 2019, Biena Health Zone reported a new case after 85 days without new cases. The case was not a known contact, but did visit a traditional health clinic in Mabalako which has been linked to several recent cases.

As of 11 December 2019, 1 710 people had been vaccinated with the second Ad26.ZEBOV / MVA-BN-Filo vaccine (Johnson & Johnson) in the two health zones of Karisimbi in Goma. Since the start of vaccinations on 8 August 2018, 256 899 people have been vaccinated with the rVSV-ZEBOV vaccine (Merck). A geographical vaccination strategy has been initiated in Biakato.

Influenza A(H9N2) - Multi-country (World) - Monitoring human cases

Opening date: 30 January 2019

Latest update: 13 December 2019

Animal influenza viruses that cross the animal-human divide infecting people are considered novel to humans and have the potential to become pandemic threats.

→Update of the week

China has reported two additional cases of human infection with avian influenza A(H9N2), with onset of symptoms in October and November 2019, in Fujian and Anhui Provinces, China. Both cases recovered after experiencing mild symptoms, and both reported exposure to poultry or a poultry slaughterhouse.

II. Detailed reports

New! Plasmodium vivax malaria introduced cases – Greece – 2019

Opening date: 12 December 2019

Latest update: 13 December 2019

Epidemiological summary

In 2019, the Greek national public health organisation reported two introduced *P. vivax* cases in Greece:

One *P. vivax* case was reported with probable place of exposure in the Municipality of Farkadona, in Thessaly Region. The patient had onset of symptoms in week 2019-17. According to the Greek authorities, it seems likely that the patient was infected during the previous season in 2018. An introduced *P. vivax* case was previously recorded in the same area in 2015.

One additional introduced case of *P. vivax* malaria was reported with onset of symptoms in week 2019-38 in the Municipality of Pydna-Kolindros, in Central Macedonia Region. An imported *P. vivax* case was recorded in a nearby village about one month before. Response measures are being taken by the competent Greek authorities. No introduced *P. vivax* cases have been previously reported from the same regional unit, however, *P. vivax* cases have previously been reported in Central Macedonia.

Background: Between 2009 and 2018, according to the Greek public health authorities, between zero and 42 locally acquired cases of *P. vivax* malaria have been reported per year. In 2017 and 2018, six and ten introduced cases of *P. vivax* were reported respectively.

Source: [Greek NPHO report](#), [Greek NPHO Annual Malaria report 2018](#)

ECDC assessment

In recent years, introduced malaria cases have been reported in several southern European countries with malariogenic potential. Greece has been reporting introduced *P. vivax* cases almost every year since 2009, and these are the first two cases reported in 2019. The risk of transmission for the local population and travellers to the areas where introduced malaria cases have occurred is assessed as very low and the Greek national public health organisation does not recommend malaria chemoprophylaxis. Personal protective measures against mosquitoes are encouraged.

Actions

ECDC is monitoring this event through epidemic intelligence activities.

Measles – Multi-country (World) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 13 December 2019

Epidemiological summary

Since the previous monthly measles update in ECDC's Communicable Disease Threats Report (CDTR) on 8 November 2019, updates have been provided for 17 EU/EEA countries: Austria, Belgium, Bulgaria, Croatia, the Czech Republic, Finland, France, Germany, Greece, Ireland, Italy, Poland, Romania, Slovakia, Slovenia, Spain and the United Kingdom. Other countries did not report new cases of measles.

Most of the cases in 2019 are reported from Romania (3 161), France (2 561), Italy (1 605), Poland (1 488), and Bulgaria (1 198).

In 2019, 10 deaths have been reported in the EU/EEA: Romania (5), France (2), Italy (1), Hungary (1) and UK (1).

Relevant updates outside EU/EEA countries are available for WHO Regions (AFRO, PAHO) and for American Samoa, Japan, Fiji, Samoa, Switzerland, Tonga, Ukraine and New Zealand.

In May 2019, WHO classified measles outbreaks across the European Region as a [Grade 2 emergency](#).

On 29 August 2019, the [European Regional Verification Commission for Measles and Rubella Elimination \(RVC\)](#) determined that, for the first time since the verification process began in the Region in 2012, four countries (Albania, the Czech Republic, Greece and the United Kingdom) had lost their measles elimination status.

The monthly measles report published in the CDTR provides the most recent data on cases and outbreaks. It is based on media reports and data reported on websites from national authorities. It is supplementary to ECDC's [monthly measles and rubella monitoring report](#) based on data routinely submitted by 30 EU/EEA countries to The European Surveillance System (TESSy). Data presented in the two monthly reports may differ.

A number of graphs and epicurves relating to measles in the EU/EEA are available in the attached CDTR PowerPoint slides.

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

[Austria](#) has reported 148 cases in 2019 as of 4 December, an increase of two (2) cases since the national report on 30 October 2019, when 146 cases were reported. All federal states reported cases of measles in 2019. In 2018, Austria reported a total of 77 cases.

Belgium reported 441 cases in January–October 2019, according to TESSy. This is an increase of 25 cases since September 2019.

[Bulgaria](#) has reported 1 198 cases of measles in 2019, as of week 48 (ending on 1 December 2019). This is an increase of 24 cases since the national report on week 43.

