COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 5, 27 January-2 February 2019

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

New! Salmonella Poona in infant products - France and Spain - 2018 - 2019

Opening date: 28 January 2019 Latest update: 1 February 2019

Santé publique France has reported cases of *Salmonella* Poona in infants with genome sequences (cgMLST) belonging to the same cluster. All patients consumed infant formula from the same brand before developing symptoms.

➔Update of the week

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

Opening date: 31 January 2019 Latest update: 1 February 2019

In December 2018 and January 2019, authorities reported an increase of Rift Valley fever cases in human and animals on Mayotte. These are the first human cases reported on Mayotte for several years.

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

Opening date: 8 October 2018 Latest update: 1 February 2019

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

➔Update of the week

During week 4 of 2019, influenza activity remained relatively stable in the European Region. Samples collected from individuals presenting with influenza-like illness (ILI) or acute respiratory infection (ARI) to sentinel primary health care sites yielded an influenza positivity rate of 51.3%.

Non EU Threats

New! Yellow fever - Brazil - 2019

Opening date: 29 January 2019 Latest update: 1 February 2019

Yellow fever is a mosquito-borne viral infection that occurs in certain tropical areas of Africa and South America. Brazil has experienced a major outbreak of yellow fever since 2016. An upsurge of confirmed cases have been reported since mid-December 2017.

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

Opening date: 30 January 2019 Latest update: 1 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 3 January 2019, one case of human infection with H9N2 avian influenza was confirmed in Guangdong Province, China. The patient is a 32-year-old woman who lives in Shenzhen and developed symptoms on 19 December 2018. She was admitted to the hospital on 25 December 2018, but the illness was mild.

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

Opening date: 1 August 2018 Latest update: 1 February 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 44 additional cases.

As of 30 January 2019, according to the Ministry of Health of the Democratic Republic of the Congo, there have been 759 Ebola virus disease cases (705 confirmed, 54 probable), including 468 deaths (414 in confirmed and 54 in probable cases), since the beginning of the outbreak.

As of 31 January 2019, according to the WHO Disease outbreak news, 65 healthcare workers have been infected to date.

Mass gathering monitoring - World Youth Day - Panama - 2019

Opening date: 24 January 2019 Latest update: 1 February 2019

World Youth Day took place from 22–27 January 2019 in Panama City, Panama, with an estimated 500,000 participants. During mass gathering events, the most common health risks are related to vaccine-preventable diseases, gastrointestinal illnesses and vector-borne diseases in favourable climate conditions.

➔Update of the week

No major events were detected during World Youth Day.

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II. Detailed reports

New! Salmonella Poona in infant products - France and Spain - 2018 - 2019

Opening date: 28 January 2019 Latest update: 1 February 2019

Epidemiological summary

Santé publique France has reported four cases of *Salmonella* Poona in infants with genome sequences (cgMLST) belonging to the same cluster. Three additional cases are suspected to be part of the same cluster (sequencing is ongoing). All seven infants consumed infant formula from the same brand before symptoms. The patients are 2–18 months old and had symptoms between August 2018 and January 2019. No deaths have been reported.

France provided information on the genomic sequences from the human isolates in EPIS-FWD so that other countries can compare. ECDC has not found matches with the French isolate (Bionumerics, Enterobase scheme v2) in their database. No other countries have reported matches so far and genome sequencing analyses are still ongoing.

Background: *Salmonella* Poona is the 36th most common serotype in the European Surveillance System (TESSy). It was reported by 23 EU/EEA countries in the period 2013-2017 with 147–206 cases per year. In the five-year period, France accounted for 34% of the cases, followed by the UK with 26%. The most common age group were children 0–4 years old (37% of all cases) and male cases were more common (58%) than female ones. Travel information was available for 55% cases and of these, 45% were imported. Thailand was the most common destination, accounting for 21% of the travel associated cases. Spain had a large outbreak of S. Poona in infants in 2010-2011 linked to contaminated infant milk formula.

Sources: Direction générale de la Santé | Santé publique France | EPIS-FWD

ECDC assessment

Santé publique France has reported a genome sequencing cluster of *S.* Poona in infants. Patients were found to have consumed the same infant formula. So far, no other countries have reported cases with isolates with a matching genome sequence. However, additional cases may be reported. Genome sequencing analysis will clarify whether the cases in other countries are associated with the same source of infection.

Actions

ECDC is monitoring this event in consultation with EFSA.

