

This weekly bulletin provides updates on threats monitored by ECDC.

NEWS

New e-learning course and operational tool for development of rapid risk assessments

ECDC launched a new e-learning course on 14 March 2019 on rapid risk assessments (RRA), as well as an operational tool that describes the RRA methodology used by ECDC. The course and the tool support public health experts responsible for developing RRAs at the European, national or sub-national level.

Participants will learn about the steps in RRA production and explore the checklists to ensure that all the required information is being considered, as well as algorithms for assessing probability and impact.

The course is self-paced with no specific starting date and the estimated duration is between 3–5 hours of active learning. Those interested can [enrol at ECDC's Virtual Academy platform](#) for full access.

[Operational tool on rapid risk assessment methodology](#)

I. Executive summary

EU Threats

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

Opening date: 8 October 2018

Latest update: 15 March 2019

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

→ Update of the week

Influenza activity was widespread in the European Region. Specimens collected from individuals presenting with influenza-like illness or acute respiratory infection to sentinel primary health care sites yielded an influenza virus positivity rate of 42.8%.

Influenza type A virus detections dominated, with slightly more A(H1N1)pdm09 than A(H3N2) viruses. Very few influenza B viruses were detected.

In week 10 of 2019, 28.3% of specimens from patients with severe acute respiratory infection (SARI) tested positive for influenza virus and almost all were type A.

Pooled data from 22 Member States and areas reporting to the EuroMOMO project indicated that the excess mortality observed in previous weeks continued to decline. Excess mortality was seen in persons aged 65 years and above and to a lesser extent in the age group 15–64 years.

Rift Valley fever (RVF) – France (Mayotte) – 2019

Opening date: 31 January 2019

Latest update: 15 March 2019

Since November 2018, Rift Valley fever cases in human and animals have been reported across Mayotte, France. These are the first human cases reported in Mayotte in several years.

→Update of the week

According to the [Agence de Santé Océan Indien](#) report with data as of 8 March 2019, 6 new human cases have been reported in Mayotte since the last CDTR update.

Furthermore, samples taken by veterinarians from sick animals or abortions during the same time period have identified 13 additional epizootic foci of Rift Valley fever in Mayotte.

Non EU Threats

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

Opening date: 24 September 2012

Latest update: 15 March 2019

Since the disease was first identified in Saudi Arabia in April 2012, more than 2 400 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 12 March 2019, 112 MERS-CoV cases have been reported in [Saudi Arabia](#) (99) and [Oman](#) (13). There were also 22 deaths in Saudi Arabia (18) and Oman (4). In Saudi Arabia, 36 cases were primary (20 of whom reported contact with camels), 31 were healthcare-acquired, 18 were household contacts and 14 cases are under investigation. The majority of cases in Saudi Arabia (76%) were reported in Wadi Aldwasir (56) and Riyadh (19). Six regions are affected with cases from the last 21 days and 10 of 13 regions in Saudi Arabia have reported cases in 2019.

According to a [ProMED-mail post](#), the transmission of MERS-CoV in Wadi Aldwasir continues in this area with a total of 57 cases (one from Riyadh attributed to this outbreak). In addition, there is an ongoing cluster in Khamees Meshait, Asir Region, with a primary case who died and three secondary cases.

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

Opening date: 1 August 2018

Latest update: 15 March 2019

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 19 additional cases, including 13 additional deaths, among confirmed cases. In the past week, autochthonous cases have been reported for the first time in Lubero health zone.

Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 15 March 2019

Global public health efforts are ongoing 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. In June 2002, the WHO European Region was officially declared polio-free.

→ Update of the week

Since the CDTR published on 8 February 2019, four new cases of wild poliovirus type 1 have been reported in Pakistan (3) and Afghanistan (1).

On 1 February 2019, the [International Health Regulations Emergency Committee](#) agreed that the spread of poliovirus remains a PHEIC and extended temporary recommendations for an additional three months.

II. Detailed reports

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

Opening date: 8 October 2018

Latest update: 15 March 2019

Epidemiological summary

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, exceeded 50% between weeks 3–7 of 2019 and peaked in week 5 of 2019.

Both influenza A virus subtypes circulate widely, with co-circulation in certain countries, while others report dominance of either A (H1N1)pdm09 or A(H3N2) viruses.

