I. Executive summary

EU Threats

Opening date: 7 January 2020        Latest update: 7 January 2022

On 31 December 2019, the Wuhan Municipal Health and Health Commission reported a cluster of pneumonia cases of unknown aetiology with a common source of exposure at Wuhan’s South China Seafood City market. Further investigations identified a novel coronavirus as the causative agent of respiratory symptoms for these cases. The outbreak rapidly evolved, affecting other parts of China and other countries worldwide. On 30 January 2020, WHO declared that the outbreak of coronavirus disease (COVID-19) constituted a Public Health Emergency of International Concern (PHEIC), accepting the Committee's advice and issuing temporary recommendations under the International Health Regulations (IHR). On 11 March 2020, the Director-General of WHO declared the COVID-19 outbreak a pandemic. The third, fourth, fifth, sixth, seventh, eighth and ninth International Health Regulations (IHR) Emergency Committee meetings for COVID-19 were held in Geneva on 30 April 2020, 31 July 2020, 29 October 2020, 14 January 2021, 15 April 2021, 14 July 2021 and 22 October 2021, respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

Update of the week

Since week 2021-50 and as of week 2021-52, 15,679,622 new cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) and 87,175 new deaths have been reported.

Since 31 December 2019 and as of week 2021-52, 290,613,933 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 5,450,958 deaths.

As of week 2021-52, 56,969,698 cases and 908,731 deaths have been reported in the EU.

The figures reported worldwide and in the EU/EEA are probably an underestimate of the true number of cases and deaths, due to various degrees of under-ascertainment and under-reporting.

The latest daily situation update for the EU/EEA is available here.

Since the last update on 22 December 2021 and as of 5 January 2022, no changes have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring and de-escalated variants.

For the latest information about variants, please see ECDC’s webpage on variants.

SARS-CoV-2 B.1.1.529 variant of concern (Omicron) - Multi country (World) - 2021-2022
On 26 November 2021, ECDC classified a SARS-CoV-2 variant belonging to Pango lineage B.1.1.529 as a variant of concern (VOC) due to concerns regarding immune escape and potentially increased transmissibility compared to the Delta VOC. WHO also classified the variant as a VOC and assigned it the label Omicron. The number of countries reporting cases with the SARS-CoV-2 Omicron VOC continues to increase globally.

Update of the week
As of 7 January 2022, a steep increase in COVID-19 cases over the past two weeks has been observed in several EU/EEA countries. For a general overview of the epidemiological COVID-19 situation in the EU/EEA, please see the ECDC Country Overview Report. At the end of week 52, the overall epidemiological situation in the EU/EEA was characterised by a high overall case notification rate which has increased rapidly in the past two weeks. High and increasing case notification rates or an epidemiological situation of high or very high concern were observed in all but two EU/EEA Member States. This situation is largely driven by the continued circulation of the Delta variant and rapidly increasing spread of the Omicron variant in many countries.

The summary below aims to give an overview of the extent to which Omicron is prevalent in EU/EEA countries. The data are collected from TESSy, EU/EEA Member States' national and/or regional websites, and media reports quoting health authorities. As a result, the data presentation and completeness might be different depending on the data sources and availability on countries' websites.

Until further notice, ECDC will provide specific updates on the Omicron VOC weekly for EU/EEA. Previous updates on reported cases are available on ECDC's dedicated website.

Non EU Threats

New! Influenza A (type H5) – United Kingdom, England – 2022
On 6 January 2022, the United Kingdom Health Security Agency (UKHSA) notified of a confirmed case of avian influenza A type H5 in a person in the South West of England.
Influenza – Multi-country – Monitoring 2021/2022 season
Opening date: 15 October 2021  Latest update: 7 January 2022

Reported influenza activity in Europe is increasing. A detailed report on the current situation is available in this weekly threats report.

