

This weekly bulletin provides updates on threats monitored by ECDC.

NEWS

New study shows how much healthcare workers know about antimicrobial resistance

Knowledge and awareness of antibiotic resistance and related issues is generally high among European healthcare workers, according to the first European survey to examine attitudes and behaviour in relation to antibiotic resistance in this group. However, the study, which was commissioned by the European Centre for Disease Prevention and Control, also reveals important gaps.

Only 58% of the 18 365 respondents answered all the questions (which tested knowledge of antibiotic resistance related to human health) correctly, with considerable variation among countries and professions. For example, among healthcare workers directly involved with patients or the public, 25% reported that they do not have easy access to guidance on infection management, and 33% do not have easy access to materials for advice on prudent antibiotic use and antibiotic resistance.

Other key results from the online survey

- More than 89% of respondents acknowledged the connection between prescribing, dispensing and administering antibiotics and the emergence and spread of antibiotic resistance.
- In total, 43% of prescribers stated that they had prescribed antibiotics at least once in the previous week, even when they would have preferred not to, because of the fear of patient deterioration or complications.
- A question as to whether antibiotics are effective against viruses had the highest proportion of respondents providing the correct answer (98%). However, responses to the statement: 'Every person treated with antibiotics is at increased risk of antibiotic-resistant infection' resulted in the lowest percentage of correct answers in the survey (75%).
- Nurses were the most likely to perform hand hygiene, even if using gloves when dealing with patients or biological material (96%).
- The majority (89%) of respondents agreed or strongly agreed that excessive use of antibiotics in livestock and food production contributes to antibiotic resistance in bacteria from humans.

To mark the occasion of European Antibiotic Awareness Day, ECDC has also published EU/EEA-wide 2018 data on [antimicrobial consumption](#) and [antimicrobial resistance](#).

I. Executive summary

EU Threats

West Nile virus - Multi-country (World) - Monitoring season 2019

Opening date: 3 June 2019

Latest update: 22 November 2019

During the West Nile virus infection transmission season, expected to be from June–November 2019, ECDC monitors the occurrence of infections in EU/EEA and EU neighbouring countries and publishes weekly epidemiological updates to inform blood safety authorities of areas at NUTS 3 level (Nomenclature of Territorial Units for Statistics 3) or GAUL 1 (Global Administrative Unit Layers 1) where at least one locally-acquired human infection was reported that meets the EU case definition (Commission Implementing Decision (EU) 2018/945).

→Update of the week

Between 15 and 21 November 2019, no human cases of West Nile virus infection have been reported by EU/EEA countries and EU neighbouring countries. In the same time period, no outbreaks among equids were reported to the Animal Disease Notification System (ADNS).

As no new human cases with recent disease onset have been reported in the last week, the final 2019 weekly update will be published next week Friday.

Influenza – Multi-country – Monitoring 2019/2020 season

Opening date: 11 October 2019

Latest update: 22 November 2019

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

→Update of the week

This CDTR report provides the update for the last week of influenza monitoring available:

Week 46, 2019 (11 to 17 November):

Influenza activity was low throughout the European Region. Influenza viruses were detected sporadically in specimens from persons with respiratory illness presenting to medical care. Both influenza types A and B viruses were detected in sentinel and non-sentinel source specimens, with a higher number of detections for influenza A viruses. Data from the 22 countries or regions reporting to the [EuroMOMO](#) project indicated all-cause mortality to be at expected levels for this time of the year.

Non EU Threats

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

Opening date: 1 August 2018

Latest update: 22 November 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, South Kivu and Ituri Provinces in the north-east of the country, close to the border with Uganda. In 2019, several imported cases from the Democratic Republic of the Congo were detected in Uganda. However, no autochthonous cases have been reported in Uganda as of 20 November 2019. On 17 July 2019, the [International Health Regulations \(IHR\) Emergency Committee](#) convened, and the WHO Director-General later declared that the outbreak meets all criteria for a public health emergency of international concern (PHEIC) under the International Health Regulations. On 18 October 2019, the Emergency Committee for Ebola virus disease in the DRC confirmed that the outbreak still constitutes a PHEIC.

→Update of the week

Since the previous CDTR and as of 20 November 2019, the [Ministry of Health of the Democratic Republic of the Congo](#) (DRC) has reported six additional confirmed cases. During the same period, four deaths were reported among confirmed cases. The recent trend of an ongoing lower number of cases reported continued this week.

After more than 30 days with no new cases, Oicha Health Zone reported one new confirmed case, which died in the community. This case had links to Kalunguta, Mandima, Mabalako, and Oicha Health Zones and was transported after death within Beni Health Zone. The source of exposure is still under investigation. All other cases reported in Beni and Mabalako Health Zones in the past week have been linked to known transmission chains. In the past 21 days, the health zones reporting most of the cases were Mabalako and Beni. This week, Mambasa and Butembo Health Zones passed 21 days with no new confirmed cases reported.

This week, security incidents occurred in multiple areas, including Beni, Oicha, and Kyondo Health Zones. The incidents were primarily due to ongoing military operations against non-state armed groups and retaliatory attacks on the local population. There have been no reports of violence aimed at the response, although it did lead to the suspension of some of the activities in areas of Beni, Butembo, and Oicha Health Zones.

As of 20 November 2019, 373 people were vaccinated with the second Ad26.ZEBOV / MVA-BN-Filo vaccine (Johnson & Johnson) in the two health zones of Karisimbi in Goma. Since the start of vaccination on 8 August 2018, 254 768 people have been vaccinated with the rVSV-ZEBOV vaccine (Merck).

Chikungunya and dengue – Multi-country (World) – Monitoring global outbreaks

Opening date: 27 January 2017

Latest update: 22 November 2019

Chikungunya virus disease and dengue are vector-borne diseases that affect 50–100 million people each year. In the past decade, an increasing number of countries have detected cases of dengue and chikungunya virus disease. Chikungunya virus disease has been circulating in Africa, Asia, the Americas, the Caribbean and the Pacific since 2013–2014. Dengue is also present in Africa, the Americas, Asia, the Caribbean and the Pacific. In 2018 and 2019, France and Spain reported autochthonous dengue cases, but no autochthonous chikungunya cases have so far been reported.

→Update of the week

Chikungunya virus disease: Several countries across the Americas region reported cases in 2019. Cases were also reported during this period in Asia and Africa. Since the previous CDTR update on 25 October 2019, the majority of new cases have been reported by Ethiopia, Brazil and Thailand.