Among hospitalised influenza virus-infected patients admitted to ICU wards, 41% of influenza A viruses were subtyped. Of these, 72% were A(H1N1)pdm09 viruses. Among influenza virus-infected patients admitted to other wards, 35% of influenza A viruses were subtyped and 63% were A(H1N1)pdm09 viruses.

Over 90% of influenza A virus-positive cases detected from SARI surveillance since week 40 of 2018 were subtyped and 81% were 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 and preliminary vaccine effectiveness estimates continue to support the use of vaccines. Early data suggest vaccines are effective and estimates vary depending on the population studied and proportions of circulating influenza A virus subtypes. Refer to data from [six European studies](#), [Canada](#), [Finland](#), [Hong Kong](#), [Sweden](#) and the [United States](#).

On 21 February 2019, [WHO published recommendations](#) for the influenza vaccine composition to be used in the 2019–2020 northern hemisphere season. The recommendation remained unchanged for B strains, was updated for A(H1N1)pdm09 and postponed to 21 March 2019 for A(H3N2).

A recent summary of regional activity from October 2018–February 2019 was published in [Eurosurveillance](#) on 28 February 2019.

Circulating viruses remain susceptible to neuraminidase inhibitors supporting use of antiviral treatment according to national guidelines.

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

ECDC assessment

Influenza activity and geographic spread remain at seasonally expected levels. Influenza A(H3N2) and A(H1N1)pdm09 co-circulate 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 [Flu News Europe website](#).

Recommendations on the composition of the 2018–2019 influenza virus vaccine are available from the [WHO](#) website.

Rift Valley fever (RVF) – France (Mayotte) – 2019

Opening date: 31 January 2019

Latest update: 15 March 2019

Epidemiological summary

According to French authorities, from 22 November 2018–8 March 2019, 88 human cases and no deaths have been reported in Mayotte. Among 63 cases with available information on gender and age, the majority of the cases were male, with a male-to-female ratio of 4:1 and age range of 10–74 years. All 63 cases were locally acquired.

Further investigations identified 52 epizootic foci of Rift Valley fever, comprising one to six animals, including bovines (42) and small ruminants (10).

Most of the Rift Valley fever cases are concentrated mainly in the Centre-West and North areas of Mayotte.

According to the French Agricultural Research Centre for International Development, Rift Valley fever seroprevalence among ruminants has decreased from 2008–2017, but increased significantly in 2017 and 2018 (3.6%, IC95% [2.3%–5.6%]) and 2018 and 2019 (10.1%, IC95% [6.5%–15.3%]).

Sources: [Agence de Santé Océan Indien](#) | [Agence de Santé Océan Indien](#) | [Emerging Infectious Diseases](#) | [Emerging Infectious Diseases](#) | [Université de la Réunion](#) | [OIE](#) | [WAHIS](#)

ECDC assessment

The detection of autochthonous cases in Mayotte is not unexpected, but the occurrence of 88 human cases within a short time period is of concern as the current weather conditions (rainy season from November–March) are favourable for vectors.

The risk of cases being imported into the EU is not new, as Rift Valley fever is endemic in many African countries. Sporadic importation of cases into the EU has occurred in the past years. To date, no autochthonous cases have been reported in the continental EU/EEA countries.