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

Opening date: 31 January 2019 Latest update: 1 February 2019

Epidemiological summary

According to Institut de veille sanitaire (InVS), from 11 December 2018 to 28 January 2019, 19 Rift Valley fever cases were confirmed on Mayotte. All cases were locally acquired. Among these cases, 14 are male and 5 are female, with an age range of 27–64 years.
Most of the cases were located in the western part of the island.
Further investigations identified several positive ruminants in the western and central parts of the island.

According to CIRAD, Rift Valley fever seroprevalence among ruminants has decreased from 2008 to 2017, but significantly increased in 2017 and 2018 (3.6%, IC95% [2.3%–5.6%]) and 2018 and 2019 (10.1% IC95% [6.5%–15.3%]).

Sources: Emerging Infectious Diseases | Emerging Infectious Diseases | Université de la Réunion | OIE | WAHIS | InVS

ECDC assessment

According to CIRAD, Rift Valley fever seroprevalence among ruminants decreased from 2008 to 2017, but significantly increased in 2017 and 2018 (3.6%, IC95% [2.3%–5.6%]) and 2018 and 2019 (10.1% IC95% [6.5%–15.3%]).
In addition, according to Institut de Veille Sanitaire, one case imported from Comoros was reported by authorities on Mayotte in 2011.

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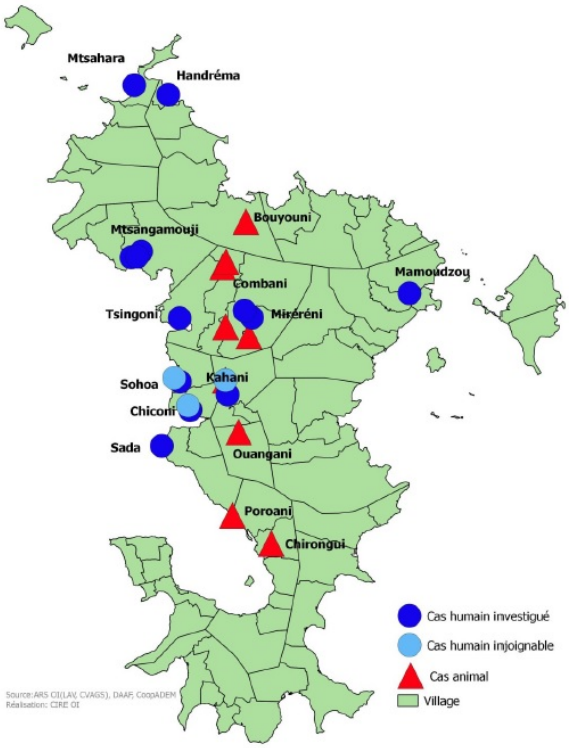
The detection of autochthonous Rift Valley fever cases on Mayotte is not unexpected, but the occurrence of 19 cases within a short time period is of concern as current weather conditions (rainy season from November to March) are favourable for the vectors.

Actions

ECDC will continue monitoring this event through epidemic intelligence activities and report again if there is a relevant epidemiological update.

Distribution of RVF human cases and ruminants, Mayotte, 11 December 2018 to 28 January 2019