Dengue: There has been a substantial increase in reports of dengue infections to date in 2019 compared with the same time period in 2018. The majority (85%) of the 1 049 000 cases reported during the last three months were reported by Brazil, the Philippines, Mexico, Nicaragua, Thailand, Malaysia and Colombia. In addition to autochthonous cases of dengue reported by France and Spain in September 2019, Spain reported the first case of sexual transmission of dengue described in men who have sex with men.

Poliomyelitis - Philippines - 2019

Opening date: 9 October 2019

Latest update: 22 November 2019

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

On 19 September 2019, a laboratory-confirmed case of circulating vaccine-derived poliovirus type-2 (cVDPV2) was reported in the Philippines. This led to the declaration of an outbreak from the Department of Health in Philippines. Other cases were subsequently detected.

→Update of the week

On 20 November 2019, according to the Philippines Department of Health, three additional cases of presumed vaccine-derived polio were confirmed on the island of Mindanao. All three cases were admitted to the Cotabato regional medical center. The first case is a two year-old female from Maguindanao who presented with fever and weakness in both legs. The second case is a one year-old male from Cotabato City with fever, cough, and weakness in both legs. The third case is a four year-old female from North Cotabato showing fever, weakness of the right leg, neck, and facial muscles. The first two cases were unvaccinated, while the third one received incomplete doses of the polio vaccine.

II. Detailed reports

West Nile virus - Multi-country (World) - Monitoring season 2019

Opening date: 3 June 2019

Latest update: 22 November 2019

Epidemiological summary

Between 15 and 21 November 2019, no human cases of West Nile virus infection have been reported by EU/EEA countries and EU neighbouring countries. In the same time period, no outbreaks among equids were reported to the Animal Disease Notification System (ADNS).

As no new human cases with recent disease onset have been reported in the last week, the final 2019 weekly update will be published next week Friday.

Since the beginning of the 2019 transmission season and as of 21 November 2019, EU Member States and EU neighbouring countries have reported 462 human infections. EU Member States reported 410 cases: Greece (223), Romania (66), Italy (53), Hungary (36), Cyprus (16), Bulgaria (5), Austria (4), Germany (4), France (2), and Slovakia (1). EU neighbouring countries reported 52 human cases in Serbia (27), Israel (10), Turkey (9) and North Macedonia (6).

To date, 50 deaths due to West Nile virus infection have been reported by Greece (34), Romania (8), Italy (4), Cyprus (1), Bulgaria (1), North Macedonia (1) and Serbia (1).

During the current transmission season, 88 outbreaks among equids have been reported by Germany (30), Greece (21), France (13), Italy (8), Hungary (7), Austria (4), Spain (4) and Portugal (1). In addition, Germany has reported 53 outbreaks among birds to ADNS.

ECDC link: [West Nile virus infection atlas](#)

Sources: [TESSy](#) | [Animal Disease Notification System](#)

ECDC assessment

During this transmission season, Germany and Slovakia reported their first autochthonous human West Nile virus infection. The occurrence of human autochthonous West Nile virus infections in Germany and Slovakia was not unexpected as WNV circulation among birds, equids and/or mosquitoes has been previously documented. All other human infections were reported in EU Member States with known persistent transmission of West Nile virus in previous years. Further human cases may be reported, but environmental conditions have become less suitable for transmission.

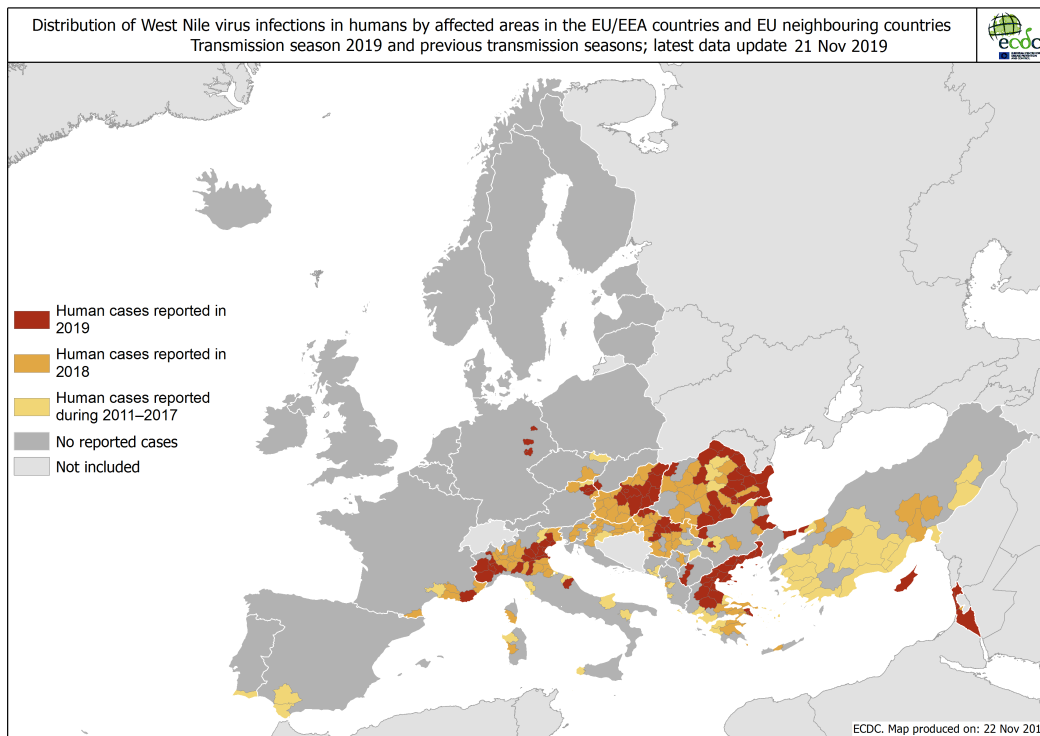
In accordance with [European Commission Directive 2014/110/EU](#), prospective donors should be deferred for 28 days after leaving a risk area for locally acquired infections unless the results of an individual nucleic acid test are negative.

Actions

During the transmission season, ECDC publishes [West Nile virus infection maps](#) together with an epidemiological summary every Friday. More information about the seasonal surveillance of West Nile virus infections can be found on [ECDC webpage](#). As no new cases with recent disease onset have been reported in the last weeks, the final 2018 weekly update will be published next Friday.

