

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

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

This week the first confirmed human case of West Nile fever in the EU was reported and detected in southern Greece. In the neighbouring countries, three new cases have been detected in Israel of which one is confirmed.

Since the beginning of the 2017 transmission season and as of 20 July 2017, one human case of West Nile fever has been reported in the EU. In the neighbouring countries, one confirmed case and three probable cases have been reported by Israel.

Outbreak of Salmonella Enteritidis PT56 and PT62 with MLVA profile 2-12-3-3-2 and 2-12-3-3-2 - multicountry - 2017

Opening date: 10 July 2017

Latest update: 21 July 2017

A multi-country outbreak of *S. Enteritidis* delineated through whole genome sequencing (WGS) analysis is currently ongoing, with 314 confirmed cases in Austria, France, Ireland, Luxembourg and the United Kingdom. Additionally, Austria, Belgium, Denmark, the Netherlands, Norway and the United Kingdom reported 21 probable and 50 historical probable cases. Confirmed cases belong to three closely related genetic clusters; probable cases belong to the multilocus variable-number tandem repeat (MLVA) profiles 2-11-3-3-2, 2-12-3-3-2; however, an additional confirmed isolate has a MLVA profile of 2-9-3-3-2.

→Update of the week

On 9 June 2017, the UK (Public Health England) reported a re-emergence of cases with genetically closely related *S. Enteritidis* infections in EPIS FWD. The cases fell into three 5-SNP single linkage clusters that were genetically related at 10-SNP level. Most cases that have been phage-typed have been characterised as PT56 or PT62, and two corresponding MLVA profiles are 2-11-3-3-2 and 2-12-3-3-2.

As of 17 July, ten EU/EEA countries replied to the urgent inquiry, eight reporting possibly associated cases.

In collaboration with the affected countries, ECDC formed an international outbreak investigation team, and prepared a case definition and a line list to gather information on cases associated with this event.

Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 21 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 14 July 2017, Romania reported 8 017 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: Bulgaria, Germany, Italy and the United Kingdom. Several other countries have also reported outbreaks. According to national public health authorities, these have caused 31 deaths in Romania, three deaths in Italy, one death in Germany and another in Portugal.

Since last month, the following countries from outside the EU have updated their data on measles: Bangladesh, Cameroon, DR Congo, Ethiopia, Indonesia, Kenya, Liberia, Nigeria, Somalia, South Africa, South Sudan, Thailand, Ukraine and the USA.

Rubella – Multistate (EU) – Monitoring European outbreaks

Opening date: 7 March 2012

Rubella, caused by the rubella virus and commonly known as German measles, is usually a mild and self-limiting disease which often passes unnoticed. The main reason for immunising against rubella is the high risk of congenital malformations associated with rubella infection during pregnancy. All EU Member States recommend vaccination against rubella with at least two doses of vaccine for both boys and girls. The vaccine is given at the same intervals as the measles vaccine as part of the MMR vaccine. No new outbreaks have been detected in the EU since March 2017.

→Update of the week

Austria detected an outbreak of rubella in March 2017.

[ECDC measles and rubella monitoring data from 1 June 2016 - 31 May 2017](#) |

Non EU Threats

New! Cyclosporiasis –the UK – 2017

Opening date: 17 July 2017

Latest update: 21 July 2017

The United Kingdom (UK) report increases in the number of cyclosporiasis cases for the third consecutive year, with a large proportion of cases identified in travellers returning from Mexico, particularly from the Riviera Maya. Infections are considered mostly foodborne and not associated with contaminated water consumption or hygiene failures.

In the last two years, cases in travellers returning from the same region were reported also by Belgium and France, in addition to other non-European Union (EU) countries like Canada and the United States of America (USA).

→Update of the week

On 14 July 2017, the UK reported an increase of travel-related cases of cyclosporiasis since the beginning of May 2017. From the beginning of the year and as of 11 July, 43 cases have been reported. Information on travel history is known for 25 patients: 11 travelled to Mexico, ten travelled to a range of other overseas destinations and four did not travel abroad. This is the third successive year when the UK has observed an increase in cyclosporiasis around May and June and where most have been related to travel to Mexico.

In addition, according to a ProMed posting, two travellers from France, who visited Mexico in June 2017, were also diagnosed with *Cyclospora* infection shortly after return.

On 11 July 2017, Belgium reported four cases of cyclosporiasis notified in 2017, of which three had a travel history to Mexico.

Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 21 July 2017

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission of the virus has completely stopped and the world becomes polio-free. Polio was declared a public health emergency of international concern (PHEIC) by the World Health Organization (WHO) on 5 May 2014 due to concerns regarding the increased circulation and international spread of wild poliovirus during 2014. On 2 May 2017, the IHR [Emergency Committee](#) agreed that the international spread of poliovirus remains a PHEIC and recommended that the temporary recommendations should be extended for a further three months. 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 reported in Afghanistan. One new WPV1-positive environmental sample was reported in the past week, from Nangarhar, collected on 21 June. It is the seventh WPV1-positive environmental sample detected in the country this year; three of the seven samples are from Nangarhar and three from Kandahar.