Update of the week

Week 52, 2021 (27 December 2021 - 2 January 2022)

Reported influenza activity in Europe continues to increase:
- Albania, Israel, North Macedonia, Norway, the Russian Federation, and Sweden reported widespread influenza activity and/or medium influenza intensity.
- 23% of all sentinel primary care specimens from patients presenting with ILI or ARI symptoms tested positive for influenza virus in week 52/2021, with a predominance of A(H3) viruses.
- Six countries reported seasonal influenza activity above the 10% positivity threshold in sentinel primary care: Armenia (78%), Israel (68%), Sweden (36%), France (33%) the Republic of Moldova (24%), and Albania (18%).
- Hospitalised cases with confirmed influenza virus infection were reported from intensive care units (29 type A viruses and 1 type B) and SARI surveillance (18 type A viruses).
- Both influenza type A and type B viruses were detected with A(H3) viruses being dominant across all monitoring systems.

Influenza A(H5N6) – Multi-country – Monitoring human cases
Opening date: 17 January 2018  Latest update: 7 January 2022

Animal influenza viruses that cross the animal-human divide to infect people are considered novel to humans and have the potential to become pandemic threats. Highly pathogenic avian influenza viruses A(H5) of Asian origin are extremely infectious for several bird species, including poultry. In 2014, a novel avian influenza A(H5N6) reassortant causing a human infection was detected in China. To date, only sporadic human cases of avian influenza A(H5N6) virus infection have been reported, mainly from China.

Update of the week

As of 20 December 2021 and since the previous monthly report published in the CDTR on 19 November 2021, six new cases, including one death, of human infection with avian influenza A(H5N6) virus have been reported from four provinces in China (Guangdong, Guangxi, Hunan, and Sichuan). The cases developed symptoms in November and December 2021; five cases were adults and one child; five were hospitalised and one had mild symptoms. No human-to-human transmission was reported.

Influenza A(H9N2) - Multi-country (World) - Monitoring human cases
Opening date: 30 January 2019  Latest update: 7 January 2022

Avian influenza viruses that infect people are considered novel to humans and have the potential to become pandemic threats.

Update of the week

As of 20 December 2021, and since the previous monthly report published in CDTR on 19 November 2021, one new case of human infection with avian influenza A(H9N2) was reported from China. No further cases were detected among contacts of this patient. Overall, 95 cases have been reported globally since 1998.

Human cases with swine influenza A(H1N2) variant virus – Multi-country – 2021
Opening date: 1 June 2021  Latest update: 7 January 2022

Animal influenza viruses that infect people are considered novel to humans and have the potential to become pandemic threats. Sporadic cases of swine origin influenza A(H1N2) virus variant infections in humans are reported from EU countries, Canada, and the United States.

Update of the week

From 17 November 2021 to December, one new case with swine influenza A(H1N2) variant virus was reported in an adult from Manitoba, Canada. The case had exposure to pigs.

Cholera – Multi-country (World) – Monitoring global outbreaks
Opening date: 20 April 2006  Latest update: 7 January 2022

Several countries in Africa and Asia have reported cholera outbreaks in 2021. Major ongoing outbreaks are being reported from Bangladesh, Nigeria, and Niger. Haiti reported its last laboratory-confirmed case in February 2019.
Update of the week
Since the last update on 23 November 2021, approximately 13 162 suspected cholera cases, including 101 deaths, have been reported worldwide. Countries reporting most of the new cases since the previous update are Bangladesh, Nigeria, Democratic Republic of Congo, Mozambique, and Niger. A list of all countries reporting new cases since our previous update on 23 November 2021 can be found below.

Middle East respiratory syndrome coronavirus (MERS-CoV) – Multi-country
Opening date: 24 September 2012 Latest update: 7 January 2022
Since the disease was first identified in Saudi Arabia in April 2012, over 2 500 cases of Middle East respiratory syndrome coronavirus (MERS-CoV) 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 towards 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
Since the previous update published on 10 December, and as of 31 December 2021, four new MERS-CoV cases have been reported by Saudi Arabian health authorities, and one new case by the United Arab Emirates.

Meningitis – Democratic Republic of the Congo – 2021
Opening date: 10 September 2021 Latest update: 7 January 2022
On September 2021, the Democratic Republic of the Congo declared an outbreak of meningitis in the north-eastern Tshopo Province. The outbreak was officially declared over on 24 December 2021.