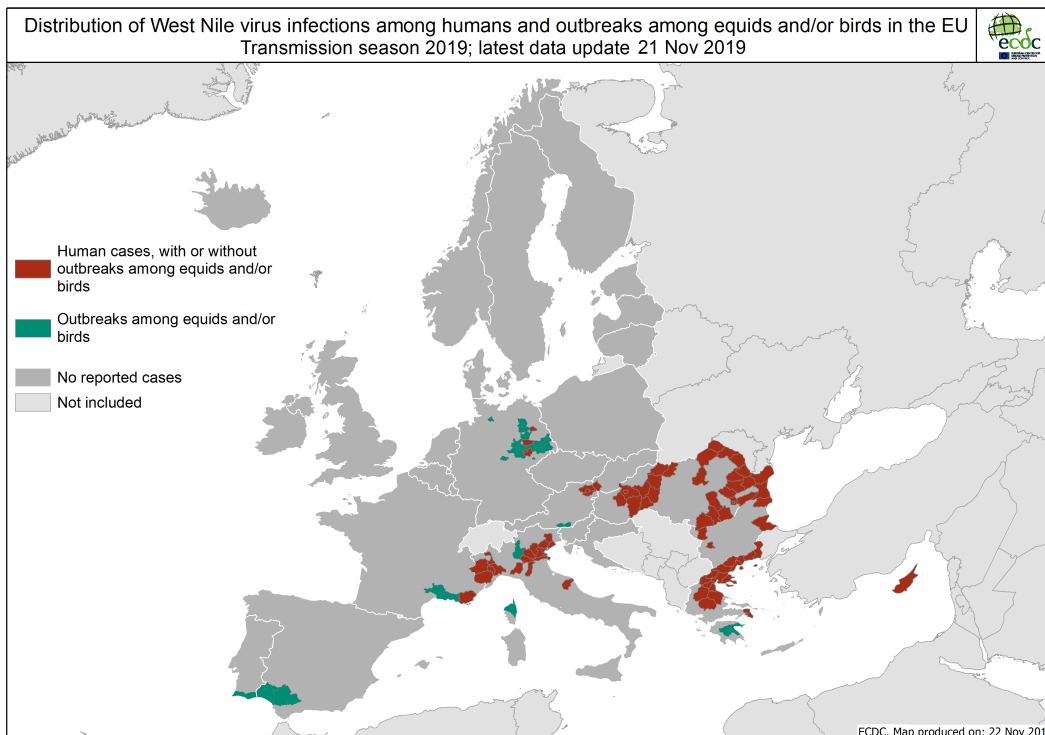
Distribution of human West Nile virus infections by affected areas as of 21 November 2019.

ECDC



Distribution of West Nile virus infections among humans and outbreaks among equids and/or birds in the EU as of 21 November 2019.

ECDC and ADNS



Influenza – Multi-country – Monitoring 2019/2020 season

5/17

Opening date: 11 October 2019

Latest update: 22 November 2019

Epidemiological summary

2019-2020 season overview

As is usual for this time of year, influenza activity is low in the European Region. The full report of the [Vaccine Composition Meeting for the southern hemisphere](#) 2020 season can be found [here](#).

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

ECDC assessment

Influenza activity is low throughout the WHO European Region, which is expected for this time of year. All-cause mortality data show mortality levels within the expected ranges for participating countries.

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

Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the [Flu News Europe](#) website.

ECDC monitors influenza activity in the WHO European Region from week 40/2019 to week 20/2020.

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

Opening date: 1 August 2018

Latest update: 22 November 2019

Epidemiological summary

Since the beginning of the outbreak a year ago and as of 20 November 2019, there have been 3 298 cases (3 180 confirmed, 118 probable) in the Democratic Republic of the Congo (DRC), including 2 197 deaths (2 079 confirmed, 118 probable), according to the Ministry of Health of the Democratic Republic of the Congo. During the past 21 days, the majority of the cases were reported in Mabalako and Beni. As of 20 November 2019, 163 healthcare workers have been infected (41 died).

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

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

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

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

ECDC assessment

ECDC assessment: Implementing response measures remains challenging in the affected areas because of the prolonged humanitarian crisis, the unstable security situation, and resistance in several sectors of the population. A substantial proportion of

cases has been detected in individuals not previously identified as contacts, stressing the need to maintain enhanced surveillance and identify the chains of transmission.

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

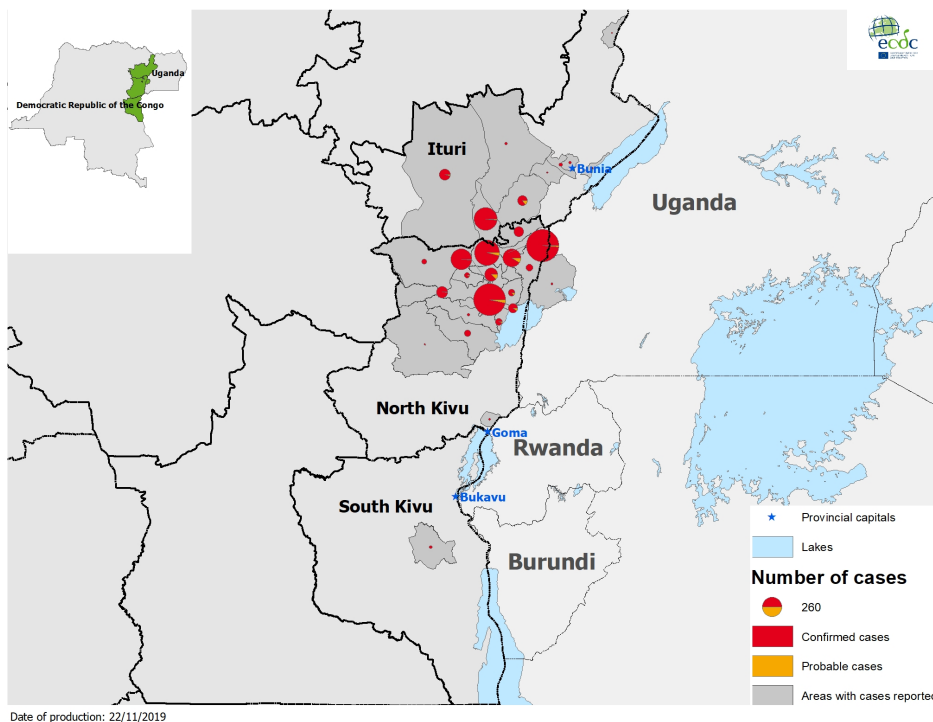
WHO assessment: As of 21 November 2019, the [WHO assessment](#) for the Democratic Republic of the Congo states that the risk of spread remains low at the global level and very high at national and regional levels. While the relatively lower case incidence observed is encouraging, it must be interpreted with caution as the situation remains highly contingent upon the level of access and security within affected communities. Concurrent with the decline in case incidence, there was a shift in hotspots from urban settings to more rural, hard-to-reach communities, within a more concentrated geographical area. These areas bring additional challenges to the response, including an extremely volatile security situation, difficulty accessing some remote areas, delays to engaging with the community which in turn lead to mistrust and misunderstandings, and potential under-reporting of cases. The recent security events and disruption of response activities underscore the fact that the risk of resurgence remains very high, as do the risks of re-dispersion of the outbreak with cases travelling outside of hotspots to seek healthcare or for other reasons. These risks continue to be mitigated by the substantial response and preparedness activities in the Democratic Republic of the Congo and neighbouring countries, with support from a consortium of international partners.