Adapted from CIRE Ocean Indien



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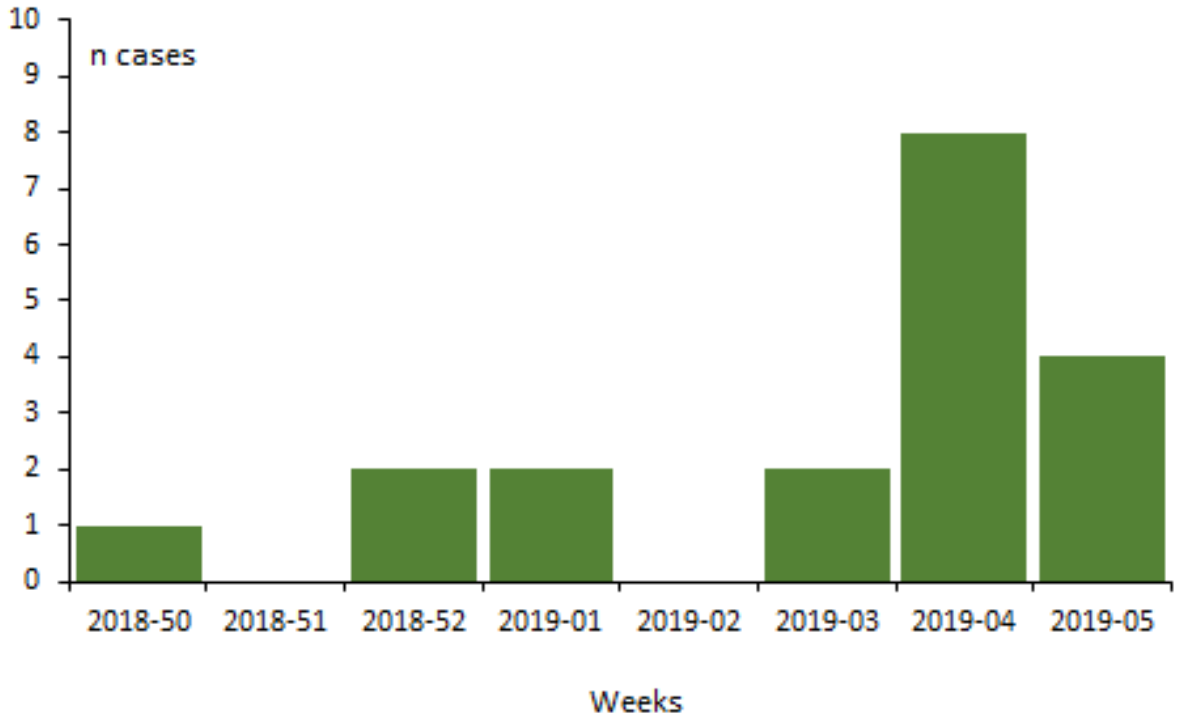
Distribution of RVF confirmed human cases, Mayotte, 11 December 2018 to 28 January 2019

Adapted from CIRE Ocean Indien



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

Opening date: 8 October 2018 Latest update: 1 February 2019

Epidemiological summary

Influenza activity remained relatively stable in the European Region. Samples collected from individuals presenting with ILI or ARI to sentinel primary health care sites yielded an influenza positivity rate of 51.3%. Influenza type A virus detections dominated with A(H1N1)pdm09 viruses and A(H3N2) viruses co-circulating. Very few influenza B viruses were detected. Pooled data from 23 Member States and areas reporting to the EuroMOMO project indicated excess mortality in adults and elderly populations overall. However, this result was driven by data from a few countries.

Based on sentinel sampling, influenza activity in the European Region exceeded a positivity rate of 10% in week 49 of 2018 and has increased continuously into week 4 of 2019. Both subtypes of influenza A viruses are circulating widely. Countries should continue to promote vaccination. In addition, countries are encouraged to use antivirals in accordance with national guidelines.

In general, current influenza vaccines tend to work better against influenza A(H1N1)pdm09 and influenza B viruses than against influenza A(H3N2) viruses. Preliminary results from Canada, where the predominant circulating viruses are influenza A (H1N1)pdm09 viruses, indicate good vaccine effectiveness.

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 still 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

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

New! Yellow fever - Brazil - 2019

Opening date: 29 January 2019 Latest update: 1 February 2019

Epidemiological summary

Between week 27 in 2018 and 18 January 2019, authorities have reported 12 confirmed cases of yellow fever. Among these cases, five have died. All confirmed cases were reported from São Paulo State and 11 were reported after mid-December 2018. According to the Brazilian Ministry of Health, no epizootics among non-human primates have been confirmed after September 2018 in Brazil.

Brazilian authorities consider the high transmission season range from December to May. In 2017, more than 800 cases were reported, while in 2018, more than 1 200 cases were reported.

Source: Ministry of Health Brazil | Pan American Health Organization

ECDC assessment

The transmission season has started and further cases are likely to occur with the increase of vector activity.

Travellers to yellow fever risk areas should seek medical advice before their trip and receive the yellow fever vaccine at least 10 days before travelling (unless vaccination is contraindicated). They should also follow measures to avoid mosquito bites and be aware of yellow fever symptoms and signs.

The probability of local yellow fever transmission in continental Europe following introduction of the virus by a viraemic traveller is currently considered extremely low as current weather conditions are unfavourable for the vector, *Aedes aegypti* is not established in continental EU and vector competency of *Aedes albopictus*, which is established in parts of southern and central Europe, is limited.