In Syria, four new cases of circulating vaccine-derived poliovirus type 2 (cVDPV2) were reported in the past week, all from Mayadeen district, Deir-Al-Zour governorate.

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 Yunnan.

Seasonal influenza – Asia - 2017

Opening date: 11 July 2017

Latest update: 21 July 2017

In Asia an unexpected increase in seasonal influenza cases starting in April 2017 have been monitored.

[Hong Kong](#) | [Taiwan](#) | [Macau](#) | [China](#)

→Update of the week

Hong Kong and Macau are experiencing an increasing number of severe influenza cases, while Taiwan is reporting that the influenza activity has peaked and is decreasing gradually. The main circulating influenza virus type is A(H3N2).

II. Detailed reports

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 20 July 2017, in the EU Member States, Greece has reported one case of West Nile fever in humans. In the neighbouring countries, four cases have been reported in Israel.

Source: [ECDC WNF page](#)

ECDC assessment

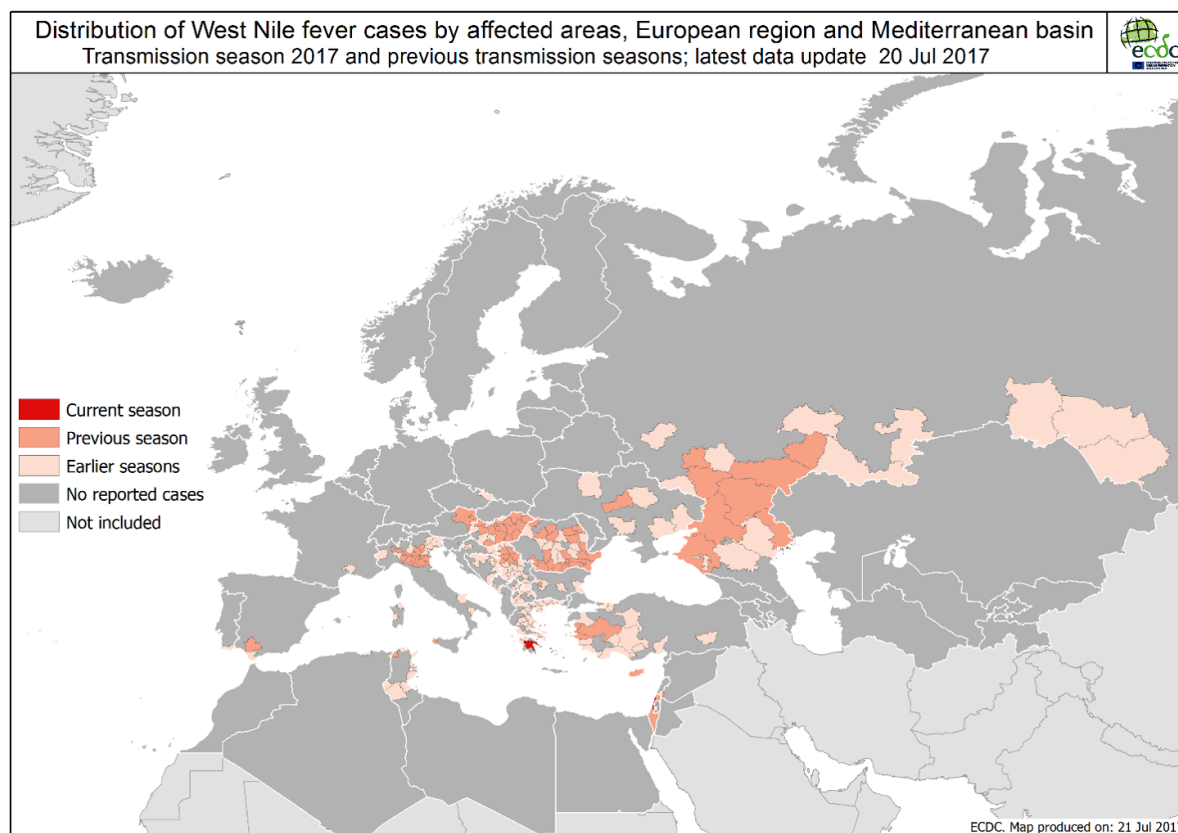
The first West Nile fever human case as reported in EU Member States on 20 July is consistent with observations of seasonal transmission from previous years, and requires implementation of related blood safety measures.

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 20 July 2017

ECDC



Outbreak of Salmonella Enteritidis PT56 and PT62 with MLVA profile 2-12-3-3-2 and 2-12-3-3-2 - multicountry - 2017

Opening date: 10 July 2017

Latest update: 21 July 2017

Epidemiological summary

As of 17 July 2017, nine EU/EEA countries reported 314 confirmed cases, 21 probable cases and 50 historical probable cases. The country reporting most of cases is the UK, with 81% of the total cases in the outbreak and 94% of the confirmed cases.