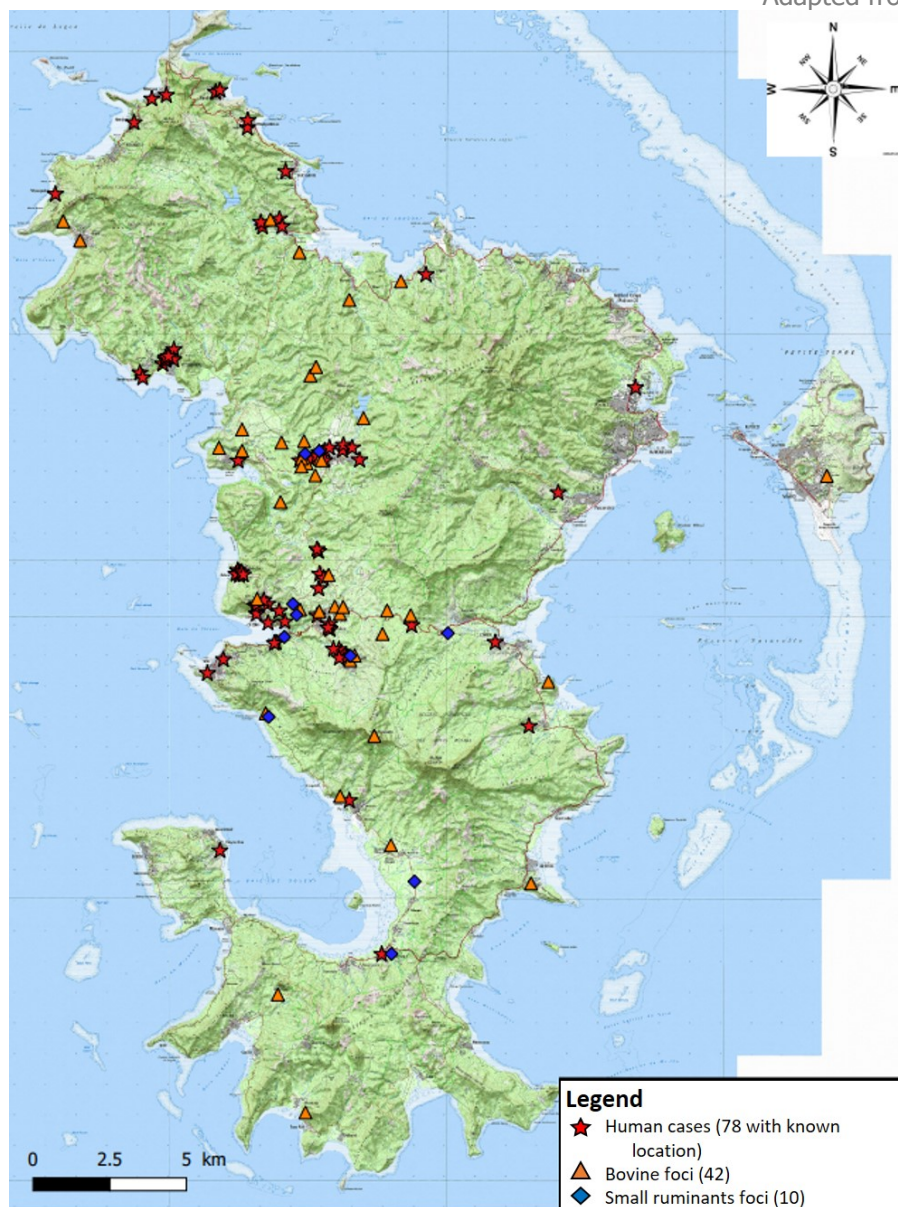
EU Member States should maintain awareness of the situation in Africa and continue to include Rift Valley fever in differential diagnosis for sick returning travellers, as importation of cases from Mayotte cannot be excluded.

Actions

ECDC published a [rapid risk assessment on Rift Valley fever in Mayotte \(France\)](#) on 7 March 2019. ECDC will continue monitoring this event through epidemic intelligence activities and report again if there is a relevant epidemiological update.

Geographic distribution of human cases (stars) and epizootic foci in bovines (triangles) and small ruminants (diamonds) of RVF in Mayotte, from 22 November 2018 to 07 March 2019.

Adapted from Agence de Santé Océan Indien



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

Opening date: 24 September 2012

Latest update: 15 March 2019

Epidemiological summary

In 2019 and as of 12 March 2019, 112 MERS-CoV cases have been reported in Saudi Arabia (99) and Oman (13). There were also 22 deaths in Saudi Arabia (18) and Oman (4). In Saudi Arabia, 36 cases were primary (20 of whom reported contact with camels), 31 were healthcare-acquired, 18 were household contacts and 14 cases are under investigation. The majority (76%) of cases in Saudi Arabia were reported in Wadi Aldwasir (56) and Riyadh (19).

Since April 2012 and as of 12 March 2019, 2 409 cases of MERS-CoV, including 871 deaths, have been reported by health authorities worldwide.

Sources: [ECDC MERS-CoV page](#) | [WHO MERS-CoV](#) | [ECDC factsheet for professionals](#) | [Saudi Arabia Ministry of Health](#)