[Croatia](#) has reported 53 cases of measles in 2019 as of 8 November 2019, an increase of two (2) cases since 15 October 2019. Of the 53 reported cases, nine were imported. The cases were reported from Split-Dalmatia county (14), the city of Zagreb (31), Brod-Posavina county (5), Zadar county (2) and Dubrovnik-Neretva county (1). The current cases are only being reported in the city of Zagreb. In other counties, the cases were reported in the first half of the year.

[The Czech Republic](#) has reported 587 cases of measles during the period January–October 2019, an increase of one (1) case since the national report for September 2019. In the same period in 2018, the Czech Republic reported 171 cases of measles.

[Finland](#) has reported nine cases of measles in 2019 as of 9 December, an increase of one (1) case since 17 July 2019. According to [media](#) quoting health authorities on 22 November 2019, one case was confirmed in the Hyvinkää Hospital, Finland.

[France](#) has reported 16 additional cases in Ile-de-France region as of 4 December and since the [national report](#) for September 2019. Taking these cases into account, overall France reported 2 507 cases from 1 January – 4 December 2019, 273 cases of which were reported in Ile-de-France region. According to TESSy, France reported 2 561 cases during the period January–October 2019.

[Germany](#) had reported 503 cases by week 46 (ending on 17 November 2019), an increase of five (5) cases since week 41. Most of the cases were reported from North Rhine-Westphalia (135), Lower Saxony (86), Bavaria (73) and Baden-Württemberg (72). During the same period in 2018, Germany reported 529 cases. In addition, [Germany's](#) parliament has voted to make measles vaccinations compulsory for children, in response to a global rise in cases of the disease. Parents who refuse to get their children inoculated face fines of up to EUR 2 500 and their child will probably be banned from nursery or school. The Measles Protection Act will come into force next March.

[Greece](#) has reported 43 measles cases during the period January–October 2019, an increase of three (3) cases since September 2019.

[Ireland](#) has reported 74 cases of measles in 2019 and as of 30 November 2019, an increase of nine (9) cases since the previous national report on 2 November 2019. According to TESSy, 77 cases have been reported by Ireland in the period January–October 2019. During the same period in 2018, Ireland reported 76 cases.

[Italy](#) reported 1 605 cases, including one death, during the period January–October 2019 which is an increase of nine (9) cases since the monthly report for September.

[Luxembourg](#): no national update is available since 18 cases were reported in April this year; 25 cases had been reported to TESSy as of October 2019.

[Poland](#) has reported 1 488 cases in the period January–November 2019, an increase of 111 cases since the national report for October 2019.

[Romania](#) has reported 3 161 cases of measles, including five deaths in 2019 and as of 6 December 2019 which is an increase of 244 cases since the national report on 1 November 2019. Since the beginning of the outbreak in October 2016 and as of 6 December 2019, Romania has reported 18 761 confirmed measles cases, including 64 deaths.

[Slovakia](#) has reported 334 cases in 2019 and as of 8 November 2019.

[Slovenia](#) has reported 28 cases in 2019 as of 9 December 2019; an increase of nine (9) cases since the outbreak in June 2019.

[Spain](#) has reported 281 cases in 2019 as of 1 December 2019; an increase of 12 cases since the national report for 3 November 2019.

The United Kingdom has reported 808 cases, including one death, during the period January–October 2019, according to TESSy an increase of 42 cases since the previous monthly report.

Relevant epidemiological summary for countries outside the EU/EEA

A global overview is available from [WHO's website](#). Additional information with the latest available data is provided for several countries.

[Japan](#) has reported 736 cases of measles in 2019 as of 4 December 2019; an increase of 11 cases since the national report on 27 October 2019.

[New Zealand](#) has reported 2 149 confirmed cases of measles across the country during the period 1 January–6 December 2019. This represents an increase of 146 cases since the national report on 6 November 2019

[Switzerland](#) has reported 214 cases in 2019 as of 3 December 2019; an increase of one case since the national report on 29 October 2019.

[Ukraine](#) has reported 58 276 cases of measles, including 20 deaths as of 6 November in 2019; an increase of 52 cases since the national report for 31 October 2019. Of the reported cases, 27 568 were adults and 30 708 were children. Measles cases have been reported from all regions of the country. Since the beginning of the outbreak in June 2017 over 150 000 cases, including 41 deaths, have been reported by Ukraine.

Measles outbreaks have been reported since October 2019 in the Pacific Island countries and areas: Samoa, Tonga, Fiji and American Samoa.

[Samoa](#) has been experiencing a large outbreak of measles with 4 819 cases, including 70 deaths (CFR: 1.5%) reported in 2019, as of 10 December 2019. The Samoan government announced a [state of emergency](#) on 15 November 2019, prohibiting children under 19 years from attending all organised gatherings or entering any medical facility unless absolutely necessary. Following this outbreak Samoa has been receiving international help. A door-to-door mass [vaccination campaign](#) was launched on 5–6 December 2019, measles vaccination as been made compulsory, all businesses and non-essential government services have been ordered to close and inter-island ferries shut down.

The Ministry of Health in [Fiji](#) has organised an immunisation campaign to tackle a measles outbreak and in 2019 there have been 19 confirmed cases reported in the [country](#), as of 6 December 2019.

The Ministry of Health in [Tonga](#) announced an outbreak of measles in October 2019. As of 9 December 2019, [Tonga](#) has reported 485 confirmed or suspected cases of measles.

[American Samoa](#) has declared a public health emergency due to an outbreak of measles. As of report on 9 December 2019 nine (9) cases had been reported.