Actions

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

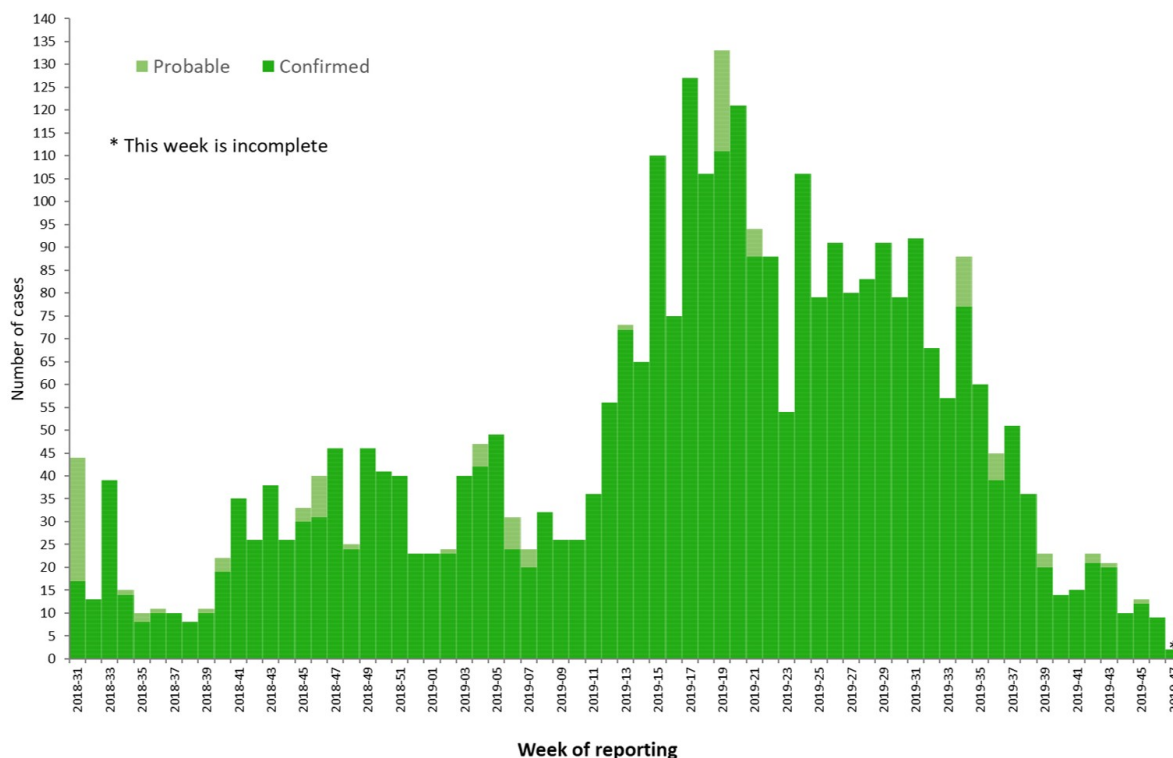
Geographical distribution of confirmed and probable cases of Ebola virus disease, Democratic Republic of the Congo and Uganda, as of 20 November 2019

Source: ECDC



Distribution of confirmed and probable cases of Ebola Virus Disease, Democratic Republic of the Congo and Uganda, as of 20 November 2019

Source: ECDC



Ebola Virus Disease case distribution in DRC and Uganda, as of 20 November 2019

Source: ECDC

#	Demographic	Number of confirmed cases	Number of probable cases	Confirmed and probable cases	Number of deaths	Conf/Prob cases in past 7 days
	Democratic Republic of the Congo	3180	118	3298	2197	
	North-Kivu Province	2677	100	2777	1933	
	Alimbongo	5	0	5	2	
	Beni	688	9	697	459	ACTIVE
	Biena	18	2	20	14	
	Butembo	284	3	287	353	
	Goma	1	0	1	1	
	Kalunguta	194	18	212	89	
	Katwa	651	24	675	494	
	Kayna	27	0	27	8	
	Kyondo	25	4	29	19	
	Lubero	31	2	33	6	
	Mabalako	399	17	416	326	ACTIVE
	Manguredjipa	18	0	18	12	
	Masereka	50	6	56	23	
	Musienene	84	1	85	34	
	Mutwanga	32	0	32	12	
	Nyiragongo	3	0	3	1	
	Oicha	63	0	63	29	ACTIVE
	Pinga	1	0	1	0	
	Vuhovi	103	14	117	51	
	Ituri province	497	18	515	261	
	Ariwara	1	0	1	1	
	Bunia	5	0	5	4	
	Komanda	56	10	66	54	
	Lolwa	6	0	6	1	
	Mambasa	78	3	81	30	
	Mandima	339	5	344	165	
	Nyakunde	2	0	2	1	
	Rwampara	8	0	8	3	
	Tchomia	2	0	2	2	
	South-Kivu	6	0	6	3	
	Mwenga	6	0	6	3	
	Uganda	1	0	1	1	
	Kasese province	1	0	1	1	
	Kasese	1	0	1	1	
	Cumulative Total	3181	118	3299	2198	

Chikungunya and dengue – Multi-country (World) – Monitoring global outbreaks

Opening date: 27 January 2017

Latest update: 22 November 2019

Epidemiological summary

Europe

Chikungunya virus disease:

No autochthonous cases of Chikungunya virus were detected in continental EU/EEA countries in 2019.

Dengue:

In September 2019, Spain and France reported autochthonous cases of dengue with no epidemiological link between events. ECDC issued a [rapid risk assessment](#) on 1 October 2019.

In early November 2019, Spanish authorities reported the likely sexual transmission of dengue between two men. On 18 November 2019, ECDC published a [rapid risk assessment](#) of sexual transmission of dengue in Spain.

Spain: In late September 2019, [Spanish health authorities](#) laboratory confirmed two cases of dengue reported in men who have sex with men (MSM) who reside in the municipality of Madrid. The first case had a relevant travel history to Cuba. On his return, he had unprotected anal sexual intercourse with his male partner in the three days after the onset of symptoms. The partner developed symptoms about a week later. No *Aedes albopictus* mosquitoes were detected at their place of residence, nor at places they visited during the incubation period, nor have they been detected in these areas during entomological surveillance carried out in Madrid since 2017.