ECDC assessment

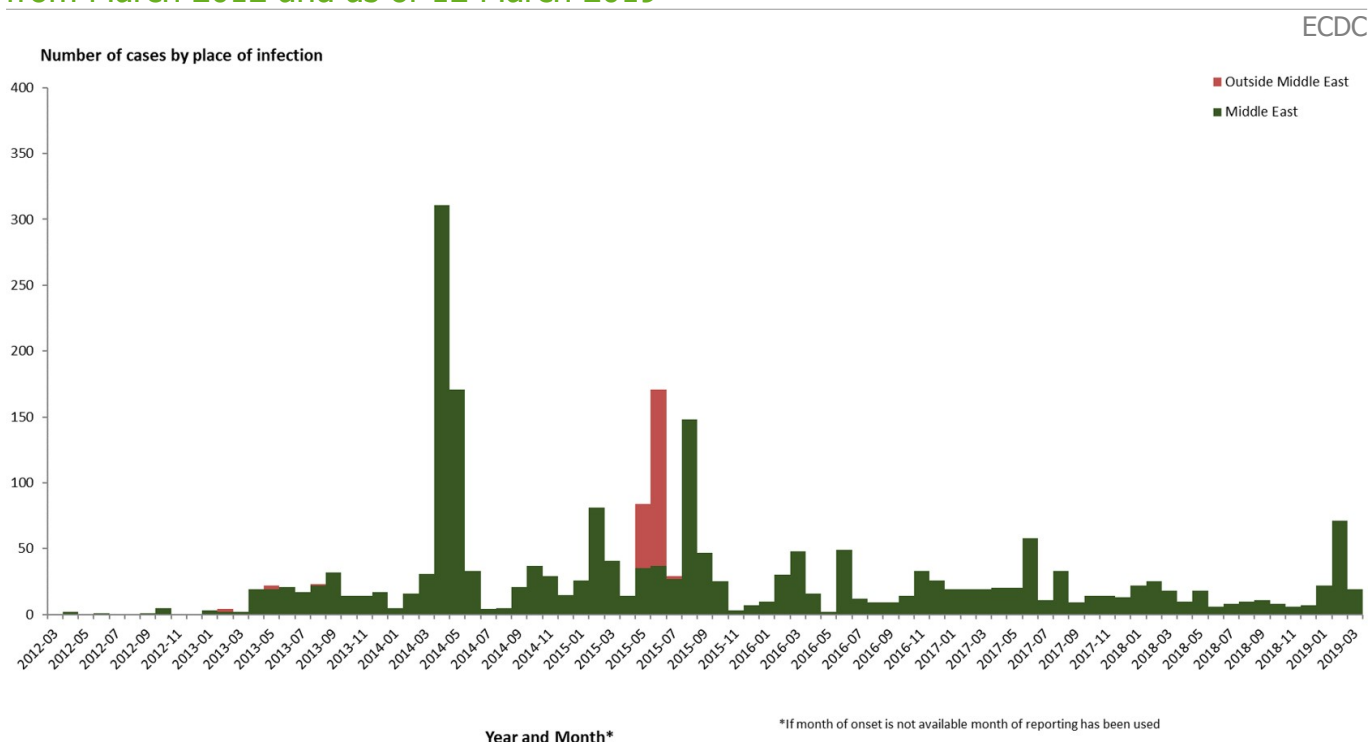
The risk of sustained human-to-human transmission in Europe remains low. ECDC's assessment remains that the MERS-CoV outbreak poses a low risk to the EU, as stated in the [rapid risk assessment](#) published on 29 August 2018, which also provides details on the last case reported in Europe.

On 2 August 2018, ECDC published a [rapid risk assessment regarding public health risks related to communicable diseases during the 2018 Hajj, Saudi Arabia, 19–24 August 2018](#) that also addresses MERS-CoV.