According to the [WHO Regional Office for Africa](#) (as of 8 December 2019) outbreaks of measles have been reported in several countries. The Democratic Republic of the Congo (DRC) is experiencing a large measles outbreak, which is continuing to expand. Between 1 January and 2 December 2019, DRC has reported 269 079 suspected cases of measles, including 5 430 deaths (CFR 2%); an increase of 46 140 cases and 975 deaths since the WHO AFRO report published on 3 November 2019. WHO has activated emergency response grade 2 in the DRC. Outbreaks of measles have also been reported in Cameroon (1 170 cases, 382 confirmed, 14 deaths), the Central African Republic (1 638 cases, 98 confirmed, 40 deaths (CFR 2.4%)), Chad (25 916 cases, 271 confirmed, 255 deaths (CFR 1%)), the Comoro Islands (144 cases, 58 confirmed), Ethiopia (9 437 cases and 59 confirmed), Guinea (4 690 cases, 1 091 confirmed, 18 deaths (CFR 0.3%)), Lesotho (59 suspected, four confirmed), Liberia (1 569 cases, 237 confirmed, five deaths (CFR 0.3%)), Mali (1 179 cases, 342 confirmed), Niger (9 969 cases, 54 deaths (CFR 0.5%)), Nigeria (55 476 cases and 2 150 confirmed, 275 deaths (CFR 0.5%)), and South Sudan (3 963 cases, 169 confirmed, 23 deaths (CFR 0.6%)).

[Pan American Health Organization](#): as of 30 November 2019, 15 740 confirmed cases of measles have been reported by 13 countries. Most of the cases have been reported in Brazil (13 489), followed by the US (1 262), Venezuela (520) and Colombia

(226).

[WHO Regional Office of the Western Pacific](#): as of September 2019, confirmed measles cases have been reported by Australia (191), Brunei Darussalam (1), Cambodia (337), China (2 548), Hong Kong SAR, China (84), Macao SAR, China (41), Lao People's Democratic Republic (554), Malaysia (760), Mongolia (2), New Zealand (1 667), Philippines (42 610), Republic of Korea (178), Singapore (158) and Viet Nam (3 141).

ECDC assessment

Measles cases are being reported in the majority of European countries and many countries across the world. Measles remains endemic in a number of EU/EEA countries and affects all age groups, highlighting large population immunity gaps. To protect themselves both at home and when travelling, people of all ages should check their vaccination status and ensure they are vaccinated with two doses of measles-containing vaccine. Particular care is recommended to avoid infants under one year or those for whom vaccination is contraindicated being potentially exposed to measles, as these groups are at increased risk of infection and possible complications. For a more complete overview, consult ECDC's [risk assessment](#) 'Who is at risk for measles in the EU/EEA?' published on 28 May 2019.

Actions

ECDC monitors the measles situation through epidemic intelligence and produces a monthly report with measles surveillance data from The European Surveillance System for 30 EU/EEA countries.

Influenza – Multi-country – Monitoring 2019/2020 season

Opening date: 11 October 2019

Latest update: 13 December 2019

Epidemiological summary

2019–2020 season overview

Influenza activity is increasing in the European Region, although most countries still reported influenza activity rates below baselines or at low levels.

Influenza activity in the European Region, based on sentinel sampling, first exceeded a positivity rate of 10% in week 47/2019.

Type A viruses dominate across the European Region, although a number of countries have reported influenza type B virus dominance or co-dominance of types A and B virus.

Sources: [EuroMOMO](#) | [Flu News Europe](#) |

ECDC assessment

Influenza activity is increasing in the European Region, although most countries are still reporting influenza activity rates at baseline or low levels.

In March 2019, WHO published [recommendations](#) for the composition of influenza vaccines to be used in the 2019–2020 northern hemisphere season. Influenza vaccination for the 2019–2020 season should be promoted because vaccine coverage among the elderly, chronic disease risk groups and healthcare workers is sub-optimal in most EU Member States, according to the [VENICE report](#). The vast majority of recently circulating influenza viruses in the Region and worldwide were susceptible to neuraminidase inhibitors, which supports the use of antiviral treatment in accordance with national guidelines.

Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the [Flu News Europe](#) website. ECDC monitors influenza activity in the WHO European Region from week 40/2019 to week 20/2020.

Rabies imported cases - EU/EEA - 2019

Opening date: 5 December 2019

Latest update: 13 December 2019

Epidemiological summary

Between 5 and 11 December 2019, three imported rabies cases were reported in the EU. These cases were notified by Latvia, Spain and Italy. In 2019, one additional case was reported in May by Norway.

Norway: On 3 May 2019, Norwegian authorities reported a fatal case of rabies in a returning traveller from South-East Asia. The case was bitten by a dog during a trip to the region. The case developed symptoms in late April and died on 6 May.

Latvia: On 5 December 2019, Latvia reported a rabies case in Daugavpils, on the border with Belarus and Lithuania. According to laboratory results, the virus sequence is genetically linked to a rabies virus from Asia. The patient had a travel history to Asia before the onset of symptoms. According to the official Ministry of Health press release, as of 4 December, over 60 contacts had received post-exposure treatment (vaccination). Since 2014, Latvia has been rabies-free.

Spain: On 11 December 2019, health authorities in the Basque country in Spain confirmed the diagnosis of an imported rabies case with travel history to Morocco. According to the same sources, the case has been hospitalised and is in a critical condition and the authorities have undertaken all the necessary precautionary measures.