Yellow fever risk areas in Brazil, as of 30 January 2019

Adapted from WHO Yellow Fever Vaccination Recommendations in the Americas, 2018

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

Opening date: 30 January 2019 Latest update: 1 February 2019

Epidemiological summary

Since 1998 and as of 31 January 2019, 49 laboratory-confirmed cases of human infection with AI A(H9N2) virus, including one death, have been reported globally. Cases occurred in China (42), 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

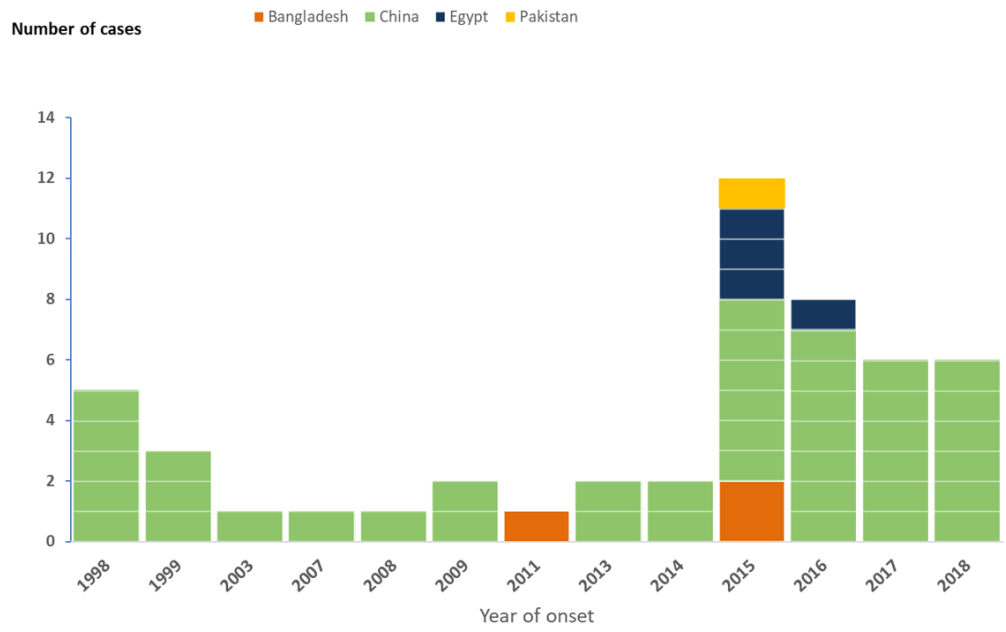
Although avian influenza A(H9N2) has caused infection in humans, human infections remain rare and no sustained human-to-human transmission has been reported. No human cases due to A(H9N2) have been reported in Europe.

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 avian influenza situation and the last report was published on 18 December 2018.

Distribution of confirmed human cases of A(H9N2) by reporting country, 1998 – 31 January 2019



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Geographical distribution of confirmed human cases of A(H9N2), 1998 – 31 January 2019