Actions

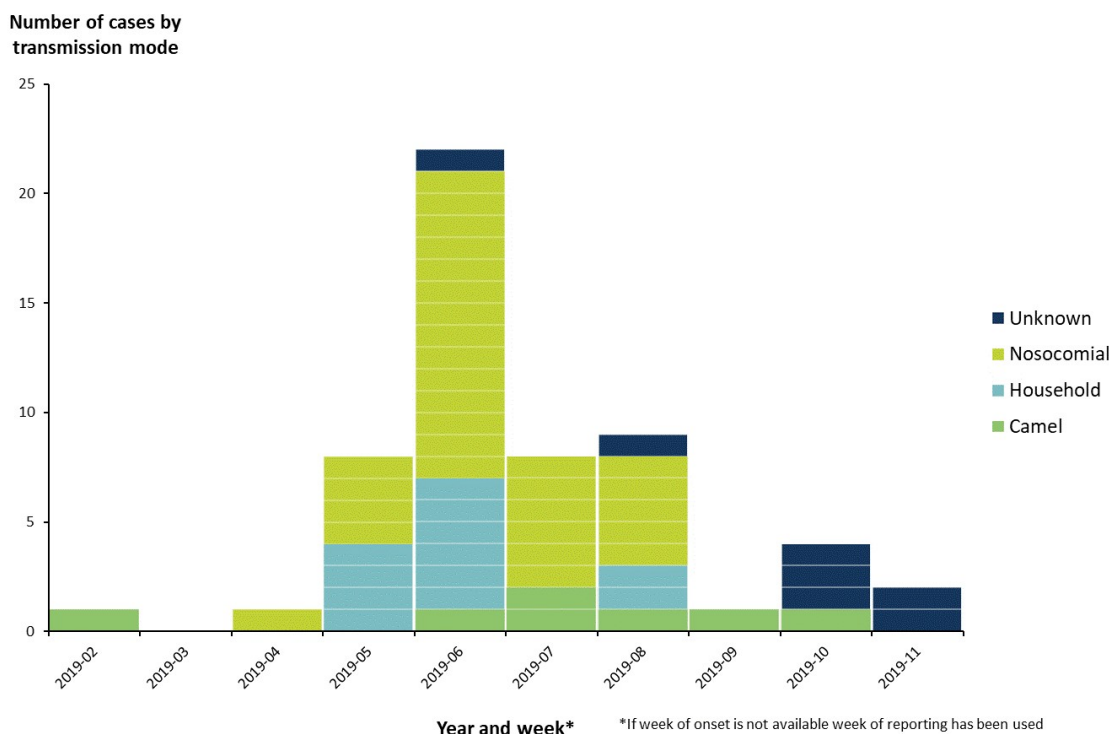
ECDC monitors this threat through epidemic intelligence and reports on a weekly basis.

Distribution of confirmed cases of MERS-CoV by place of infection and month of onset, from March 2012 and as of 12 March 2019



Distribution of confirmed cases of MERS-CoV in Wadi Aldwasir, Saudi Arabia, in 2019 by mode of transmission and week of onset/reporting, as of 12 March 2019.

ECDC



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

Opening date: 1 August 2018

Latest update: 15 March 2019

Epidemiological summary

Since the beginning of the outbreak and as of 13 March 2019, there have been 932 cases (867 confirmed, 65 probable), including 587 deaths (522 confirmed, 65 probable), according to the Ministry of Health of the Democratic Republic of the Congo.

According to the [WHO Regional Office for Africa](#), 74 healthcare workers have been infected as of 13 March 2019, including 26 deaths.

Twenty health zones in two provinces have reported confirmed or probable Ebola virus disease cases: Beni, Biena, Butembo, Kalunguta, Katwa, Kayna, Kyondo, Lubero, 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.

According to the [WHO disease outbreak news update](#) published on 14 March 2019, attacks on emergency treatment centres in Butembo and Katwa, persistence of resistance and mistrust, political tension and insecurity have resulted in recurrent temporary suspension and delays in case investigation and response activities. These events occur amidst declining trends in case incidence; however, the high proportion of community deaths reported among confirmed cases, persistent delays in detection and isolation and challenges in the timely reporting and response to probable cases collectively increase the likelihood of further chains of transmission in affected communities and increased risk of geographical spread within the Democratic Republic of the Congo and to neighbouring countries.

Source: [Ministry of Health of the Democratic Republic of the Congo](#)

ECDC assessment

ECDC assessment: Response measures remain challenging in affected areas because of the prolonged humanitarian crisis, unstable security situation and resistance among the population. 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 continue to be among individuals not previously identified as contacts, highlighting the need to maintain enhanced surveillance in order to 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.