Italy: On 10 December 2019, Promed reported one case of imported rabies in Apulia region, Italy. The patient was hospitalised on 8 October 2019 and died on 19 November 2019. The patient had a travel history to Zanzibar, Tanzania, in September 2019, where he/she was bitten by an aggressive dog on 8 September 2019. The case was laboratory confirmed by the national and FAO Reference Centre for Rabies, IZSve in Padova, Italy. According to the same sources, the case received rabies vaccination after the exposure but was immunocompromised due to a corticosteroid therapy prescribed to treat an autoimmune disease. No immunoglobulin administration was carried out.

Source: [FHI](#), [HELSE](#), [media](#), [Regional health authorities](#), [Promed](#), [MoH Latvia](#)

ECDC assessment

Between 2015 and 2018, there were 0-1 human case of [rabies reported every year](#). All cases were among travellers who have been exposed to the virus during trips to rabies enzootic areas. The occurrence of four imported cases this year highlights the risk related to human rabies among travellers visiting enzootic areas, as well as the need for travel advice and rapid post exposure prophylaxis after being bitten by a potentially rabid animal.

Actions

ECDC is monitoring these events and the risk of importation of additional rabies cases closely. ECDC will report again if relevant epidemiological updates become available.

New! Poliomyelitis – Multi-country (World) – Monitoring global outbreaks

Opening date: 9 December 2019

Latest update: 13 December 2019

Epidemiological summary

In 2019 and as of 12 December:

Wild poliovirus:

116 cases of wild poliovirus type 1 have been reported in two endemic countries: Pakistan (94) and Afghanistan(22). This is 87 cases more than during the same period in 2018 (29).

Circulating vaccine-derived poliovirus (cVDPV):

Overall, 216 cases of cVDPV have been reported in 17 countries. Among these there were six cases of cVDPV1, reported from Myanmar, one cVDPV1 in the Philippines and one in Malaysia.

Additionally, 208 cases of cVDPV2, reported from Angola (71), the Democratic Republic of the Congo (53), Nigeria (18), the Central African Republic (16), Pakistan (11), Ghana (9), Philippines (9), Benin (6), Ethiopia (5), Somalia (3), Togo (3), China(1), Chad (1), Zambia (1) and Niger (1).

No cases of cVDPV3 have been reported.

In 2019, 11 new countries reported cases of cVDPV2 compared to 2018.

On 24 October 2019, an independent commission of experts concluded that wild poliovirus type 3 (WPV3) has been eradicated worldwide.

Sources: [Global Polio Eradication Initiative](#) | [ECDC](#) | [ECDC Polio interactive map](#) | [WHO DON](#) | [WPV3 eradication certificate](#)

ECDC assessment

The WHO European Region has remained polio-free since 2002. Inactivated polio vaccines are used in all EU/EEA countries. The risk of reintroduction of the virus in Europe exists as long as there are non- or under-vaccinated population groups in European countries and poliomyelitis is not eradicated. According to WHO, one EU/EEA country (Romania) and two neighbouring countries (Bosnia and Herzegovina, and Ukraine) remain at high [risk of a sustained polio outbreak](#). According to the same report, an additional 15 EU/EEA countries are at intermediate risk of sustained polio outbreaks, following wild poliovirus importation or emergence of cVDPV due to suboptimal programme performance and low population immunity. The continuing circulation of wild poliovirus type 1 (WPV1) in three countries shows that there is a continued risk of the disease being imported into the EU/EEA. Furthermore, the worrying occurrence of outbreaks of circulating vaccine-derived poliovirus (cVDPV), which only emerge and circulate due to lack of polio immunity in the population, shows the potential risk for further international spread.

To limit the risk of reintroduction and sustained transmission of WPV and cVDPV in the EU/EEA, it is crucial to maintain high vaccine coverage in the general population and increase vaccination uptake in the pockets of under-immunised populations.

[ECDC](#) endorses WHO's temporary recommendations with regard to EU/EEA citizens who are resident in or long-term visitors (> 4 weeks) to countries with potential risk of international spread.

ECDC link: [ECDC comment on risk of polio in Europe](#) | [ECDC risk assessment](#)

Actions

ECDC provides updates on the polio situation on a monthly basis. ECDC monitors reports on polio cases worldwide through epidemic intelligence, in order to highlight polio eradication efforts, and identifies events that increase the risk of wild poliovirus being reintroduced into the EU.

ECDC maintains an [interactive map](#) showing countries that are still endemic for polio and have ongoing outbreaks of cVDPV.

Poliomyelitis - Philippines and Malaysia - 2019

Opening date: 9 October 2019

Latest update: 13 December 2019

Epidemiological summary

Human cases: Since the declaration of the polio outbreak by the Philippines authorities on 19 September 2019 and as of 12 December 2019, twelve polio cases have been reported (age range 2–9 years). These cases are from Maguindanao province (6), Sultan Kudarat Province (2), Cotabato province (1), Basilan island (1), Lanao Del Sur province (1) and Laguna province (1). Among the twelve cases, one is characterised as cVDPV1, nine as cVDPV2, one as iVDPV2 and one as VDPV1 awaiting genetic analysis.

Five samples in healthy children from Maguindanao, Mindanao were found with cVDPV2, all linked to previously detected cVDPV2 from Mindanao.

Environmental samples: Of the samples collected between 1 July and 2 December 2019, 29 tested positive, 28 from (NCR) and one from Davao City in Mindanao. Of the 29 positive environmental samples, 13 cVDPV1 strains were isolated in NCR, all genetically linked, and sixteen samples are VDPV2 isolates from NCR and Mindanao island (Davao city).