Update of the week
A total of 2 682 cases and 205 deaths (case fatality ratio, CFR: 7.7%), have been reported in Tshopo Province during this outbreak. The CFR decreased significantly, from 49% at the time the outbreak was declared (September 2021) to 7.7%. This decrease would be a result of intensified community sensitisation for early health-seeking behaviour by suspected cases and the improvement of case management practices.

Chikungunya and dengue – Multi-country (World) – Monitoring global outbreaks
Opening date: 27 January 2017 Latest update: 7 January 2022
Chikungunya virus disease and dengue are vector-borne diseases transmitted by Aedes mosquitoes. Outbreaks of dengue and chikungunya virus diseases have been reported globally in the Americas, Asia, Africa, Oceania, and Europe. Chikungunya virus disease and dengue are not endemic in mainland Europe, despite autochthonous outbreaks having been reported during the summer and autumn months in recent years.

Update of the week
Chikungunya virus disease: In 2021, 225 696 cases were reported, the majority from Brazil (127 487), India (91 477). Since the previous CDTR published on week 47 (ending 27 November 2021), 8 622 new cases have been reported, the majority from Brazil (8 468).

Dengue: In 2021, 1 612 850 cases were reported, the majority from Brazil (916 096) and India (123 106), Vietnam (68 268), Philippines (65 655) and Colombia (50 582). Since the previous CDTR published on week 47 (ending 27 November 2021), 140 791 new cases have been reported, the majority from Brazil (52 446), Colombia (13 130), Pakistan (23 428), Peru (7 334), and Vietnam (6 964).
II. Detailed reports

**New! Influenza A (type H5) – United Kingdom, England – 2022**

**Opening date:** 7 January 2022  
**Latest update:** 7 January 2022

**Epidemiological summary**

On 6 January 2022, the UK Health Security Agency (UKHSA) notified of a confirmed case of avian influenza A type H5 in a person in the South West of England.

The UK HSA reports that "The case was detected after the Animal and Plant Health Agency (APHA) identified an outbreak of the H5N1 strain of avian flu in their flock of birds. Their infection was identified through the routine monitoring which is conducted on anyone who has close contact with infected birds. The infected birds have all been culled." The UKHSA swabbed this person and detected low levels of influenza. Further laboratory analysis revealed that the virus is of the ‘H5’ type, found in birds. It has not yet been possible to confirm that this is a H5N1 infection (the strain that is currently circulating in birds in the UK).

The person was in very close and regular contact with a large number of infected birds, kept in and around their home for a prolonged period. All contacts of the case, including persons who visited the premises, have been traced and there is no evidence of onward transmission. The individual is currently well and self-isolating.

The UK has recently seen a large number of outbreaks and incidents of avian influenza in birds across the country of the H5N1 strain and the APHA and the UK’s Chief Veterinary Officer have issued alerts to bird owners.

**Source:** [UK HSA Press Release](#)

**ECDC assessment**

This is the first human case of this strain in the UK. No human-to-human transmission has been detected in this event. Currently, there is a large number of avian influenza outbreaks in birds across Europe. Human cases are to be expected and ECDC, together with EFSA and EURL colleagues have raised awareness among clinicians around avian flu infection (please see [published commentary](#) for more information).

Specific to A(H5N1): Human cases related to the avian influenza A(H5N1) virus could occur in regions where A(H5N1) is endemic in the poultry population (Asia, Africa, and the Middle East). Current epidemiological and virological evidence suggests that A (H5N1) viruses have not acquired the ability to transmit from human to human, thus the likelihood of sustained human-to-human transmission is low. This is the first human case due to A (type H5) to have been reported in Europe.

The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to be very low. Direct contact with infected birds or a contaminated environment is the most likely source of infection and the use of personal protective measures for people exposed to dead birds or their droppings will minimise the remaining risk.

**Actions**

Epidemic intelligence is closely monitoring this event and will report as soon as further relevant information becomes available.

A summary of ongoing avian influenza outbreaks can be found on this [webpage](#).