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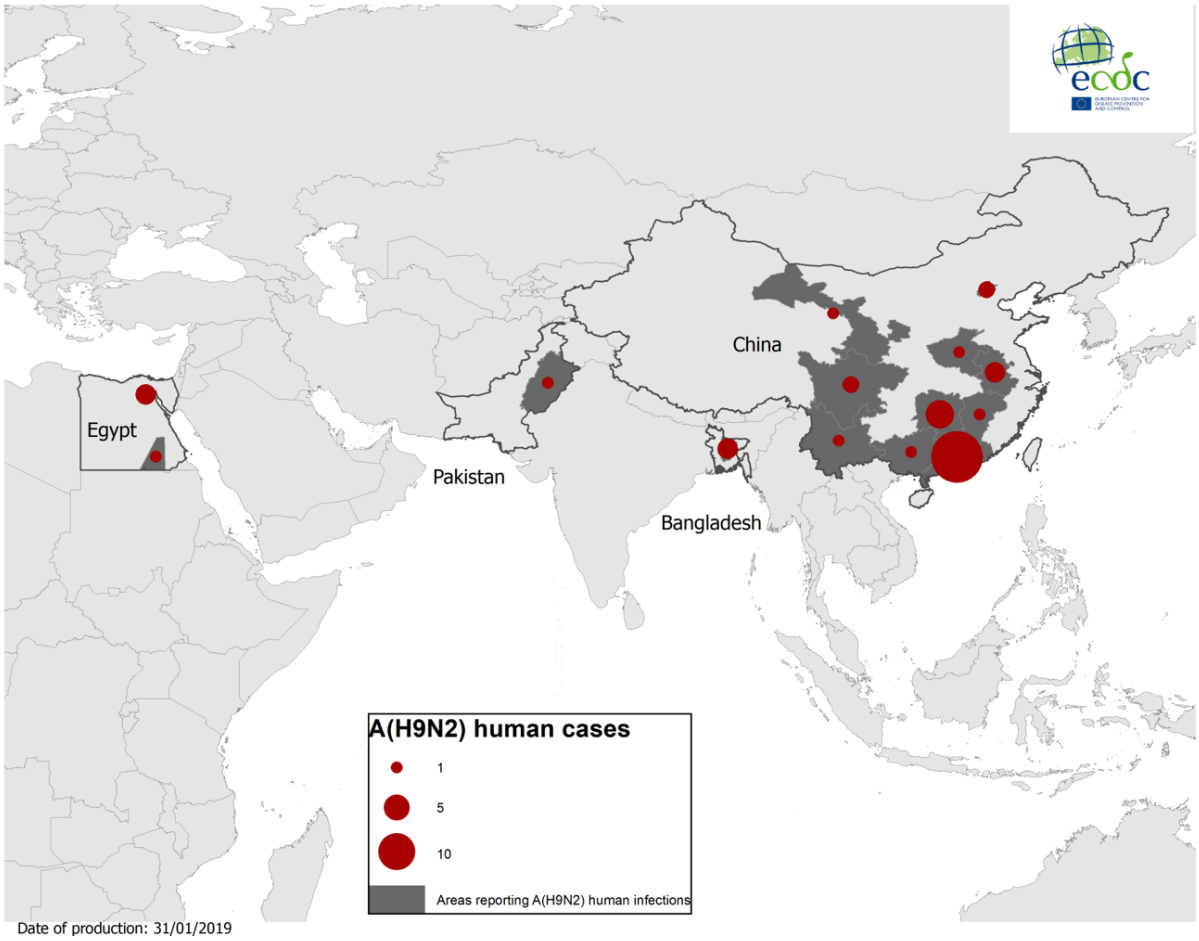

Ebola virus disease - tenth outbreak - Democratic Republic of the Congo - 2018 -2019

Opening date: 1 August 2018 Latest update: 1 February 2019

Epidemiological summary

Since the beginning of the outbreak and as of 30 January 2019, there have been 759 Ebola virus disease cases (705 confirmed, 54 probable), including 468 deaths (414 in confirmed and 54 in probable cases), according to the Ministry of Health of the Democratic Republic of the Congo.
Eighteen 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 Komanda, Mandima, Nyankunde and Tchomia health zones in Ituri Province.

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

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As of 31 January 2019, according to the WHO Disease outbreak news, 65 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 the 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.

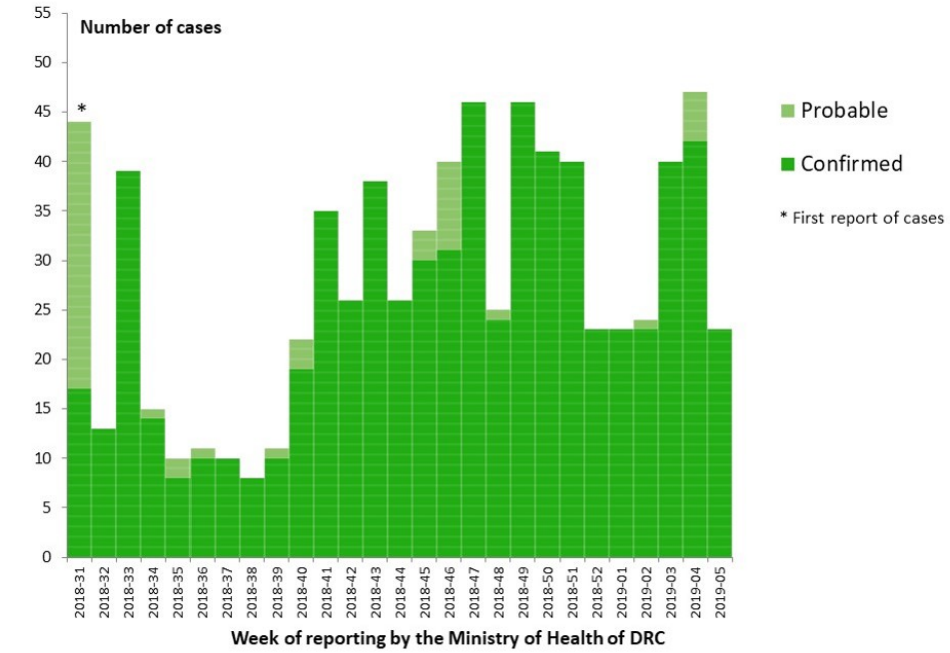
WHO assessment: As of 17 January 2019, the WHO assessment is that the risk of spread is low at the global level, but remains very high at national and regional levels.