Sources: [WHO-UNICEF report](#), [Department of Health press release](#), [US CDC](#), [Global polio eradication initiative vaccines factsheet](#), [GPEI Vaccine derived polio factsheet](#), [GPEI weekly update Philippines](#), [ECDC factsheet](#), [ECDC polio map](#), [Unicef-WHO SitRep \(9\)](#), [Unicef-WHO SitRep \(10\)](#), [Unicef-WHO SitRep \(11\)](#), [Press release of Malaysia MoH](#)

ECDC assessment

Polio was declared a public health emergency of international concern (PHEIC) by WHO on 5 May 2014 due to concerns over the increased circulation and international spread of wild poliovirus in 2014. The PHEIC is still in place due to the ongoing risk of

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international spread of poliovirus. In 2000, the WHO Western Pacific Region including the Philippines and Malaysia was declared polio-free.

WHO estimates that the risk for the Philippines is high at national level, due to chronically suboptimal immunisation coverage with polio vaccines, sub-optimal performance of AFP surveillance, and poor sanitation and hygiene conditions. WHO estimates the risk as moderate at regional level and low at global level. According to [WHO and UNICEF](#), the vaccination coverage for the third polio dose among one-year-old children was 66% in 2018. During [the current round](#) of the national polio vaccination campaign that started on 25 November, 3,953,754 children under 5 years have been vaccinated, which is 90% of the targeted 4.4 million children.

In Malaysia, the vaccination coverage for the third polio dose was 99% in 2018 according to WHO/UNICEF. As of 5 December 2019, a survey in Sabah state showed a polio vaccination coverage of 88.4% among children between the age of two months and fifteen years, which is sub-optimal.

The risk for EU travellers in the affected areas is considered as very low provided they are fully vaccinated. The WHO European Region has remained polio-free since 2002. Inactivated polio vaccines are used in all EU/EEA countries. The risk of reintroduction of the virus in Europe exists as long as there are non- or under-vaccinated population groups in European countries and poliomyelitis is not eradicated. [ECDC](#) endorses [WHO's temporary recommendations](#) with regard to EU/EEA citizens who are resident in or long-term visitors (> 4 weeks) to countries with potential risk of international spread.

According to the European Regional Commission for the Certification of Poliovirus Eradication (RCC), one EU/EEA country (Romania) and two neighbouring countries (Bosnia and Herzegovina, and Ukraine) remain at high risk of a sustained polio outbreak. According to the same report, an additional [14 EU/EEA](#) countries are at intermediate risk of a sustained polio outbreak. To limit the risk of reintroduction and sustained transmission of poliovirus in the EU/EEA, it is crucial to maintain high vaccine coverage in the general population and increase the vaccination uptake in the pockets of under-immunised populations.

Actions

ECDC is monitoring this event through Epidemic Intelligence. ECDC maintains an [interactive map](#) showing countries that are still endemic for polio and have ongoing outbreaks of cVDPV. ECDC has published a news item: [Update on the global polio situation and implications for the EU/EEA](#).

Geographic distribution of poliovirus cases and environmental detection in the Philippines and Malaysia, July to December 2019

Source: ECDC



Ebola virus disease - tenth outbreak - Democratic Republic of the Congo - 2018-2019

Opening date: 1 August 2018

Latest update: 13 December 2019

Epidemiological summary

Since the beginning of the outbreak a year and half ago and as of 11 November 2019, there have been 3 343 cases (3 225 confirmed, 118 probable) in the Democratic Republic of the Congo (DRC), including 2 210 deaths (2 092 confirmed, 118 probable), according to the Ministry of Health of the Democratic Republic of the Congo. During the past 21 days, most cases were reported in Mabalako, Mandima and Beni. As of 11 December 2019, 169 healthcare workers have been infected.

In the DRC, 29 health zones in three provinces have reported confirmed/probable Ebola virus disease cases: Mwenga in South Kivu Province, Alimbongo, Beni, Biena, Butembo, Goma, Kalunguta, Katwa, Kayna, Kyondo, Lubero, Mabalako, Manguredjipa, Masereka, Mutwanga, Musienene, Nyiragongo, Oicha, Pinga and Vuhovi Health Zones in North Kivu Province and Ariwara, Bunia, Mambasa, Nyankunde, Komanda, Lolwa, Mandima, Rwampara and Tchomia in Ituri Province.

In Uganda, one imported case (reported on 29 August 2019) died on 30 August 2019 in Kasese district, which borders North Kivu. However, as of today, there have been no reports of autochthonous transmission in Uganda.

Public health emergency of international concern (PHEIC): On 17 July 2019, WHO's Director-General [declared](#) the Ebola virus disease outbreak in the Democratic Republic of the Congo a PHEIC. This declaration followed the fourth meeting of the IHR Emergency Committee for Ebola virus disease in the Democratic Republic of the Congo on 17 July 2019. The declaration was made in response to the geographical spread observed in the previous weeks, as well as the need for a more intensified and coordinated response in order to end the outbreak. On 18 October 2019, the Committee decided that the outbreak still constitutes a PHEIC.