Of the 374 cases with information available on gender, 189 (51%) are male with a median age of 31 years (interquartile range (IQR) 11-53), and for female cases is 30 years (IQR 16-51).

Information on travel during the incubation period was available for 181 cases, of which 57 (31%) travelled abroad. Among those, the most commonly reported countries of travel were Spain (60%) and Portugal (14%) (Table 3). All cases from Ireland and Luxembourg were travel-associated. A confirmed case from Luxembourg who travelled to Spain in 2015 had a fatal outcome. This is the only patient reported to have died in this outbreak.

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Public Health England reports that non-travel related UK cases are distributed throughout the country. Both in current and past years, the investigations into this outbreak highlighted an association with eating in food outlets, and poultry products (i.e. poultry meat or eggs) have been suggested as potential vehicles of infections; however, sufficient evidence to identify a specific product associated with cases was not available.

In Spain, no MLVA or WGS is performed, and therefore it is not possible to confirm if the outbreak is also taking place in this country. However, phage-typing is performed on isolates belonging to outbreaks under investigation and in January and March 2017, two outbreaks of *S. Enteritidis* PT56 were identified in Spain.

ECDC assessment

This is a multi-country outbreak associated with three closely related genetic clusters ongoing for a prolonged period of time. In a past investigation, eggs and/or poultry meat were the suspected vehicle(s) of infection. Several cases reported a travel history to the Iberian Peninsula during their exposure period.

Until the source of infection has been identified and the outbreak is controlled, new cases associated with this outbreak are likely to occur. Elderly people and immunocompromised patients are at risk of a more severe outcome if infected. Infants are at increased risk for invasive infection.

Actions

ECDC monitors this event through EPIS-FWD. ECDC published a [rapid risk assessment](#) on 20 July 2017.

Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 21 July 2017

Epidemiological summary

EU/EEA countries with updates since last week:

Bulgaria: There is an increase by one case since 14 July 2017. Since the beginning of 2017 and as of 16 July, Bulgaria reported 163 cases. During the same time period in 2016 Bulgaria reported one case.

Germany: There is an increase by 17 cases since 14 July 2017. Since the beginning of 2017 and as of 12 July, Germany reported 797 cases. During the same time period in 2016, Germany reported 172 cases.

Italy: There is an increase by 171 cases, including one additional death, since 14 July 2017. Since the beginning of 2017 and as of 18 July, Italy reported 3 672 cases, including three deaths. Among the cases, 263 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 370 cases since 14 July 2017. Since 1 January 2016 and as of 14 July 2017, Romania reported 8 017 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 groups. Timis, in the western part of the country closest to the border with Serbia, is the most affected district with 1 214 cases. Vaccination activities are ongoing in order to cover communities with suboptimal vaccination coverage.

United Kingdom: In the past week, England and Wales reported 37 new cases. Since the beginning of 2017 and as of 09 July 2017, England and Wales reported 846 confirmed cases. In the same time period in 2016, they reported 861 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.

Outside EU since last month

Bangladesh: According to [media](#), in July 2017 more than 100 children were hospitalised due to measles. Nine children have died. The cases occurred in Sitakunda's Tripura Para in the south of the country, where according to the [media](#), measles vaccination activities ceased seven years ago.

Cameroon: Since January 2017 and as of 12 July, Cameroon has reported 213 cases, including one death, in the Health Districts of Kolofata and Mora, in the north of the country.

DR Congo: Since January 2017 and as of 11 June 2017, DR Congo had recorded 20 898 suspected measles cases, including 241 deaths. The incidence of new cases has declined since the current outbreak peaked in early 2017.

Ethiopia: Since January 2017 and as of 02 July 2017, Ethiopia has reported 2 246 cases, of which 989 are confirmed. This represents an increase by 265 cases since the last report on 04 June 2017.

Indonesia: According to [media](#), an emergency situation has been declared in the Deiyai Regency, in Papua, where a measles outbreak is believed to have caused the deaths of 40 infants in the past three months.

Kenya: Measles outbreaks have been ongoing in Dagahaley, Dadaab and IFO refugee camps in Garissa County since March 2017 and in Mandera county since June 2017. As of 11 July, 48 cases and no deaths have been reported from these outbreaks.

Liberia: Since the beginning of 2017 and as of 9 July, Liberia has reported 942 suspected cases of measles, of these 122 tested positive. Eighty-nine of the suspected cases were compatible with measles and epi-linked, while 59 are pending laboratory confirmation. Of the 675 equivocal and negative cases, 608 (90%) samples have been tested for rubella, of which 291 (48%) were positive.