In the absence of data supporting a possible vector transmission or other routes of transmission, sexual transmission is considered the most likely route of transmission in this case. This is the first case of dengue described in an area without the presence of vector mosquitoes that has been attributed to sexual transmission, and the first sexual transmission described in men who have sex with men (MSM).

Americas and the Caribbean

Chikungunya virus disease:

Brazil: In 2019, as of 2 November, Brazil reported 126 677 probable cases, including 81 confirmed deaths. This represents an increase of 7 501 cases and nine deaths since the previous CDTR update.

Bolivia: In 2019, as of 19 October, Bolivia has reported 75 confirmed cases. This represents an increase of 11 cases since the last CDTR report.

Colombia: In 2019 and as of 9 November, Colombia has reported 485 cases, of which 46 are laboratory confirmed. This represents an increase of 44 cases since the last CDTR report. During the same period in 2018, 590 cases were reported.

El Salvador: In 2019, as of 9 November, El Salvador reported 648 suspected cases. This represents an increase of 68 cases since the previous CDTR update. For the same period in 2018, El Salvador reported 354 suspected cases.

Mexico: In 2019, as of 11 November, nine confirmed cases have been reported in Mexico. This represents an increase of four cases since the previous CDTR update. For the same period in 2018, Mexico reported 34 confirmed cases.

Nicaragua: In 2019, as of 10 November, Nicaragua reported 170 suspected cases. Among these cases, none was confirmed. This represents an increase of 47 cases since the last CDTR report.

Peru: In 2019, as of 3 November, Peru has reported 148 cases. This represents an increase of 11 additional cases since the previous CDTR update.

Venezuela: In 2019, as of 5 October, the country has reported 129 cases, including seven confirmed cases according to WHO Pan American Health Organization (PAHO). This represents an increase of 24 cases since the previous CDTR update.

Dengue:

As of data available on 19 November 2019, WHO PAHO has reported 2 848 381 suspected and confirmed dengue cases in the Americas region in 2019, including 1 256 deaths. The highest incidence rates in the Region of the Americas are reported by Nicaragua, Belize, Honduras and Brazil. Brazil reported 73% of the cases (2 070 170 cases), an almost ten-fold increase compared with the same period in 2018 when 231 481 cases were reported. All four dengue virus serotypes are circulating in Brazil.

According to [Santé publique France](#), an increased number of dengue cases has been reported in the Caribbean in the recent weeks, in Guadeloupe, Saint Martin, and Martinique islands. Guadeloupe reported 343 confirmed cases of dengue compared to 18

cases in 2018. Martinique reported 50 confirmed cases compared to zero last year. [Saint Martin](#) reported 12 confirmed cases in 2019, of which seven cases were reported since mid-October 2019.

The four dengue virus serotypes (DENV 1, DENV 2, DENV 3, and DENV 4) are currently circulating simultaneously in the Region of the Americas, which increases the risk of severe cases. The figures for each country of the Americas Region can be found on the [PAHO Health Information Platform](#).

Asia

Chikungunya virus disease:

[India](#): According to the National Centre for Disease Control, from 12 August to 15 September 2019, several chikungunya cases have been reported in Karnataka (51), Tamil Nadu (32) and Telangana (2). Additionally, since the last CDTR update, media sources reports 322 cases in [Bihar](#), 273 in [Pune](#) and seven cases in [Madurai](#).

[Malaysia](#): According to Malaysia MoH, in 2019 and as of 2 November, 562 cases have been reported across the country, with most of the cases being reported in Selangor and Perak regions. This represents an increase of 85 cases since the previous CDTR update.

[Maldives](#): According to the Maldives Health Protection Agency, in 2019 and as of 12 November, there have been 1 459 cases reported in the country. This represents an increase of 48 cases since the previous CDTR update.

[Taiwan](#): In 2019, as of 9 November, the country has reported 21 indigenous chikungunya cases. In the same period in 2018, no indigenous chikungunya cases were reported in Taiwan.

[Thailand](#): In 2019, as of 10 November, the country has reported 9 339 cases, affecting 56 provinces, with no associated deaths. This is an increase of 1 235 cases since the previous CDTR update. The provinces reporting the highest incidences are located in the southern and western parts of the country.

Dengue:

This year, most countries in Asia and South-East Asia are reporting a large increase in the number of detected cases.

[Japan](#) has reported 416 cases, in 2019 and as of 13 November 2019.

[Bangladesh](#) has reported 98 779 cases, in 2019 and as of 17 November 2019. This is an almost ten-times increase compared to 2018. However, there is currently a decreasing trend in case reports, matching previous seasonal trends.

[The Maldives](#) reported 4 505 cases in 2019 and as of 12 November 2019.

Thailand: According to [media](#) quoting health authorities, more than 136 000 cases have been reported in Thailand in 2019 and as of 20 November 2019, including 126 deaths. The highest concentration of cases is in and around the capital Bangkok and in the northern province of Chiang Mai.

[Cambodia](#) has reported 62 938 cases of dengue in 2019 and as of 7 November 2019. This is an eight-fold increase compared to 8 046 cases for the same period in [2018](#).

China: according to [media](#), quoting health authorities, an outbreak with more than 600 cases has been reported in East China as of September 2019. China faces an increase of dengue cases in 2019, according to WHO. Earlier this year they had reported 1 527 cases.

[Laos](#) reported 33 728 cases including 59 deaths in 2019 and as of week 41 (ending on 12 October 2019). Although the weekly trend in reported cases is decreasing, by contrast, in during the same period of [2018](#), Laos reported 5 497 cases.

[Malaysia](#) reported 115 286 cases, including 295 deaths in 2019 as of 18 November 2019. In the same period [last year](#), Malaysia reported 61 254 cases with 104 deaths.

[The Philippines](#) reported 371 717 dengue cases and 1 407 deaths as of 19 October 2019. Last year, for the same period, the country reported 180 072 cases and 927 deaths.

[Singapore](#) reported 14 272 cases in 2019 as of 15 November 2019. The number of dengue cases has steadily increased over the past four weeks, but is still only half of the weekly number of cases that were reported in mid-July.

[Taiwan](#) has reported 581 cases in 2019 and as of 12 November 2019. In the same period in 2018, Taiwan reported 533 cases.

[Nepal](#) has reported 14 662 cases in 2019 and as of mid-November 2019, according to the Ministry of Health. This is an increase of

9 567 cases in the past two months.