Sources: [CMRE](#) | [Ebola dashboard Democratic Republic of the Congo](#) | [Ministry of Health of the Democratic Republic of the Congo](#) | [WHO](#) | [WHO Regional Office for Africa](#)

ECDC assessment

ECDC assessment: Implementing response measures remains challenging in the affected areas because of the prolonged

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humanitarian crisis, the unstable security situation, and resistance in several sectors of the population. A substantial number of cases has been detected in individuals not previously identified as contacts, stressing the need to maintain enhanced surveillance and identify the chains of transmission.

The fact that the outbreak is ongoing in areas with a cross-border population flow with Rwanda, South Sudan, Burundi and Uganda remains of particular concern. So far, the identification of imported cases to previously non-affected areas does not change the overall risk for the EU/EEA, which remains very low.

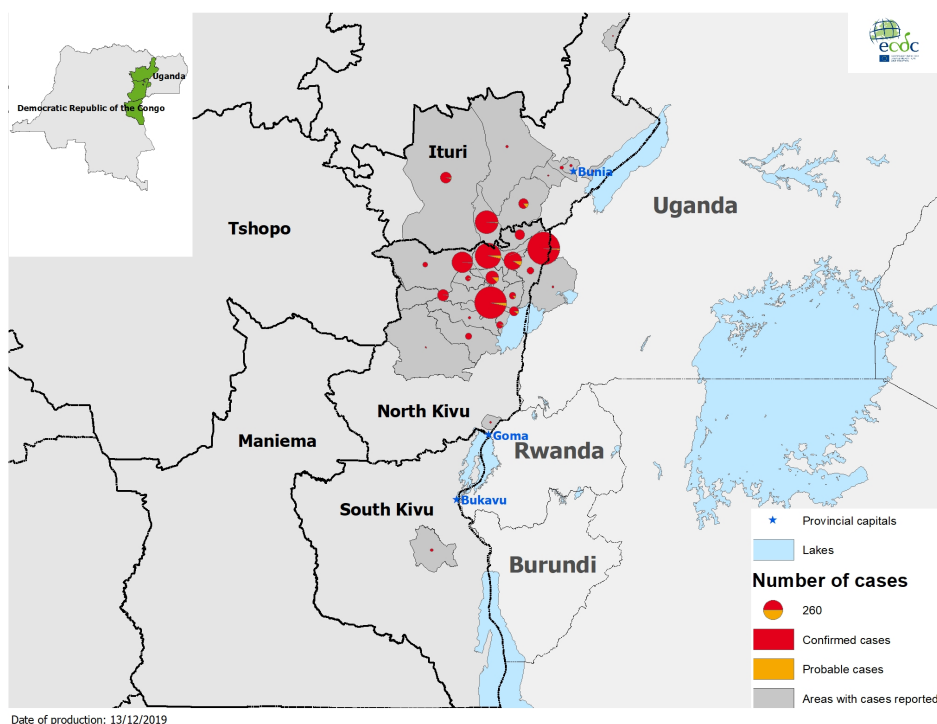
WHO assessment: As of 12 December 2019, the [WHO assessment](#) for the Democratic Republic of the Congo states that the risk of spread remains low at the global level and very high at national and regional levels.

Actions

ECDC published an [epidemiological update](#) on 13 June 2019 and updated its [rapid risk assessment](#) on 7 August 2019.

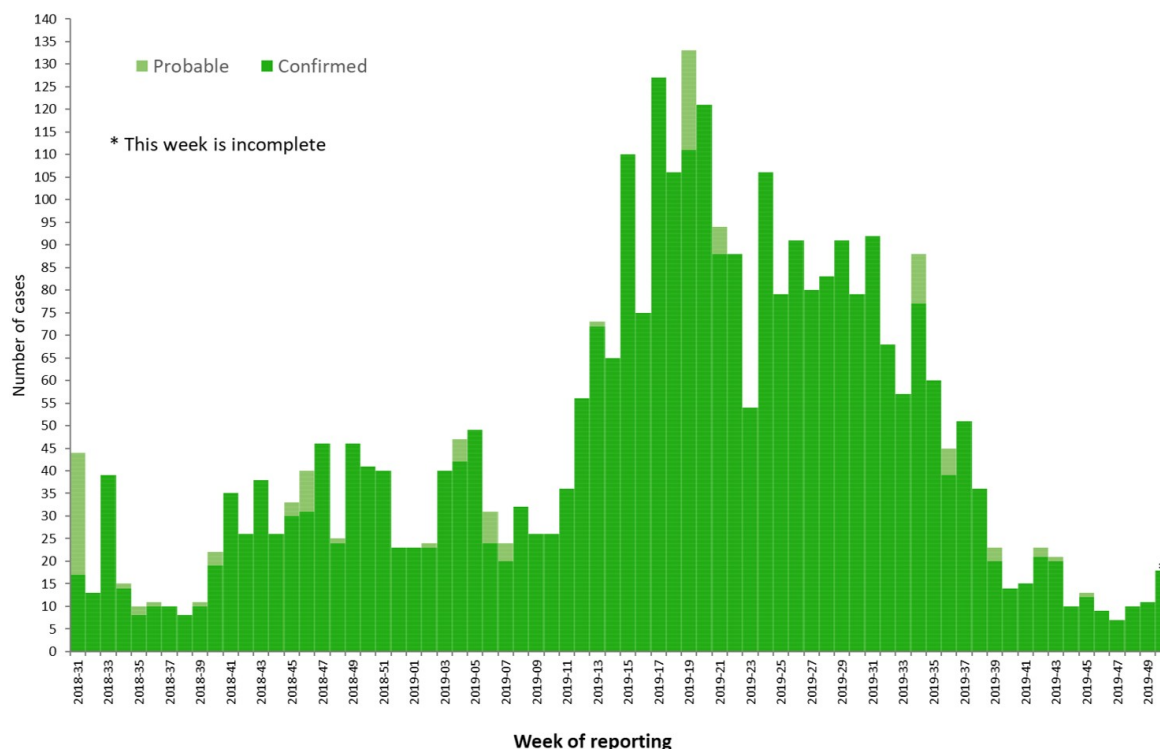
Geographical distribution of confirmed and probable cases of Ebola virus disease, Democratic Republic of the Congo and Uganda, as of 11 December 2019

