



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 7, 10-16 February 2019

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary EU Threats

New! Measles - Multistate (EU) ex France - 2019

Opening date: 14 February 2019 Latest update: 15 February 2019

In February 2019, France reported an outbreak of measles among workers and tourists at a ski resort in Val Thorens, France. Following this notification, other countries reported cases of measles in returning travellers from Val Thorens. Virus sequenced genotype has been shared between the countries.

Influenza - Multistate (Europe) - Monitoring season 2018 - 2019

Opening date: 8 October 2018 Latest update: 15 February 2019

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

→Update of the week

From 4–10 February 2019, influenza activity was widespread in the European Region.

Dengue – France, Réunion – 2019

Opening date: 13 March 2018 Latest update: 15 February 2019

Since the beginning of 2019, the island of Réunion, a French department in the Indian Ocean, has seen a significant increase in dengue cases.

→Update of the week

According to regional health authorities, Réunion has reported 476 cases of dengue since the beginning of 2019 and as of 3 February 2019. During the same period in 2018, Réunion reported approximately 45 cases.

According to <u>Santé publique France</u>, the epidemic is expanding and reaching areas that previously had not been affected.

Non EU Threats

Middle East respiratory syndrome coronavirus (MERS-CoV) - Multistate

Opening date: 24 September 2012

Latest update: 15 February 2019

Since the disease was first identified in Saudi Arabia in September 2012, more than 2 300 Middle East respiratory syndrome coronavirus (MERS-CoV) cases have been detected in 27 countries. In Europe, eight countries have reported confirmed cases, all with direct or indirect connections to the Middle East. The majority of MERS-CoV cases continue to be reported from the Middle East. The source of the virus remains unknown, but the pattern of transmission and virological studies point toward dromedary camels in the Middle East as a reservoir from which humans sporadically become infected through zoonotic transmission. Human-to-human transmission is amplified among household contacts and in healthcare settings.

→Update of the week

In 2019 and as of 13 February 2019, 66 MERS-CoV cases were reported in <u>Saudi Arabia</u> (60) and <u>Oman</u> (6), of which 53 were male and 13 were female. There were eight deaths in Saudi Arabia (6) and Oman (2). In Saudi Arabia, 29 cases were primary cases, 21 healthcare-acquired and 10 household contacts. Of the primary cases, 11 reported camel contact. The majority of the cases (85%) were reported in Wadi Aldwasir (37) and Riyadh (14).

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

Opening date: 1 August 2018

On 1 August 2018, the Ministry of Health of the Democratic Republic of the Congo declared the 10th outbreak of Ebola virus disease in the country. The outbreak affects North Kivu and Ituri Provinces in the northeast of the country close to the border with Uganda. On 17 October 2018, the International Health Regulations Emergency Committee concluded that the epidemic does not at this stage constitute a public health emergency of international concern.

→Update of the week

Since the previous CDTR, the Ministry of Health of the Democratic Republic of the Congo has reported 38 additional cases and one new health zone affected (Bunia, Ituri Province).

As of 13 February 2019, according to the Ministry of Health of the Democratic Republic of the Congo, there have been 829 Ebola virus disease cases (768 confirmed, 61 probable), including 521 deaths (460 in confirmed and 61 in probable cases), since the beginning of the outbreak.

As of 14 February 2019, according to WHO outbreak news, 68 healthcare workers have been infected to date.

Influenza A(H9N2) - Multistate (World) - Monitoring human cases

Opening date: 30 January 2019

Latest update: 15 February 2019

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

→Update of the week

On 1 February 2019, one additional case of human infection with H9N2 avian influenza was confirmed in Hunan Province, China. The patient is a 2-year-old male who developed symptoms on 27 November 2018. He had mild illness and no clear history of live poultry exposure.

II. Detailed reports

New! Measles - Multistate (EU) ex France - 2019

Opening date: 14 February 2019 Latest update: 15 February 2019

Epidemiological summary

On 11 February 2019, France reported an outbreak of measles at a popular ski resort in Val Thorens, France. As of 14 February 2019, 5 confirmed and 20 suspected cases have been reported by France, mainly among ski resort workers, as well as a five-month-old child. Cases were either unvaccinated or incompletely vaccinated. The first case developed symptoms on 21 January 2019 and the following cases developed symptoms during the first week of February 2019. Three cases were confirmed by PCR and one by serology. Virus sequences have been uploaded to the WHO MeaNS database. So far, there were no severe cases reported by France.