Nigeria: Since the beginning of 2017 and as of 07 July, Nigeria has reported 13 484 suspected measles cases and 77 deaths. During the same time period in 2016, 19 944 suspected cases and 83 deaths were reported.

Somalia: According to [ECHO](#), there have been more than 12 000 measles cases in Somalia in 2017.

South Africa: Since January 2017 and as of 15 June 2017, South Africa reported 83 cases of measles. Most cases were reported from an ongoing outbreak in Gauteng province (42 cases) and from a now-contained outbreak in Western Cape province (29).

South Sudan: Since the beginning of 2017 and as of 25 June, South Sudan has reported 1 891 suspected cases, including 16 deaths.

Thailand: Since 1 January 2017 and as of 15 July 2017, Thailand reported 1 926 cases from 71 provinces. No deaths were reported. The highest morbidity rate was in the south of Thailand with 7.23 per 100 000 population.

Ukraine: According to [media](#) quoting the Ministry of Health of Ukraine the incidence of measles has been growing rapidly. During the first half of 2017, 1 043 cases were registered, including 783 children. Two vaccinated children died.

USA: On 13 July 2017, the [Minnesota Department of Health](#) (MDH) confirmed an additional case of measles associated with the outbreak that started in March 2017 after several weeks with no new cases. Since March 2017 and as of 13 July, 79 cases were reported across four different counties in Minnesota. Seventy-one of those cases are in unvaccinated patients. The majority of cases are in children. The most recent case is in an unvaccinated adult that visited several public locations in while infectious. Minnesota's measles outbreak has exceeded the cumulative number of 70 cases reported in the entire United States in 2016. Since 1 January 2017 and as of 17 June 2017, 108 cases were reported from 11 states (California, Florida, Maryland, Michigan, Minnesota, Nebraska, New Jersey, New York, Pennsylvania, Utah, and Washington).

ECDC assessment

Measles outbreaks continue to occur in EU/EEA countries. There is a risk of spread and sustained transmission in areas with susceptible populations. The national vaccination coverage remains less than 95% for the second dose of MMR in the majority of EU/EEA countries. The progress towards elimination of measles in the WHO European Region is assessed by the European Regional Verification Commission for Measles and Rubella Elimination (RVC). Member States of the WHO European Region are making steady progress towards the elimination of measles. At the fifth meeting of the RVC for Measles and Rubella in October 2016, of 53 countries in the WHO European Region, 24 (15 of which are in the EU/EEA) were declared to have reached the elimination goal for measles, and 13 countries (nine in the EU/EEA) were 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. 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.

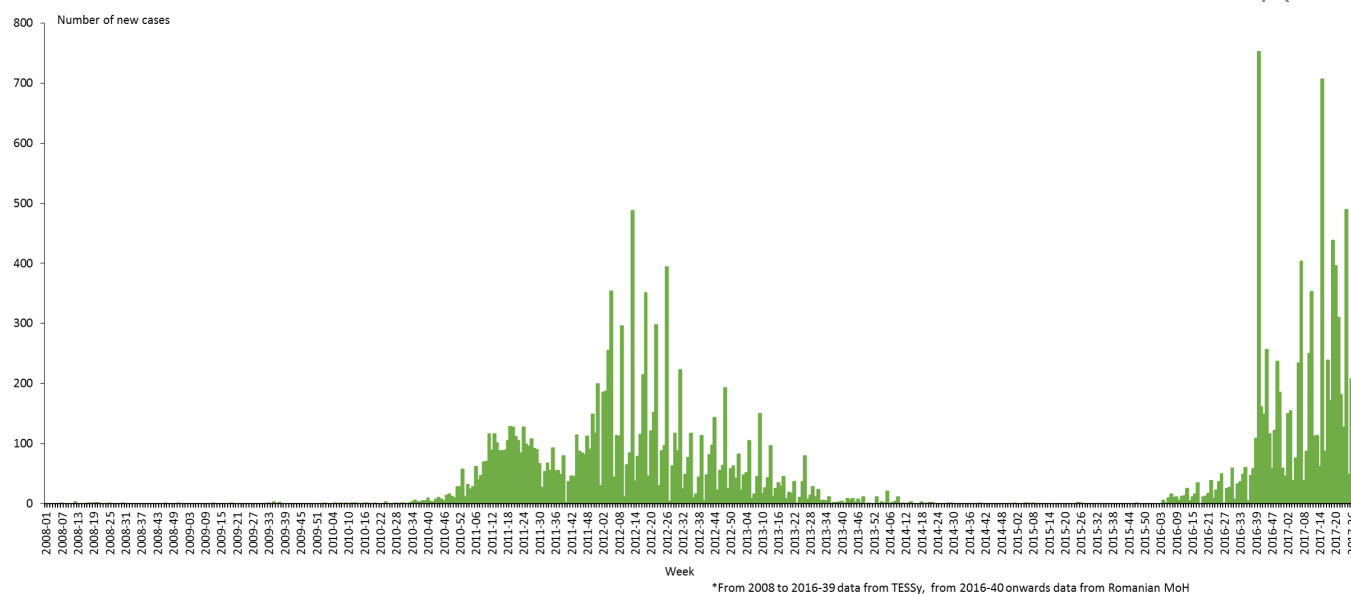
ECDC link: [Measles page](#)

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 measles outbreaks in Europe on a weekly basis and monitoring worldwide outbreaks on a monthly 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 2017-28, Romania

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



Rubella – Multistate (EU) – Monitoring European outbreaks

Opening date: 7 March 2012

Epidemiological summary

No new outbreaks have been detected in the EU since March 2017.