Source: ECDC



Distribution of confirmed and probable cases of Ebola Virus Disease, Democratic Republic of the Congo and Uganda, as of 11 December 2019

Source: ECDC



Ebola Virus Disease case distribution in DRC and Uganda, as of 11 December 2019

Source: ECDC

#	Country	Number of confirmed cases	Number of probable cases	Confirmed and probable cases	Number of deaths	Conf/Prob cases in past 7 days
	Democratic Republic of the Congo	3225	118	3343	2210	
	North-Kivu Province	2713	100	2813	1940	
	Alimbongo	5	0	5	2	
	Beni	695	9	704	459	ACTIVE
	Biena	19	2	21	14	ACTIVE
	Butembo	284	3	287	353	
	Goma	1	0	1	1	
	Kalunguta	194	18	212	89	
	Katwa	651	24	675	494	
	Kayna	27	0	27	8	
	Kyondo	25	4	29	19	
	Lubero	31	2	33	6	
	Mabalako	425	17	442	332	ACTIVE
	Manguredjipa	18	0	18	12	
	Masereka	50	6	56	23	
	Musienene	84	1	85	34	
	Mutwanga	32	0	32	12	
	Nyiragongo	3	0	3	1	
	Oicha	65	0	65	30	
	Pinga	1	0	1	0	
	Vuhovi	103	14	117	51	
	Ituri province	506	18	524	267	
	Ariwara	1	0	1	1	
	Bunia	5	0	5	4	
	Komanda	56	10	66	54	
	Lolwa	6	0	6	1	
	Mambasa	78	3	81	30	
	Mandima	348	5	353	171	ACTIVE
	Nyakunde	2	0	2	1	
	Rwampara	8	0	8	3	
	Tchomia	2	0	2	2	
	South-Kivu	6	0	6	3	
	Mwenga	6	0	6	3	
	Uganda	1	0	1	1	
	Kasese province	1	0	1	1	
	Kasese	1	0	1	1	
	Cumulative Total	3226	118	3344	2211	

Influenza A(H9N2) - Multi-country (World) - Monitoring human cases

Opening date: 30 January 2019

Latest update: 13 December 2019

Epidemiological summary

Taiwan Centers for Disease Control have reported two additional cases of human infection with avian influenza A(H9N2) in China, with onset of symptoms in October and November 2019 in Fujian and Anhui Provinces, China. Both cases recovered after experiencing mild symptoms, and both reported exposure to poultry or a poultry slaughterhouse. One of the cases was a 4-year-old girl from Sanming, Fujian Province, China, she had onset of illness on 26 October 2019. The second case was a 5-year-old girl from Fuyang, Anhui Province, China who had onset of illness on 12 November 2019.

To date, and since 1998, a total of 60 laboratory-confirmed cases of human infection with avian influenza A(H9N2) viruses have been reported worldwide, including one death. These cases have been reported from China (50), Egypt (4), Bangladesh (3), Oman (1), Pakistan (1) and India (1). The human infections reported from India had disease onset in January 2019 and from Oman in April 2019.

Sources: [ECDC avian influenza page](#) | [WHO avian and other zoonotic influenza page](#) | [ECDC/EFSA joint report: Avian influenza overview November 2018 – August 2019](#) | [Emerging Infectious Diseases](#) | [Taiwan CDC](#)

ECDC assessment

Although avian influenza A(H9N2) has caused infection in humans, human infections remain rare and no sustained human-to-human transmission has been reported. No human cases due to A(H9N2) have been reported in Europe.

Human cases related to a low pathogenic avian influenza A(H9N2) virus are detected sporadically and are not unexpected in regions where A(H9N2) is endemic in the poultry population (Asia, Africa and the Middle East). Direct contact with infected birds or a contaminated environment are the most likely source of infection.