Following the French notification, measles cases have also been reported by other countries.

Denmark reported two PCR-confirmed measles cases in returning travellers on 13 February 2019: a young adult male and a middle-aged woman who stayed in Val Thorens in January 2019, but in different weeks.

The virus from both cases has been identified as genotype D8 with 100% similarity and sequences have been uploaded to the WHO MeaNS database. The Danish healthcare authority expressed interest for the results of any virus characterization from the cases diagnosed in France.

In addition, two suspected cases in returning travellers from the ski resort have been reported by **UK (Scottish)** and **Belgian** health authorities (one case each).

As of 14 February 2019, there have been 28 cases of measles possibly related to the outbreak in Val Thorens, France, reported by four countries: France (5 confirmed, 20 suspected), Denmark (2 confirmed), UK-Scotland (1 suspected) and Belgium (1 suspected).

Sources: Santé publique France | Outbreak News Today | Statens Serum Institut

ECDC assessment

Additional cases linked to the ski resort at Val Thorens are likely to occur. The resort is very busy at this time of the year due to French school holidays starting on 9 February 2019 and has many foreign visitors, especially from the Netherlands, the UK and Scandinavia. People planning to visit the affected area are advised to consult their healthcare provider if they are uncertain about their vaccination status. Vaccination with two doses of measles-containing vaccine is advised. Particular care is recommended if travelling with infants under one year of age or those for whom vaccination is contraindicated, who will be at increased risk of infection and possible complications. For a more complete assessment, see ECDC 'Risk of measles transmission in the EU/EEA' published on 21 March 2018.

Actions

ECDC monitors this event through epidemic intelligence activities. ECDC monitors measles situation and reports on a monthly basis.

Influenza - Multistate (Europe) - Monitoring season 2018 - 2019

Opening date: 8 October 2018 Latest update: 15 February 2019

Epidemiological summary

Weekly overview

From 4–10 February 2019, influenza activity was widespread in the European Region. Specimens collected from individuals presenting with influenza-like illness or acute respiratory infection to sentinel primary healthcare sites yielded an influenza virus positivity rate of 53%, slightly lower than the previous week (58%).

Influenza type A virus detections dominated, with A(H1N1)pdm09 viruses and A(H3N2) viruses co-circulating. Few influenza B

viruses were detected.

A total of 46% of specimens from patients hospitalised with severe acute respiratory infection (SARI) collected in week 6 of 2019 were positive for influenza virus and all were type A.

Pooled data from 24 Member States and areas reporting to the EuroMOMO project indicated excess mortality, mostly among the elderly aged 65 years and above, but also in individuals in the age group 15–64 years. However, this result was driven by data only from certain countries.

2018-2019 season overview

Influenza activity in the European region based on sentinel sampling exceeded a positivity rate of 10% in week 49 of 2018 and has increased continuously into week 5 of 2019, after which it began to drop. The positivity rate has exceeded 50% since week 3 of 2019.

Both influenza A virus subtypes are circulating widely, with co-circulation in certain countries, while others report dominance of either A(H1N1)pdm09 or A(H3N2) viruses. Countries should continue to promote vaccination. In addition, countries are encouraged to use antivirals in accordance with national guidelines.

Among hospitalised influenza virus-infected patients admitted to ICU wards, 40% of influenza A virus detections were subtyped. Of these, 78% were A(H1N1)pdm09 virus. Among influenza virus-infected patients admitted to other wards, 28% of influenza A virus detections were subtyped and 71% were A(H1N1)pdm09 virus.

Over 90% of influenza A virus-positive cases detected from SARI surveillance since week 40 of 2018 were subtyped and 81% had the A(H1N1)pdm09 virus.

In general, current influenza vaccines tend to work better against influenza A(H1N1)pdm09 and influenza B viruses than against influenza A(H3N2) viruses. Interim estimates from <u>Canada</u> and <u>Hong Kong</u> show good effectiveness at preventing A(H1N1)pdm09 infections, while estimates from the <u>CDC</u> suggest 47% overall vaccine effectiveness against all influenza virus infection associated with medically attended acute respiratory infection. Real-time estimates from <u>Sweden</u> and <u>Finland</u> suggest overall vaccine effectiveness of 33% for the elderly. For children, the CDC and Finnish estimates suggest overall vaccine effectiveness of 61–66%.