For the countries below, different trends have been observed.

Afghanistan: no update available is since Afghanistan has reported its first confirmed dengue case in October 2019, in a person with travel history during the incubation period to India.

Sri Lanka has reported more cases than last year. According to the Ministry of Health and as of 19 November 2019, Sri Lanka has reported 72 085 cases of dengue in 2019, compared with 46 000 cases for the same period last year. Colombo, Gampaha, Kalutara and Galle districts are the most affected areas.

Pakistan has reported 20 754 cases of dengue since the beginning of the year and as of 20 October 2019, according to the national institute of health.

Vietnam has reported 200 000 cases, including 50 deaths in January – October 2019. This is an increase of 75 249 cases since the report for July 2019.

India: In **Jaipur** there were 1 084 confirmed cases reported in 2019 and as of 21 October 2019. A sharp increase from 535 dengue cases (reported from 1 January–24 September 2019).

Africa

Chikungunya virus disease:

Ethiopia: According to WHO, since the beginning of the outbreak in July 2019 and as of 10 November, 53 238 cases with no associated deaths have been reported in Dire Dawa city Administration and Araf regions. This is an increase of 3 622 cases since the previous CDTR update.

Republic of Congo: In 2019, as of 29 September, 11 434 cases with no deaths associated have been reported across the Republic of Congo. This represents an increase of 152 cases since the previous update in the CDTR.

Sudan: According to an OCHA report quoting Sudan Federal Ministry of Health, 56 additional chikungunya cases were reported in Sudan during October 2019. Cases were reported from South Darfur, West Darfur, East Darfur and Kassala states.

Dengue:

According to WHO, cases continue to be reported in Benin, Réunion, Sudan, and Tanzania.

Benin has reported 19 suspected and 11 confirmed cases of dengue fever, including two deaths between 10 May and 17 October 2019. These cases were reported from Atlantique, Littoral, Ouémé and Couffo Departments.

In 2019 and as of 13 November 2019, **Sudan** has reported 1 720 cases and 17 deaths in Kassala hospitals and five cases from the El Ganab locality in Port Sudan.

Tanzania has reported 6 917 confirmed cases, including 13 deaths (case fatality rate (CFR): 0.2%) from 1 August 2018 until 20 October 2019. Since the beginning of the outbreak, 11 Regions have been affected: Arusha, Dar es Salaam, Dodoma, Kagera, Kilimanjaro, Lindi, Morogoro, Pwani, Ruvuma, Singida and Tanga.

Réunion has reported 18 066 confirmed dengue cases and 14 deaths from 1 January–19 November 2019. The Regional authorities report that the rate of dengue case detection has stabilised in recent weeks at a low number. The most affected areas are in the south and west: Saint-Leu et Le Port, Saint-Paul, Saint-Pierre, La Possession, Le Tampon and Saint-Louis.

Australia and the Pacific

Chikungunya virus disease:

No outbreaks have been reported since the previous update.

Dengue:

Cases of dengue are reported by Australia, Cook Islands, French Polynesia, Marshall Islands and New Caledonia.

Australia has reported 1 268 cases of dengue in 2019, which is more than the same period in 2018 (828 cases) but still within the Australian's regular seasonal trend.

Cook Islands has reported 99 confirmed cases of dengue in 2019, as of end of September 2019, of which 22 cases were DENV-2.

[French Polynesia](#) has reported 1 890 autochthonous cases of dengue since the beginning of the year and as of 3 November 2019. The cases are reported on the islands of Tahiti, Bora-Bora, Moorea, Nuku-Hiva, Raiatea, Huahine, Rangiroa, Ua Pou, Tahaa, Hiva Oa, Ua Huka, Tubuai and Fatu Hiva. Both DENV-1 and DENV-2 are circulating.

[Marshall Islands](#) have reported 1 085 cases of dengue, including 280 confirmed cases and one death in 2019 and as of 10 November 2019. DENV-3 is in circulation. The outbreak is slowing down in Ebeye, continuing in Majuro, with cases reported from Rongrong and Utrik. The cases were reported due to an outbreak which started on 25 June this year.

[New Caledonia](#) has reported 3 902 dengue cases including two deaths since the beginning of the year and as of 16 October 2019. Cases reported weekly continue to decrease, with the epidemic officially declared over during week 34. Among the samples serotyped in 2019, the vast majority are DENV-2 and there have been two imported cases of DENV-1 and DENV-4.

N.B: The data presented in this report originate from several sources, both official public health authorities and non-official ones such as news media.

Data completeness depends on the availability of reports from surveillance systems and their accuracy, which varies between countries.

All data should be interpreted with caution as there may be areas of under-reporting; reported figures may not reflect the actual epidemiological situation.

ECDC assessment

Chikungunya virus disease and dengue are endemic in large regions of the intertropical convergence zone. As a precautionary measure, [personal protective measures against mosquito bites](#) should be applied.

The detection of autochthonous cases of dengue in France and Spain in 2019 is not unexpected due to the presence of *Aedes albopictus* in the areas where cases have been reported. The risk of further transmission is very low due to low vector activity at this time of year.