Furthermore, ECDC monitors avian influenza strains through its influenza surveillance programme and epidemic intelligence activities, and in collaboration with EFSA and the EU reference laboratory, in order to identify significant changes in the virological characteristics and epidemiology of the virus. ECDC, together with EFSA and the EU reference laboratory for avian influenza, produces a quarterly updated report of the [avian influenza situation](#). The most [recent report](#) was published on 22 December 2021.

**COVID-19 associated with SARS-CoV-2 – Multi-country (World) – 2019 - 2022**

**Opening date:** 7 January 2020  
**Latest update:** 7 January 2022

**Epidemiological summary**

*Please be aware that due to the end-of-year-festivities and ECDC holidays, the data collection process was not carried out.*
Since 31 December 2019 and as of week 2021-52, 290 613 933 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 5 450 958 deaths.

**Cases have been reported from:**

**Africa:** 9 822 377 cases; the five countries reporting most cases are South Africa (3 468 079), Morocco (966 777), Tunisia (728 802), Ethiopia (426 656) and Libya (390 294).

**Asia:** 73 425 228 cases; the five countries reporting most cases are India (34 922 882), Iran (6 196 913), Indonesia (4 263 168), Philippines (2 851 931) and Malaysia (2 764 354).

**America:** 105 435 479 cases; the five countries reporting most cases are the United States (55 114 128), Brazil (22 246 276), Argentina (5 739 245), Colombia (5 191 021) and Mexico (3 990 587).

**Europe:** 101 242 650 cases; the five countries reporting most cases are United Kingdom (13 235 401), Russia (10 554 309), France (10 228 050), Turkey (9 551 910) and Germany (7 217 639).

**Oceania:** 687 494 cases; the five countries reporting most cases are Australia (499 958), Fiji (55 009), French Polynesia (46 382), Papua New Guinea (36 192) and Guam (19 689).

**Other:** 705 cases have been reported from an international conveyance in Japan.

**Deaths have been reported from:**

**Africa:** 228 801 deaths; the five countries reporting most deaths are South Africa (91 198), Tunisia (25 588), Egypt (21 797), Morocco (14 855) and Ethiopia (6 958).

**Asia:** 1 148 634 deaths; the five countries reporting most deaths are India (481 893), Indonesia (144 097), Iran (131 680), Philippines (51 570) and Vietnam (33 021).

**America:** 2 417 863 deaths; the five countries reporting most deaths are the United States (826 065), Brazil (618 534), Mexico (299 544), Peru (202 818) and Colombia (130 061).

**Europe:** 1 650 836 deaths; the five countries reporting most deaths are Russia (311 353), United Kingdom (148 851), Italy (138 087), France (128 049) and Germany (112 223).

**Oceania:** 4 818 deaths; the five countries reporting most deaths are Australia (2 266), Fiji (702), French Polynesia (636), Papua New Guinea (590) and New Caledonia (281).

**Other:** 6 deaths have been reported from an international conveyance in Japan.

**EU/EEA:**

As of week 2021-52, 57 409 567 cases have been reported in the EU/EEA: France (10 228 050), Germany (7 217 639), Spain (6 659 275), Italy (6 188 236), Poland (4 105 613), Netherlands (3 165 633), Czechia (2 483 794), Belgium (2 132 409), Romania (1 797 288), Portugal (1 434 548), Sweden (1 347 621), Austria (1 283 321), Greece (1 281 588), Hungary (1 262 361), Slovakia (1 237 518), Denmark (821 286), Ireland (772 490), Bulgaria (748 184), Croatia (722 054), Lithuania (509 376), Slovenia (467 565), Norway (402 572), Latvia (277 019), Finland (260 292), Estonia (232 949), Cyprus (169 848), Luxembourg (109 652), Malta (54 089), Iceland (31 059) and Liechtenstein (6 238).

As of week 2021-52, 910 142 deaths have been reported in the EU/EEA: Italy (138 087), France (128 049), Germany (112 223), Poland (97 974), Spain (89 553), Romania (57 034), Hungary (38 276), Czechia (36 301), Bulgaria (30 983), Belgium (27 980), Greece (20 973), Netherlands (20 957), Portugal (19 002), Slovakia (16 788), Sweden (15 326), Austria (13 283), Croatia (12 653), Lithuania (7 462), Slovenia (6 073), Ireland (5 912), Latvia (4 887), Denmark (3 292), Estonia (1 938), Finland (1 564), Norway (1 305), Luxembourg (915), Cyprus (767), Malta (479), Liechtenstein (68) and Iceland (38).