High vaccine effectiveness against A(H1N1)pdm09 viruses is consistent with genetic characterisation reports indicating that all circulating viruses belong to clade 6B.1 and remain antigenically similar to the vaccine virus despite the emergence of a number of subgroups. The lower vaccine effectiveness against A(H3N2) viruses likely reflects the circulation of multiple genetic clades, some of which contain viruses that display low antigenic similarity to the vaccine virus, particularly with egg-propagated compared to cell culture-propagated vaccine virus.

Source: Flu News Europe | EuroMOMO

ECDC assessment

Influenza activity and geographic spread remain at seasonally expected levels. Influenza A(H3N2) and A(H1N1)pdm09 cocirculate in Europe. Influenza vaccine coverage among the elderly, chronic disease risk groups and healthcare workers was suboptimal in most EU Member States, according to the VENICE report. Influenza vaccination efforts should continue in the EU.

Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the <u>Flu News Europe</u> website.

Recommendations on the composition of the 2018–2019 influenza virus vaccine are available from the WHO website.

Dengue - France, Réunion - 2019

Opening date: 13 March 2018 Latest update: 15 February 2019

Epidemiological summary

According to <u>Agence de Santé Océan Indien</u>, Réunion has reported 476 cases of dengue since the beginning of 2019 and as of 3 February 2019. Réunion reported 6 770 cases in 2018, according to <u>Santé publique France</u>. The circulating serotype in 2018 and 2019 is DENV-2.

Source: Agence de Santé Océan Indien

ECDC assessment

An increased number of dengue cases has been observed in Réunion in the first weeks of 2019 that will likely continue in the coming weeks. The risk for onward transmission of dengue fever in Europe is linked to importation of the virus by viraemic travellers into receptive areas with established and active competent vectors (i.e. *Aedes albopictus* in mainland Europe, mainly around the Mediterranean Sea and *Aedes aegypti* on the island of Madeira). Environmental conditions in Europe are currently unfavourable for the growth of mosquito populations, so the likelihood of sustained autochthonous dengue virus transmission in continental Europe associated with the introduction by a returning traveller is very low.

Actions

ECDC monitors this outbreak through epidemic intelligence. ECDC published a rapid risk assessment, ' $\underline{\text{Dengue outbreak in }}$ Réunion, France – First update', on 6 July 2018.

Middle East respiratory syndrome coronavirus (MERS-CoV) - Multistate

Opening date: 24 September 2012 Latest update: 15 February 2019

Epidemiological summary

In 2019 and as of 13 February 2019, 66 MERS-CoV cases were reported in Saudi Arabia (60) and Oman (6), of which 53 were male and 13 were female. There were eight deaths in Saudi Arabia (6) and Oman (2). In Saudi Arabia, 29 cases were primary cases, 21 healthcare-acquired and 10 were household contacts. Of the primary cases, 11 reported camel contact. The majority of the cases (85%) were reported in Wadi Aldwasir (37) and Riyadh (14).

Since April 2012 and as of 13 February 2019, 2 361 cases of MERS-CoV, including 858 deaths, have been reported by health authorities worldwide.

Sources: ECDC MERS-CoV page | WHO MERS-CoV | WHO MERS-CoV updates | ECDC factsheet for professionals

ECDC assessment

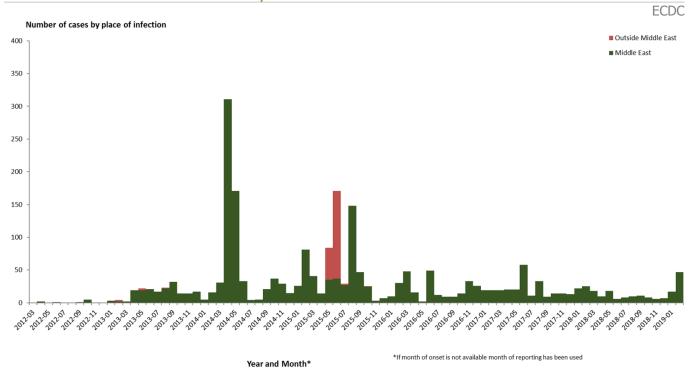
The risk of sustained human-to-human transmission in Europe remains low. ECDC's assessment remains that the MERS-CoV outbreak poses a low risk to the EU, as stated in the <u>rapid risk assessment</u> published on 29 August 2018, which also provides details on the last case reported in Europe.