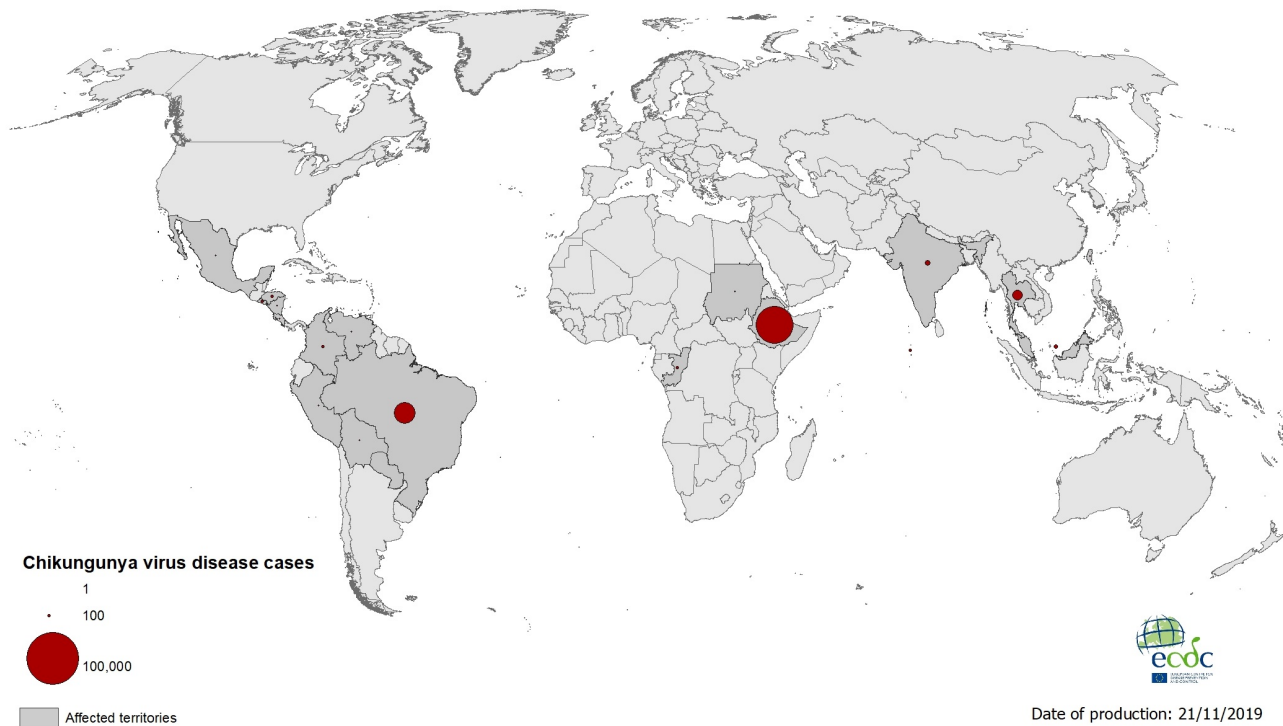
ECDC published a [rapid risk assessment](#) on the dengue outbreak in Reunion on 18 June 2019 and a [rapid risk assessment](#) on autochthonous cases of dengue in Spain and France on 1 October 2019.

Actions

ECDC monitors these threats through epidemic intelligence and reports on a monthly basis. A summary of the worldwide overview of [dengue](#) and [chikungunya](#) is available on the ECDC website.

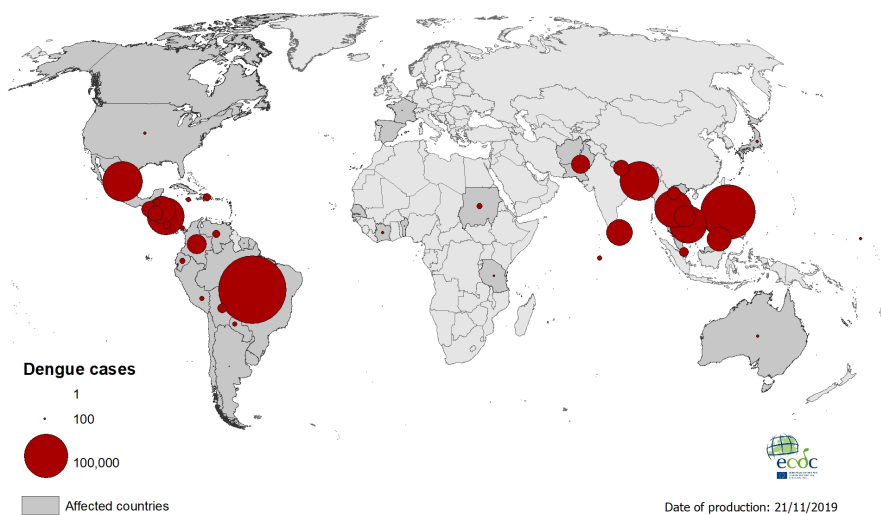
Geographical distribution of chikungunya virus disease cases reported worldwide, September to November 2019

Source: ECDC



Geographical distribution of dengue cases reported worldwide, September to November 2019

Source: ECDC



Poliomyelitis - Philippines - 2019

Opening date: 9 October 2019

Latest update: 22 November 2019

Epidemiological summary

On 19 September 2019, Philippines' authorities declared a polio outbreak after the confirmation of the first polio case since 2000, when the country was declared polio free.

As of 21 November, seven polio cases have been detected in 2019.

The first case was a 3-year-old girl in the area of Lanao del Sur (Mindanao island).

On 20 September 2019, a second case was reported in an immunocompromised five-year-old boy in the area of Laguna (50 km from Manila). This case was categorised as iVDPV2.

On 28 October 2019, a third case was confirmed in a four-year-old girl in the area of Maguindanao (Mindanao island).

On 4 November 2019, a fourth case was confirmed in a three-year old girl from Lambayong in Sultan Kudarat province (Mindanao island), who had not received any dose of oral polio vaccine (OPV).

The first, third and fourth cases were genetically linked leading to the characterisation of the virus as cVDPV2, whereas the Laguna case was not genetically linked to any previously detected samples, pointing towards a new emergence.

Since September 2019, two environmental samples from Manila and Davao (Mindanao Island) were positive for VDPV2. Both were genetically related to the cVDPV2 cases, according to a UNICEF/WHO joint report.

Furthermore, [eleven](#) VDPV1 environmental samples have been detected in Manila, since July 2019. All were genetically linked but did not have a genetic linkage with any other known VDPV1 detected globally, indicating new emergence.

On 20 November 2019, an additional three cases from Mindanao were confirmed. The samples have been tested positive for poliovirus by the National Polio Laboratory at the Research Institute for Tropical Medicine (RITM), sequencing and genetic analysis results conducted at the National Institute of Infectious Diseases in Japan are pending.

As of 19 November, a total of 16 environmental samples from six sites tested positive between 1 July and 2 November 2019. VDPV type 1 has been isolated from 11 environmental samples in Manila. VDPV type 2 has been isolated from five environmental samples in Manila in NCR, and Davao (Mindanao island). All VDPV1 samples were genetically linked but did not have a genetic linkage with any other known VDPV1 detected globally, indicating new emergence

Sources: [WHO-UNICEF report](#), [Department of Health press release 1](#), [Department of health press release 2](#), [Department of health press release 3](#), [Department of health press release 4](#), [Department of health press release 5](#), [US CDC, Global polio eradication initiative vaccines factsheet](#), [GPEI Vaccine derived polio factsheet](#), [GPEI weekly update Philippines](#), [ECDC factsheet](#), [ECDC polio map](#)

ECDC assessment

WHO estimates that the risk is high at the national level due to chronically suboptimal immunisation coverage with polio vaccines, sub-optimal performance of AFP surveillance, and poor sanitation and hygiene conditions. WHO estimates the risk as moderate at regional level and low at global level. The US CDC has recently updated its advice for travel to the Philippines to level 2 - Practice Enhanced Precautions.