Web sources: [ECDC measles and rubella monitoring](#) | [ECDC rubella factsheet](#) | [WHO epidemiological brief summary tables](#) | [WHO epidemiological briefs](#) | [Progress report on measles and rubella elimination](#) | [European Regional Verification Commission for Measles and Rubella Elimination \(RVC\) \(2016\)](#)

ECDC assessment

The World Health Organization (WHO) has targeted the elimination of measles and rubella in the 53 Member States of the WHO European Region. Elimination is defined as the absence of endemic cases in a defined geographical area for a period of at least 12 months, in the presence of a well-performing surveillance system. Regional elimination can be declared after 36 or more months of the absence of endemic measles or rubella in all Member States of the WHO European Region. Although progress has been made towards elimination, this goal has not yet been achieved. The fifth Regional Verification Commission meeting was held 24-26 October 2016. According to the results, 24 countries in the WHO EURO Region are deemed to have eliminated rubella.

Web source: [WHO-EU](#)

Actions

ECDC closely monitors rubella transmission in Europe by analysing the cases reported to The European Surveillance System and through its epidemic intelligence activities. Twenty-four EU and two EEA countries contribute to the enhanced rubella surveillance. The purpose of the enhanced rubella surveillance is to provide regular and timely updates on the rubella situation in Europe in

support of effective disease control, increased public awareness, and achieving the target of rubella and congenital rubella elimination.

New! Cyclosporiasis –the UK – 2017

Opening date: 17 July 2017

Latest update: 21 July 2017

Epidemiological summary

On 14 July 2017, the UK notified, through the early warning and response platform (EWRS), an increase in travel-related cases of cyclosporiasis since the beginning of May 2017. From the beginning of the year to 19 July, 58 cases have been reported. Cases were equally distributed among females and males, mostly between 20 and 50 years of age. No children <15 years of age were reported. Information on travel history is known for 38 patients: 23 travelled to Mexico, 10 travelled to a range of other overseas destinations and five did not travel abroad. This is the third successive year that the UK has observed increases in cyclosporiasis around May and June and where most have been related to travel to Mexico.

In 2016, 440 cases were reported between June and October in the UK of which 359 reported travel to Mexico, mostly to the Riviera Maya and Cancun regions.

In 2015, 79 UK cases associated with a travel to Mexico were reported. Detailed food histories suggested that cases had consumed a variety of fresh foods including fruits, herbs and salads.

Cyclosporiasis is not a mandatory notifiable disease in most EU/EEA countries. In response to an alert launched by the UK in the Epidemic Intelligence Information System for Food- and Waterborne Diseases and Zoonoses (EPIS-FWD) in July 2017, Belgium reported four cases of cyclosporiasis notified in 2017, of which three had a travel history to Mexico.

In August 2016, in response to a previous alert in EPIS-FWD, France reported six confirmed and three probable cases in July and August 2016 in travellers returning from Mexico. In addition, according to a ProMed posting, two travellers from France, who visited Mexico in June 2017, were also diagnosed with *Cyclospora* infection shortly after return.

Source: [Promed](#) | [HPE](#) | [media](#) | [Eurosurveillance](#)

ECDC assessment

Healthcare providers should consider the diagnosis of cyclosporiasis in patients with travel history and prolonged watery diarrhoea and request specific tests for this parasite. Once an index case has been identified, health authorities should consider testing their travel contacts.

Even if cyclosporidiasis is not a notifiable disease, competent authorities could also consider encouraging healthcare providers to report the diagnosed infection to national surveillance authorities. National public health authorities may consider collecting information related to exposure history as well as region of travel of cyclosporiasis cases, as well as performing descriptive and analytical studies on travellers returning from the affected area.

Immunocompromised patients, particularly those infected with HIV and with HIV/TB co-infection are at increased risk of being infected and developing a more severe and prolonged disease.

The risk from *Cyclospora* infection amongst travellers to Mexico remains high due to the lack of confirmation of suspected vehicle (s) and related control measures.

Actions

In June 2017, ECDC and the UK alerted the EPIS-FWD members of the risk of cyclosporiasis in travellers returning from Mexico. ECDC is monitoring this event through epidemic intelligence and EPIS-FWD. ECDC prepared a rapid risk assessment which is published on ECDC website in July 2017.

Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 21 July 2017

Epidemiological summary

As of 19 July 2017, eight wild poliovirus cases were reported in 2017. In 2016, 19 cases were reported during the same period. In 2017, Afghanistan has reported five cases and Pakistan three cases. In 2017, 31 circulating vaccine-derived poliovirus type 2 (cVDPV2) cases have been reported, four from the Democratic Republic of Congo (DRC) and 27 from the Syrian Arab Republic. Of the 27 cases in Syria, all had onset of paralysis between 3 March and 6 June. Twenty-six of the cases are from Mayadeen, and one from Raqua governorate. Confirmation of additional cases is not unexpected at this time and would not change the operational situation, as outbreak response plans are being finalized, in line with internationally-agreed outbreak response protocols. 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.

Two outbreak response campaigns are planned covering both Deir-Al-Zour and Raqua, the first to commence on 22 July targeting 328,000 children aged less than five years in Deir-Al-Zour and 120,000 children in Raqua.

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. ECDC published a [risk assessment](#) in June 2014.

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, 1 556 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 758 cases as of 13 July 2017.

The 1 556 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 (7) 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

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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.

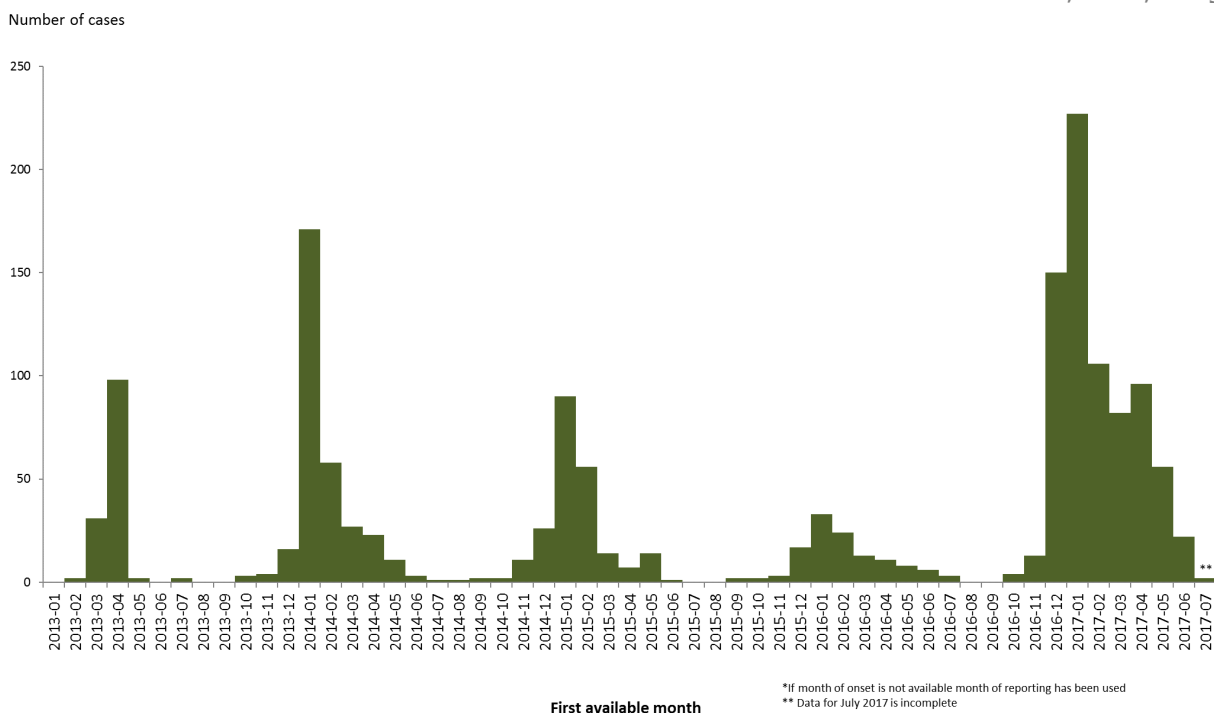
The possibility of humans infected with influenza A(H7N9) returning to the EU/EEA cannot be excluded. However, the risk of the disease spreading within Europe via humans is still considered low, as there is no evidence of sustained human-to-human transmission.

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. ECDC monitors this event through epidemic intelligence and will report on this event monthly.