On 2 August 2018, ECDC published a <u>rapid risk assessment regarding public health risks related to communicable diseases during the 2018 Hajj, Saudi Arabia, 19–24 August 2018</u> addressing MERS-CoV.

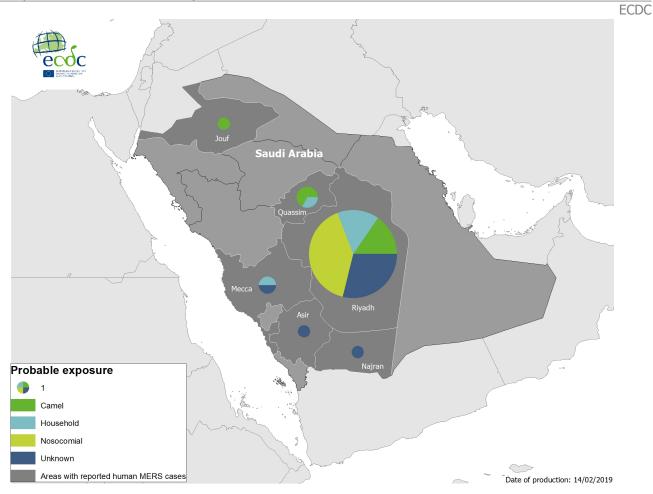
Actions

ECDC monitors this threat through epidemic intelligence and will report on a weekly basis.

Distribution of confirmed cases of MERS-CoV by first available month and region, from March 2012 and as of 13 February 2019



Geographical distribution of confirmed MERS-CoV cases by country of infection and year, from April 2012 to 31 January 2019



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

Opening date: 1 August 2018

Epidemiological summary

Since the beginning of the outbreak and as of 13 February 2019, there have been 829 Ebola virus disease cases (768 confirmed, 61 probable), including 521 deaths (460 in confirmed and 61 in probable cases), according to the Ministry of Health of the Democratic Republic of the Congo.

Nineteen health zones in two provinces have reported confirmed or probable Ebola virus disease cases: Beni, Biena, Butembo, Kalunguta, Katwa, Kayna, Kyondo, Mabalako, Mangurujipa, Masereka, Musienene, Mutwanga, Oicha and Vuhovi health zones in North Kivu Province and Bunia, Komanda, Mandima, Nyankunde and Tchomia health zones in Ituri Province.

Source: Ministry of Health of the Democratic Republic of the Congo

As of 31 January 2019, according to the WHO Disease outbreak news, 68 healthcare workers have been infected to date.

ECDC assessment

ECDC assessment: Response measures remain challenging in affected areas because of the prolonged humanitarian crisis, unstable security situation, resistance among the population and recent general election. The fact that the outbreak is ongoing in areas with cross-border population flow with Rwanda, South Sudan and Uganda remains of particular concern.

A substantial proportion of cases remain among individuals not previously identified as contacts, stressing the need to maintain enhanced surveillance and identify chains of transmission.

The overall risk of introduction and further spread of Ebola virus disease within the EU/EEA is very low. However, the risk can only be eliminated by stopping transmission at the local level.

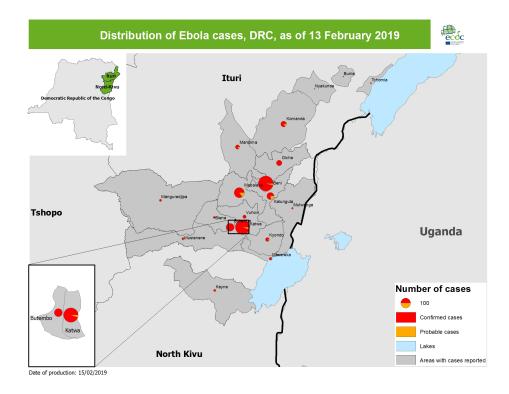
WHO assessment: As of 7 February 2019, the <u>WHO assessment</u> is that the risk of spread is low at the global level, but remains very high at national and regional levels.