On the 28 October 2019, the [Department of Health](#) reported 95.58% vaccination coverage for polio among children 0-59 months old for the October 14-27 round of Mass vaccination campaign in the National Capital Region (NCR) and in identified areas of Mindanao (Lanao del Sur, Marawi City, Davao del Sur, and Davao City).

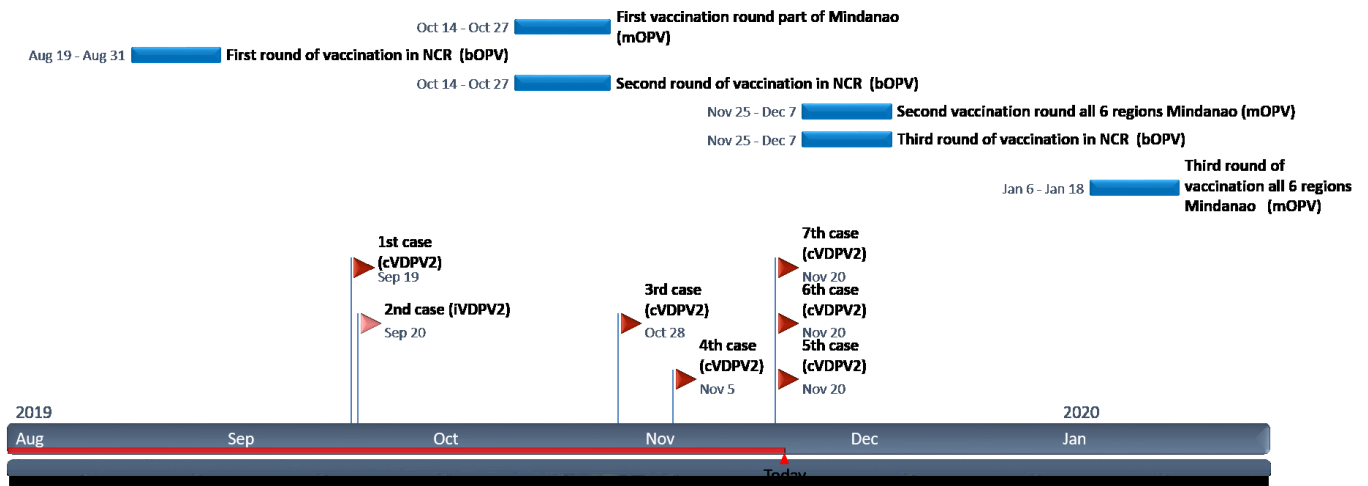
The risk for EU travellers in the Philippines is considered to be very low provided they are fully vaccinated. The WHO European Region has remained polio-free since 2002. Inactivated polio vaccines are used in all EU/EEA countries. The risk of reintroduction of the virus in Europe exists as long as there are non- or under-vaccinated population groups in European countries and poliomyelitis is not eradicated. According to WHO, one EU/EEA country (Romania) and two neighbouring countries (Bosnia and Herzegovina, and Ukraine) remain at risk of a sustained polio outbreak following wild poliovirus importation or emergence of cVDPV due to suboptimal programme performance and low population immunity.

Actions

ECDC is monitoring this event through epidemic intelligence.

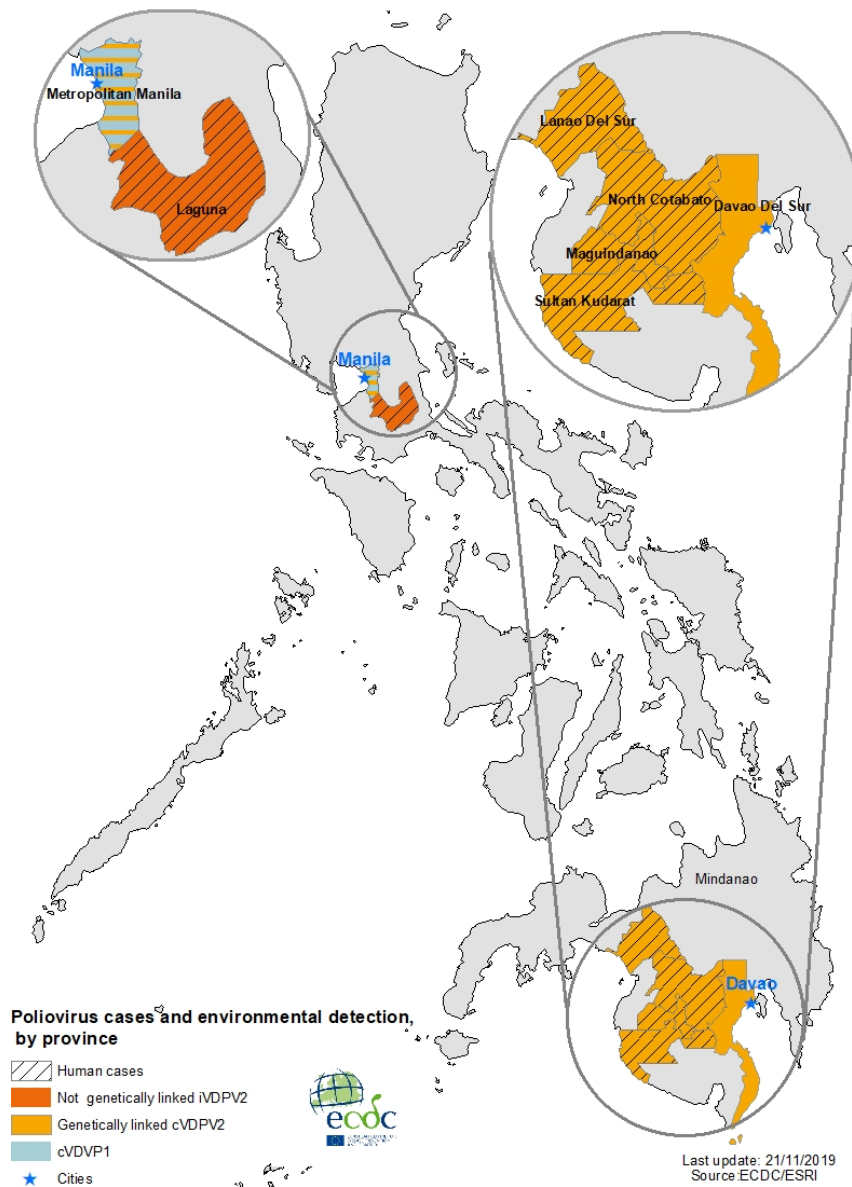
Timeline of poliomyelitis cases and response measures implemented in the Philippines outbreak

ECDC



Poliovirus cases and environmental detection, by province, Philippines, July - November 2019

ECDC



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