The latest daily situation update for the EU/EEA is available [here](https://ecdc.europa.eu/en).
Public Health Emergency of International Concern (PHEIC):
On 30 January 2020, the World Health Organization declared that the outbreak of COVID-19 constitutes a PHEIC. On 11 March 2020, the Director-General of WHO declared the COVID-19 outbreak a pandemic. The third, fourth, fifth, sixth, seventh, eighth and ninth International Health Regulations (IHR) Emergency Committee meetings for COVID-19 were held in Geneva on 30 April 2020, 31 July 2020, 29 October 2020, 14 January 2021, 15 April 2021, 4 July 2021 and 22 October 2021 respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

ECDC assessment
For the most recent risk assessment, please visit ECDC’s dedicated webpage.

Actions
On 15 December 2021, ECDC published the Rapid Risk Assessment, "Assessment of the further emergence of the SARS-CoV-2 Omicron VOC in the context of the ongoing Delta VOC transmission in the EU/EEA, 18th update".

A dashboard with the latest updates is available on ECDC’s website. For the latest update on SARS-CoV-2 variants of concern, please see ECDC’s webpage on variants.

On 2 December 2021, ECDC published a Threat assessment brief, "Implications of the further emergence and spread of the SARS-CoV-2 B.1.1.529 variant of concern (Omicron) for the EU/EEA first update", and is actively monitoring, assessing and reporting about the evolving situation with the Omicron variant of concern.

On 15 December 2021, ECDC published a rapid risk assessment, "Assessment of the further emergence of the SARS-CoV-2 Omicron VOC in the context of the ongoing Delta VOC transmission in the EU/EEA, 18th update".
Epidemiological summary

As of 7 January 2022, a steep increase in COVID-19 cases over the past two weeks has been observed in several EU/EEA countries. For a general overview of the epidemiological COVID-19 situation in the EU/EEA, please see the ECDC Country Overview Report. At the end of week 52, the overall epidemiological situation in the EU/EEA was characterised by a high overall case notification rate which has increased rapidly in the past two weeks. High and increasing case notification rates or an epidemiological situation of high or very high concern were observed in all but two EU/EEA Member States. This situation is largely driven by the continued circulation of the Delta variant and rapidly increasing spread of the Omicron variant in many countries.
The summary below aims to give an overview of the extent to which Omicron is prevalent in EU/EEA countries. The included data are collected from TESSY, EU/EEA Member States' national and/or regional websites, and media reports quoting health authorities. As a result, the data presentation and completeness might be different depending on the data sources and availability on countries’ websites.

In EU/EEA countries that use faster methods to screen for the Omicron VOC (variant-specific PCR tests and/or S gene target failure rather than full sequencing) and publish these data, the estimated prevalence of the Omicron VOC for the most recent date available was:

- **Denmark**: 92.5% (2 January 2022)
- **France**: 80.3% (2021-w52)
- **Iceland**: 70% from one laboratory (21 December 2021)
- **Ireland**: 96% (5 January 2022)
- **Italy**: 28% (23 December 2021)
- **Luxembourg**: 32.4% (2021-w51)
- **Netherlands**: 76.9% ranges between labs 76.3%-90.8% (2 January 2022)
- **Portugal**: 75% (27 December 2021)
- **Romania**: 17.7% (2021-w52)

Several additional countries publish full sequencing results or do not specify the type of method used. Please note that due to the lag between sampling and sequencing, for some countries these results may show the situation with several weeks’ lag:

- **Austria**: 61% (2021-w52)
- **Belgium**: 97.8% (2021-w52)
- **Bulgaria**: 4.4% (samples taken between 15 November and 22 December)
- **Czechia**: 46.7% (2021-w52)**
- **Cyprus**: 50% (2021-w51)**
- **Estonia**: 55% (29 December 2021)*
- **Finland**: 36.1% (2021-w51)** And 90% in Helsinki (5 January 2022)*
- **Germany**: 20% (2021-w51)**
- **Greece**: 40% (2021-w52)** And +/- 70% in five regions of Greece (3 January 2022)
- **Hungary**: over 11% (as of 5 January 2022) *
- **Latvia**: 16.9% (2021-w52)
- **Lithuania**: 32% (2021-w51)**
- **Malta**: 89.5% (2021-w51) **
- **Norway**: 67.7% (3 January 2022)
- **Poland**: 11.3% (2021-w52)**
- **Slovakia**: 3.9% (2021-w52)**
- **Slovenia**: estimated 40% (samples from 31 December 2021)*
- **Spain**: 68.2% (2021-w51)**
- **Sweden**: 91.7% (2021-w52)**

* Type of test not specified
** Insufficient precision at less than 5% prevalence

Countries for which no national proportion was available:

- **Croatia**: 8 cases (15 December 2021)
- **Liechtenstein**: 15 cases using targeted sequencing (as of 5 January 2022). Switzerland and Liechtenstein together have 64.20% Omicron on a seven-day average and 83.90% as a daily value on 19/12/2021 using full and targeted sequencing of a representative sample.

For the latest information about variants, please see [ECDC's webpage on variants](https://ecdc.europa.eu/en/healthtopics/disease-threats).  

**ECDC assessment**

ECDC has classified a SARS-CoV-2 variant belonging to Pango lineage B.1.1.529 as a variant of concern (VOC) due to concerns regarding immune escape and potentially increased transmissibility compared to the Delta VOC. WHO also classified the variant as a VOC and assigned it the label Omicron. As described in the [Rapid Risk Assessment](https://ecdc.europa.eu/en/healthtopics/disease-threats), based on mathematical modelling predictions, the Omicron VOC will probably become dominant in early 2022. We therefore assess the probability of further spread of the Omicron VOC in the EU/EEA as VERY HIGH.

Currently, there is considerable uncertainty related to the transmissibility, vaccine effectiveness, risk for reinfection and other properties of the Omicron VOC. However, given its immune escape potential and potentially increased transmissibility advantage compared to the Delta VOC, we assess the probability of further introduction and community spread in the EU/EEA as VERY
HIGH.

As EU/EEA countries are still facing the severe impact of the Delta VOC wave, a further rise in hospitalisations could quickly overwhelm healthcare systems. Therefore, we assess the impact of the spread of the Omicron VOC as VERY HIGH.

In conclusion, the overall level of risk for the EU/EEA associated with the SARS-CoV-2 Omicron VOC is assessed as VERY HIGH.

**Actions**

ECDC is continuously monitoring the situation through its epidemic intelligence activities. TESSy reporting for SARS-CoV-2 Omicron VOC (B.1.1.529) has been implemented.

ECDC published a Rapid Risk Assessment on 15 December 2021, *Assessment of the further emergence of the SARS-CoV-2 Omicron VOC in the context of the ongoing Delta VOC transmission in the EU/EAA*, and is actively monitoring, assessing and reporting on the situation with the Omicron VOC.

Until further notice, ECDC will provide specific updates on the Omicron VOC on a weekly basis. A section on the epidemiology of the Omicron VOC in the EU/EEA is also available in the weekly Country Overview report available here. Previous updates on reported cases are available on ECDC’s dedicated website.

**Influenza — Multi-country — Monitoring 2021/2022 season**

**Epidemiological summary**

**2021/2022 season overview**

Influenza activity, based on patients in sentinel primary care settings testing positive for influenza virus infection, crossed the epidemic threshold of 10% set for the Region in week 49/2021 and reached 23% in week 52/2021.

For the Region as a whole, influenza activity has been increasing with different levels of activity across the countries and areas of the Region with a dominance of A(H3) viruses.

**Source:** Flu News Europe

**ECDC assessment**

Reported influenza activity is increasing.

Vaccination remains the best protective measure for prevention of influenza. With dominant A(H3) circulation, clinicians should consider early antiviral treatment of at-risk groups with influenza infection in accordance with local guidance to prevent severe outcomes.