Actions

ECDC published the third update of the <u>rapid risk assessment</u> on 14 February 2019. ECDC also published an <u>epidemiological update</u> on 25 January 2019.

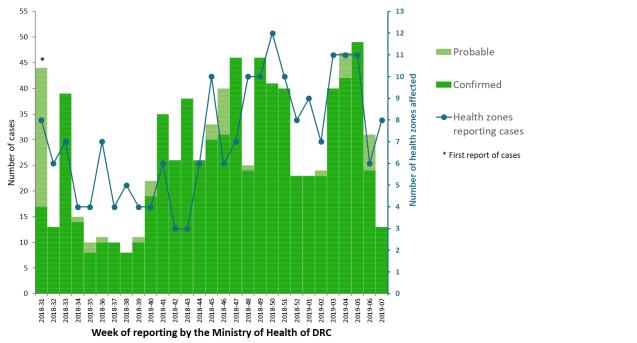
Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 13 February 2019

ECDC



Distribution of confirmed and probable cases of Ebola Virus Disease and health zones reporting cases, North Kivu and Ituri, Democratic Republic of the Congo, as of 13 February 2019





The MoH of DRC are currently conducting data cleaning. Thus, these figures are likely to change over coming days as cases are being reclassified.

Influenza A(H9N2) - Multistate (World) - Monitoring human cases

Opening date: 30 January 2019 Latest update: 15 February 2019

Epidemiological summary

Since 1998 and as of 12 February 2019, 50 laboratory-confirmed cases of human infection with AI A(H9N2) virus, including one death, have been reported globally. Cases occurred in China (43), Egypt (4) and Bangladesh (3). Additionally, one case has been detected in Pakistan in 2015, according to literature.

Sources: ECDC avian influenza page | WHO avian and other zoonotic influenza page | ECDC/EFSA joint report: Avian influenza overview August – November 2018

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.

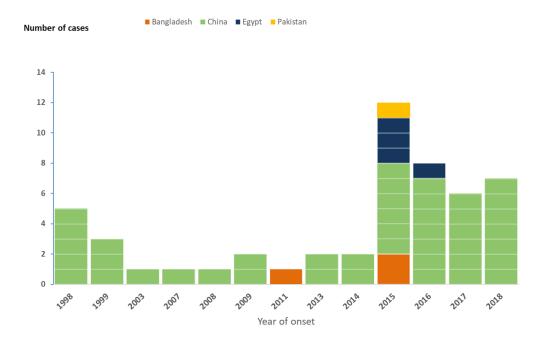
The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to remain very low. As the likelihood of zoonotic transmission of newly introduced or emerging reassortant avian influenza viruses is unknown, the use of personal protective measures for people exposed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

Actions

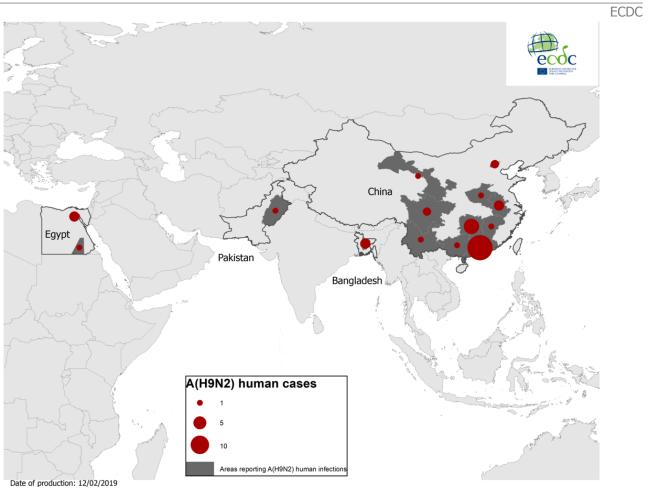
ECDC monitors avian influenza strains through epidemic intelligence in order to identify significant changes in the epidemiology of the virus. ECDC together with EFSA and the EU reference laboratory for avian influenza produce a quarterly updated report of the <u>avian influenza situation</u> and the last <u>report</u> was published on 18 December 2018.

Distribution of confirmed human cases of A(H9N2) by reporting country, since 1998 and as of 12 February 2019

ECDC



Geographical distribution of confirmed human cases of A(H9N2), 1998 - 12 February 2019



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