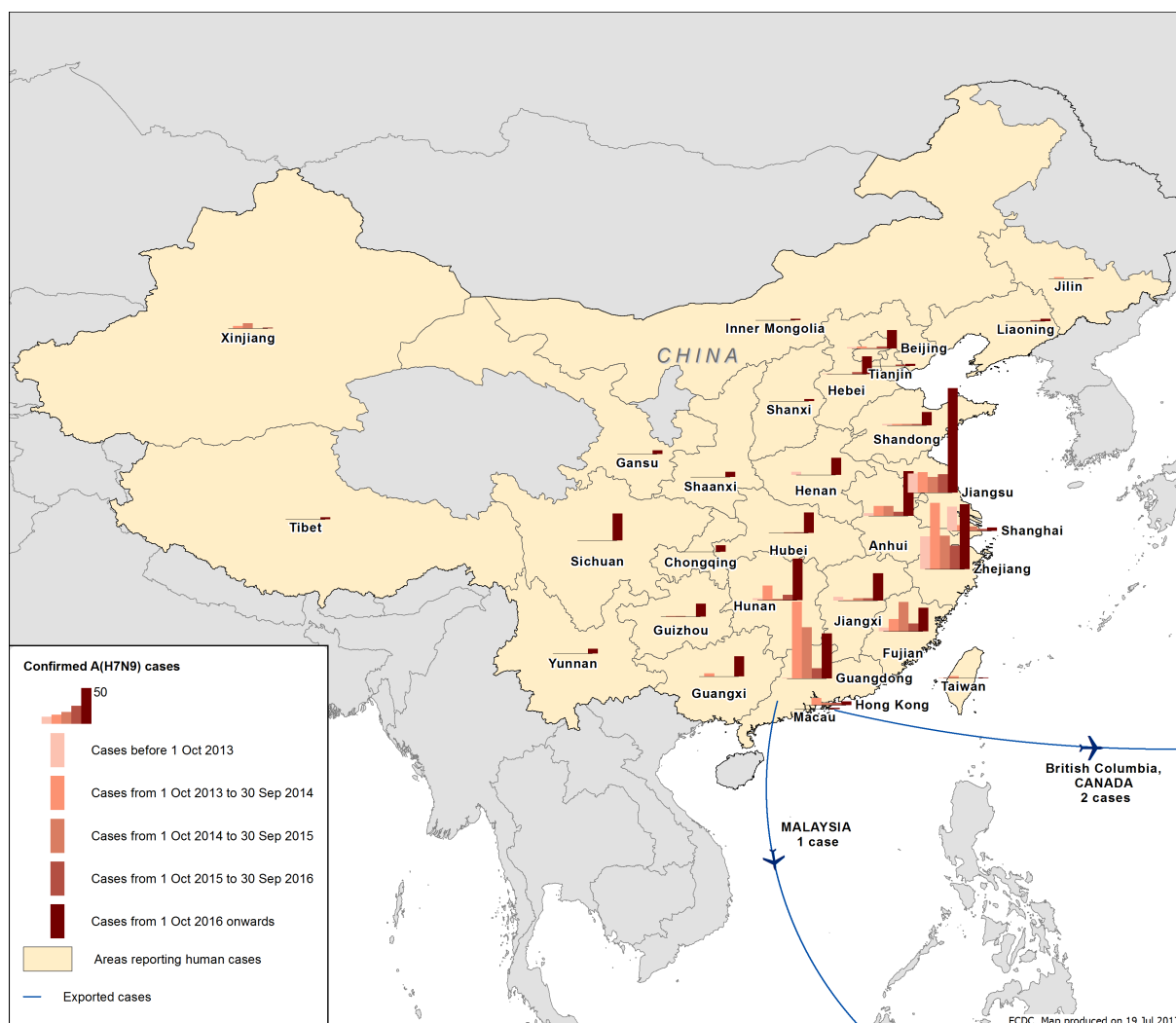
Distribution of confirmed cases of A(H7N9) by first available month, February 2013 to 19 July 2017

ECDC, WHO, Hong Kong MoH



Distribution of confirmed cases of A(H7N9) by five seasons, February 2013 to 19 July 2017

ECDC



Seasonal influenza – Asia - 2017

Opening date: 11 July 2017

Latest update: 21 July 2017

Epidemiological summary

In Hong Kong the latest surveillance data shows that the local influenza activity has further increased and is at a high level. Since 5 May and as of 19 July 2017, Hong Kong reported 297 cases of influenza-associated admission to the Intensive Care Unit, including 205 deaths. Most of the cases, 257, were due to A(H3N2).

In children, 23 cases of severe influenza-associated complications and four deaths have been detected so far in 2017, with 16 A (H3N2), six A(H1N1)pdm09, and one influenza B case.

Macau is experiencing a significant increase in influenza compared to the same period of last year. In week 2017-28, of the 127 respiratory tract samples collected, 57 had a positive reaction to the presence of the influenza virus, positivity rate of 45%, and of these 42 (74%) belong to influenza A(H3N2), 11 (20%) to influenza B and 4 (7%) to influenza A(H1N1)pdm09.