**Actions**

ECDC and WHO monitor influenza activity in the WHO European Region. Data will be updated on a weekly basis and are available on the Flu News Europe website.

**Influenza A(H5N6) — Multi-country — Monitoring human cases**

**Epidemiological summary**

As of 20 December 2021 and since the previous monthly report published in CDTR on 19 November 2021, six new cases, including one death, of human infection with avian influenza A(H5N6) virus were reported from China with onset of symptoms in November and December 2021. Five cases, including one death, were adults from 49 to 72 years of age, and one was a three-year-old child. The cases were reported from four provinces (Guangdong, Guangxi, Hunan, and Sichuan); five of the six cases...
were hospitalised; five cases had exposure to poultry, and for one case exposure history was not disclosed. No further cases were detected among contacts of these cases. Epidemiological details of the new cases are listed as follows:

1. **54-year-old female** from Zigong, Sichuan Province with onset of symptoms on 17 November 2021. The case was hospitalised on 21 November 2021 in critical condition and died on 23 November. The case had an underlying condition and had exposure to deceased backyard poultry prior to onset of illness.

2. **3-year-old male** from Nanning, Guangxi Province with onset of symptoms on 15 November 2021, hospitalised on 16 November. The case had exposure to poultry and poultry market.

3. **49-year-old male** from Hengyang, Hunan Province with onset of symptoms on 22 November 2021 and hospitalised on 25 November with severe pneumonia. The case had exposure history to poultry market.

4. **72-year-old male** from Yongzhou, Hunan Province with onset of symptoms 24 November 2021 and hospitalised on 29 November 2021. The case had exposure to poultry.

5. **58-year-old male** from Hengyang, Hunan Province with onset of mild symptoms on 4 December 2021. The case had exposure to poultry.

6. **68-year-old male** from Huizhou, Guangdong Province with onset of symptoms on 3 December 2021, was hospitalised in critical condition on 7 December. History of exposure of that case to poultry was not reported.

**Summary:** since 2014, and as of 20 December 2021, 58 cases, including 27 deaths (CFR: 46.6%), of human influenza A(H5N6) virus infection have been reported from China (57) and Laos (1). One case in China from 2015 was detected in the literature and is included in the total number of cases. The last case was reported from China with date of onset in December 2021. An increasing number of cases of avian influenza A(H5N6) is reported in China in 2021, compared to previous years.

Sources: WHO and national reports

**ECDC assessment**

Sporadic human cases of avian influenza A(H5N6) have been previously observed. No human-to-human transmission has been reported so far. Sporadic zoonotic transmission cannot be excluded; the use of personal protective measures for people directly exposed to potentially infected poultry and birds with avian influenza viruses will minimise the remaining risk. The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to be very low.

**Actions**

ECDC monitors avian influenza strains through its epidemic intelligence activities and in collaboration with EFSA and the EU reference laboratory in order to identify significant changes in the epidemiology of the virus. ECDC, together with EFSA and the EU reference laboratory for avian influenza, produces a quarterly updated report of the avian influenza situation. The most recent report was published in December 2021.
Distribution of confirmed human cases of avian influenza A(H5N6) virus infection by year of onset and country, 2014–2021

Source: ECDC

Epidemiological summary

Update: As of 20 December 2021, and since the previous monthly report published in CDTR on 19 November 2021, one new case of human infection with avian influenza A(H9N2) was reported from China. The case is a 7-year-old male from Heyuan City, Guangdong Prefecture. The case developed mild symptoms on 28 November 2021 and had a history of exposure to a poultry market.

Summary: As of 20 December 2021 and since 1998 a total of 95 laboratory-confirmed cases of human infection with avian influenza A(H9N2) viruses have been reported, from China (83), Egypt (4), Bangladesh (3), Cambodia (1), Oman (1), Pakistan (1), India (1), and Senegal (1). Most of the cases were children with mild disease.

Sources: WHO Avian Influenza Weekly Update Number 823, 17 December 2021

ECDC assessment

Sporadic human cases of avian influenza A(H9N2) have been previously observed. No human-to-human transmission has been reported. Sporadic zoonotic transmission cannot be excluded; the use of personal protective measures for people directly exposed to potentially infected poultry and birds with avian influenza viruses will minimise the remaining risk. The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to be very low.