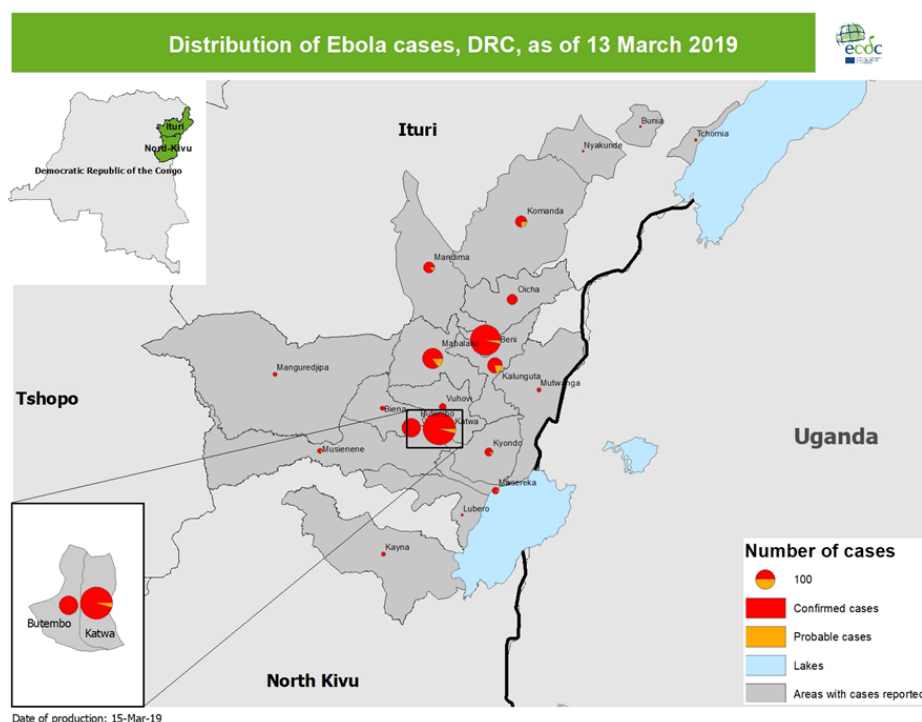
WHO assessment: As of 7 February 2019, the [WHO assessment](#) is that the risk of spread is low at the global level, but remains very high at national and regional levels.

Actions

ECDC published an epidemiological update on 25 January 2019 and the third update of a [rapid risk assessment](#) on 13 February 2019.

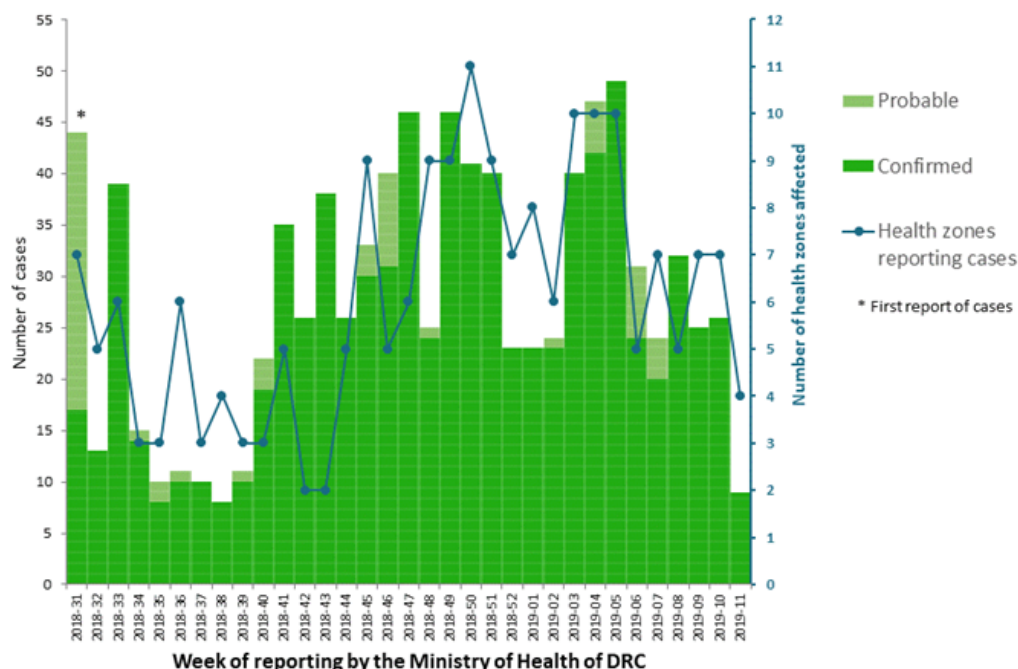
Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 13 March 2019

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 March 2019

ECDC



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

Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 15 March 2019

Epidemiological summary

In 2019 and as of 6 March 2019, six wild poliovirus type 1 cases have been reported in Afghanistan (2) and Pakistan (4). Additionally, Nigeria has reported one case of circulating vaccine-derived poliovirus type 2 (cVDPV2).

Sources: [Polio eradication: weekly update](#) | [ECDC poliomyelitis page](#) | [Polio interactive map](#)

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.

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

Actions

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

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

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