In Southern China as of 9 July, influenza activity continued to increase. The proportion of influenza-like illness (ILI) cases in

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emergency and outpatient departments reported by sentinel hospitals was 4.2% higher than that reported in the previous week (4%) and the corresponding period in 2014-2016 (3.5%, 3.9%, 3.3%). The proportion of influenza detections was 10.7%, slightly higher than 10.3% recorded in the previous week. Influenza A(H3N2) constituted 76.3% of the influenza detections.

In Taiwan the number of the influenza-positive specimens has decreased during the past two weeks. The majority of the circulating influenza virus type was A(H3N2), with 100% of the A(H3N2) viruses matching the 2016-17 influenza vaccine strain in the past four weeks. No antiviral resistance viruses were found in the circulating influenza viruses. During week 2017-28, both the numbers of reported and confirmed cases of severe complicated influenza were lower than the previous week. There were 110 newly confirmed severe complicated influenza cases and 11 reported deaths due to influenza infection. Since 1 July 2017, 1 093 severe complicated influenza cases have been confirmed, 108 of them died. Influenza A (H3N2) remained the dominant virus among severe cases with 83%. For Taiwan, the influenza activity has reached its peak and may decrease gradually. The occurrence of severe cases is expected to decline following the decrease of ILI.

[Hong Kong](#) | [Taiwan](#) | [Macau](#) | [China](#)

ECDC assessment

During the past months there has been an increase of seasonal influenza activity in some parts of Asia in Hong Kong, with some delay in Macau and Southern China, however the influenza activity is decreasing in Taiwan. In the all above mentioned countries the main circulating influenza virus type was A(H3N2).

Vaccination remains the best documented and most effective preventive measure against influenza.

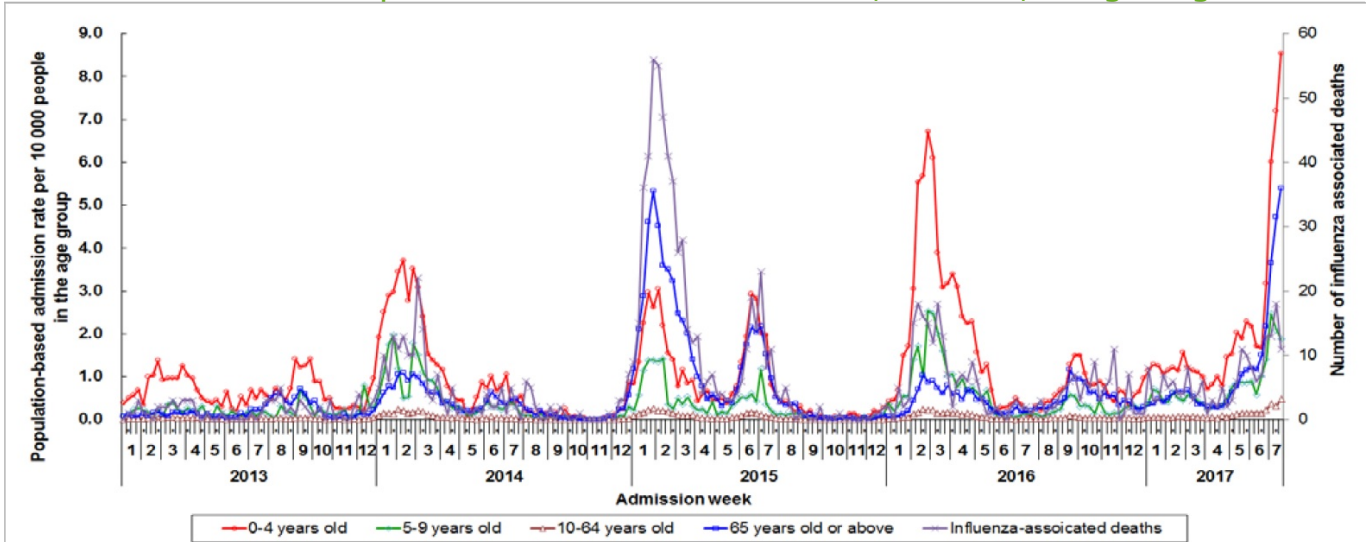
Early treatment and post-exposure prophylaxis with antivirals (neuraminidase inhibitors) can assist in protecting the elderly and people in risk groups for severe influenza illness. The circulating viruses analysed so far show susceptibility to the antiviral drugs oseltamivir and zanamivir. As advised during previous seasons, physicians should always consider early treatment (i.e. within 48 hours of symptom onset for oseltamivir and 36 hours for zanamivir) or post-exposure prophylaxis with neuraminidase inhibitors when treating influenza-infected patients and exposed individuals who belong to risk groups.

Self-isolation, hand-washing and good respiratory hygiene/cough etiquette are effective and simple measures recommended to reduce transmission and to protect individuals against infection. However, strict compliance to these measures is difficult to implement.

Actions

ECDC has been in contact with WHO and local health authorities for further information. ECDC monitors this event through epidemic intelligence.

Influenza associated hospital admission rates and deaths, 2013-17, Hong Kong



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