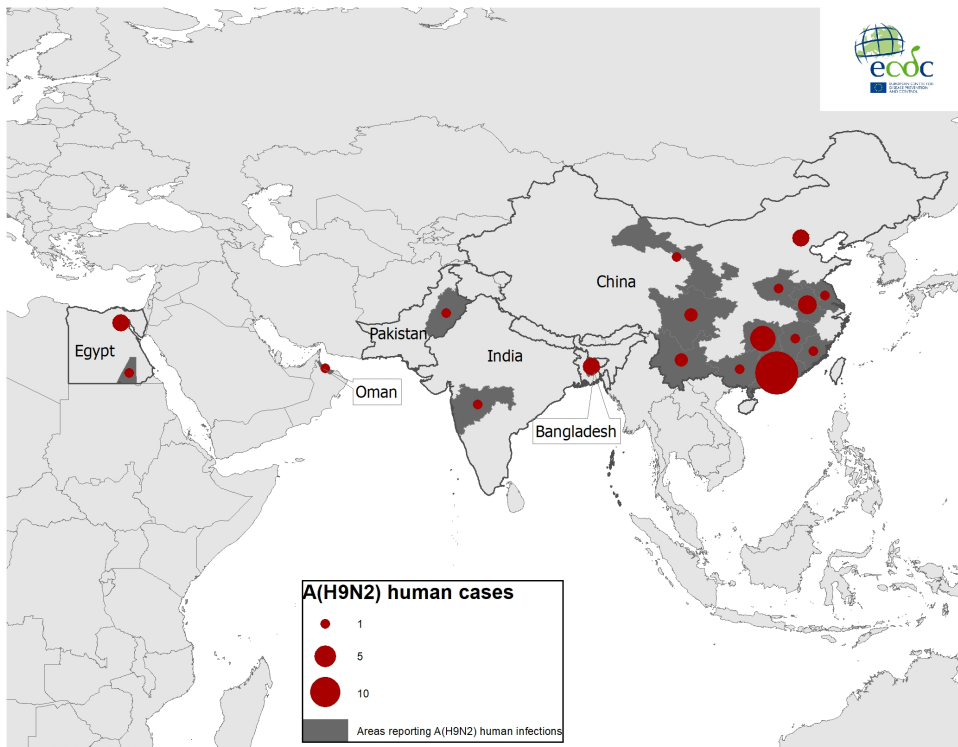
The risk of zoonotic influenza transmission to the general public in EU/EEA countries is still considered to be very low. As the likelihood of zoonotic transmission of newly introduced or emerging reassortant avian influenza viruses is unknown, the use of personal protective measures for people exposed to avian influenza viruses will minimise the remaining risk.

Actions

ECDC monitors avian influenza strains through epidemic intelligence in order to identify significant changes in the epidemiology of the virus. ECDC, together with EFSA and the EU reference laboratory for avian influenza, produces a quarterly updated report of the [avian influenza situation](#) and the last [report](#) was published on 27 September 2019.

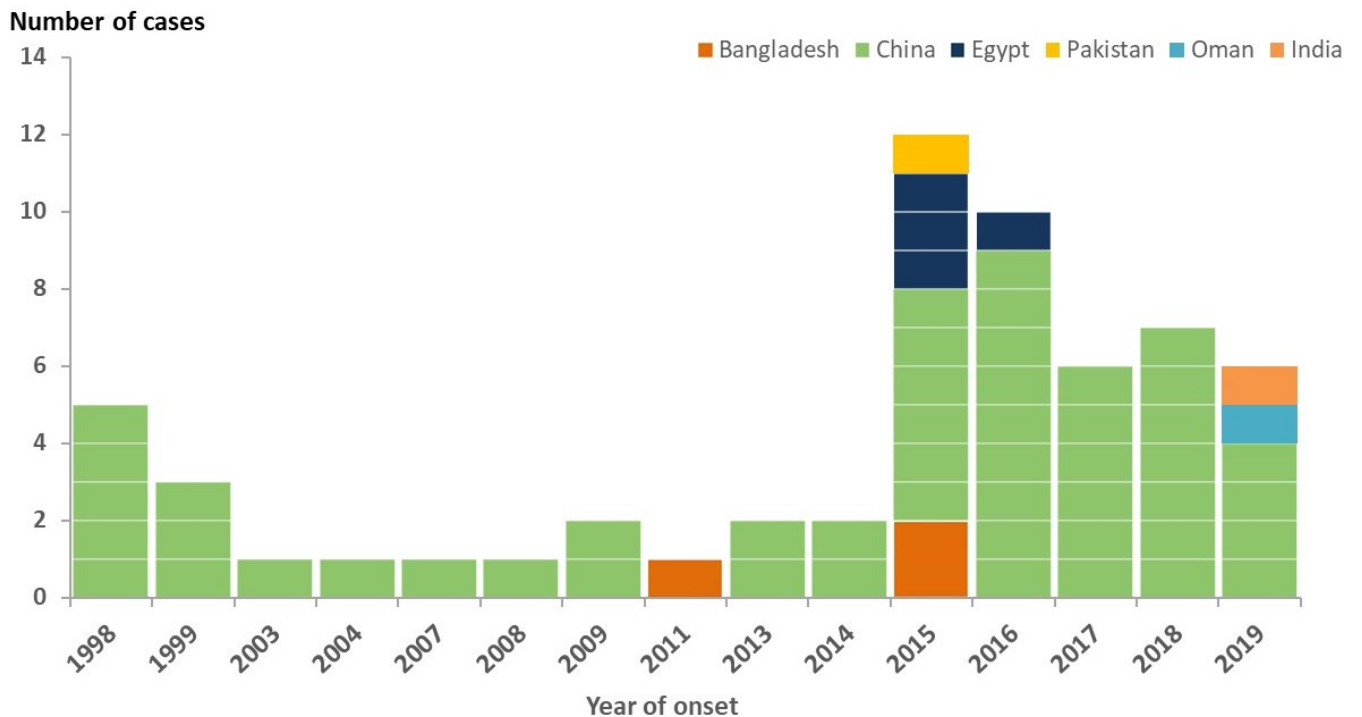
Geographical distribution of confirmed human cases of A(H9N2), 1998 – 11 December 2019

Source: ECDC



Distribution of confirmed human cases of A(H9N2) by reporting country, 1998 – 11 December 2019

Source: ECDC



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