Actions

ECDC published the second update of its rapid risk assessment on 21 December 2018 and published an epidemiological update on 25 January 2019.

Distribution of confirmed and probable cases of Ebola Virus Disease, North Kivu and Ituri, Democratic Republic of the Congo, as of 30 January 2019

ECDC



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

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Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 30 January 2019

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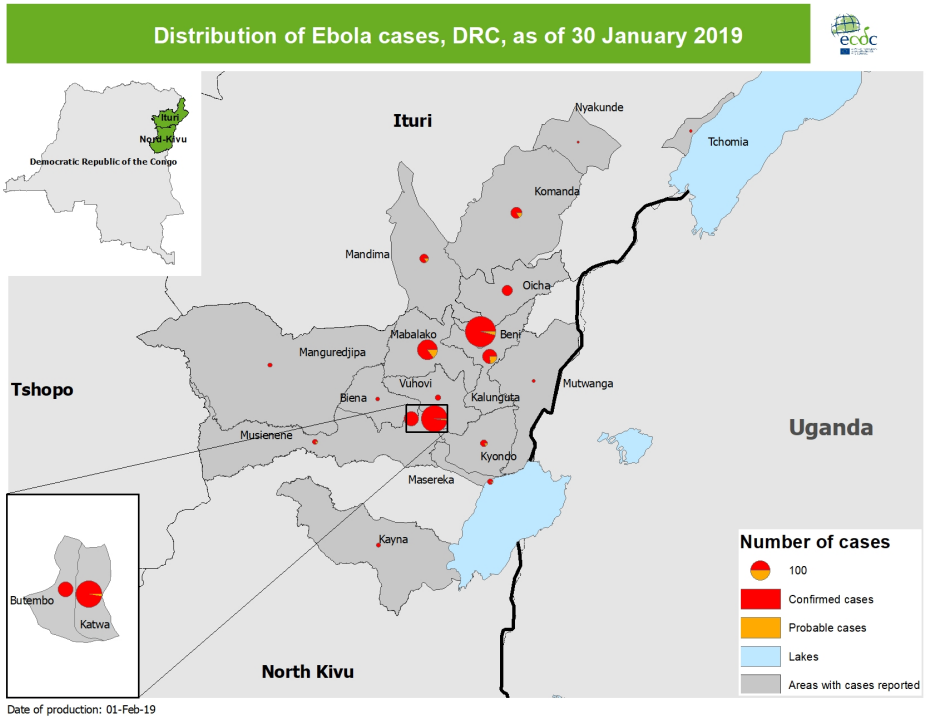

Mass gathering monitoring - World Youth Day - Panama - 2019

Opening date: 24 January 2019 Latest update: 1 February 2019

Epidemiological summary

World Youth Day took place between 22–27 January 2019 in Panama City, Panama, with an estimated 500,000 participants. The Catholic Church organises this event every two to three years with open-air masses and religious processions for pilgrims, priests and nuns from around the world. The majority of participants are aged 15–35 years.

During mass gathering events, the most common health risks are related to vaccine-preventable diseases, gastrointestinal illnesses and vector-borne diseases in favourable climate conditions. At the moment, there are risks with certain diseases in Panama, including chikungunya virus disease, dengue, gonorrhoea, hepatitis A, B and C, HIV, malaria, measles, rabies, syphilis, yellow fever and Zika virus disease.

So far, as of 1 February 2019, no major events have been detected.

According to media quoting health authorities, two imported cases of malaria were detected during the mass gathering coming from Mozambique (1) and Côte d'Ivoire (1). In addition, 955 people needed medical attention, mainly for gastritis, heatstroke and respiratory symptoms.

In addition, media quoting World Youth Day reported that on 24 January 2019, there were 128 people who needed medical attention, mainly for exhaustion (50), minor traumas (30), weakness (45), allergic reactions (2), gastroenteritis (18), and other symptoms.

World Youth Day | ECDC epidemiological update | Media | GPHIN | Ministry of Health of Panama

ECDC assessment

The risk is considered low for European travellers if vaccinated properly and recommendations for the prevention on mosquito bites and on good hygiene practices are followed.

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Actions

ECDC is no longer monitoring the event.

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