Actions

ECDC monitors avian influenza strains through its epidemic intelligence activities in order to identify significant changes in the epidemiology of the virus. ECDC, together with EFSA and the EU reference laboratory for avian influenza, produces a quarterly updated report on the avian influenza situation. The most recent report was published in December 2021.
Distribution of confirmed human cases with avian influenza A(H9N2) virus infection by onset year and country, 1998–2021

Human cases with swine influenza A(H1N2) variant virus – Multi-country – 2021

Opening date: 1 June 2021
Latest update: 7 January 2022

Epidemiological summary

A case with swine influenza A(H1N2)v was reported in an 18-year-old male from Manitoba, Canada. The case had exposure to pigs on a farm where he works. In October, the case developed mild symptoms, subsequently tested for COVID-19 and influenza. The COVID-19 test was negative. No further cases were reported among contacts of this case.

Overall in 2021, nine cases were reported with swine influenza A(H1N2)v in Austria, Canada, China, France and the US.

Source: Manitoba Government | US CDC

ECDC assessment

Sporadic transmission of swine influenza viruses from pigs or contaminated environment to humans has been observed in recent years in the EU/EEA, Canada, China and the US, so these cases are not unexpected. Swine influenza virus infection should always be considered in patients with respiratory symptoms reporting prior contact to pigs. This helps to identify transmission events to humans early and to initiate follow-up investigations. Unsubtypable influenza viruses should be shared with national influenza centres or reference laboratories as well as WHO Collaborating Centres for further virus characterisation.

Actions

ECDC is monitoring zoonotic influenza events through its epidemic intelligence activities in order to identify significant changes in the epidemiology of the virus. Cases should be reported immediately to EWRS and IHR.

Cholera – Multi-country (World) – Monitoring global outbreaks
Epidemiological summary

**Americas**

**Haiti**: No new cases have been reported since the last update. In 2021, and as of 14 November, no confirmed cholera cases have been reported in Haiti.

**Dominican Republic**: No new cases have been reported since the last update. In 2021, and as of 18 October, no cholera cases have been reported in the Dominican Republic.

**Africa**

**Benin**: Since the previous update, 541 suspected cholera cases including two deaths have been reported in Benin. In 2021, and as of 12 December, a total of 779 cases including 11 deaths (CFR 1.4%) have been reported in the country.

**Burundi**: During week 44 (ending 7 November 2021), one confirmed case of cholera and no associated deaths were reported from Cibitoke health district in Burundi. This is the first case of cholera reported in Burundi in 2021. Last year a total of 95 cholera cases and one death (CFR 1.1%) were reported in the country.

**Cameroon**: In 2021 and as of 29 November, 260 suspected cholera cases including 17 deaths have been reported from Far-North, North, Centre, South West and Littoral regions of Cameroon.

**Democratic Republic of the Congo**: In 2021, from epidemiological week 1 to 49 (ending 12 December 2021), 6 879 suspected cholera cases including 137 deaths (CFR 1.9%) were recorded in 80 health zones across 16 provinces of the Democratic Republic of the Congo. In 2020, a total of 30 304 suspected cholera cases including 514 deaths (case fatality 1.7%) were reported in 179 health zones across 23 provinces.

**Ethiopia**: Since the last update, no new cholera cases have been reported in Ethiopia. In 2021, and as of 26 September, 2 319 suspected cholera cases have been reported including 25 deaths.

**Kenya**: No new cases have been reported since the last update. In 2021 and as of 18 October, 38 cholera cases including 14 confirmed cases, have been recorded in Kenya’s Garissa and Turkana Counties.

**Mali**: Since the last update no new cholera cases have been reported in Mali. In 2021, and as of 31 October, a total of 11 cases including four deaths have been reported in Mali’s northern region of Gao.

**Mozambique**: Since the last update, no new cholera cases have been reported in Mozambique. On 28 September 2021, the WHO was notified about a cholera outbreak in some communities of Caia District. By 19 October 2021, 191 cases were recorded with no deaths associated. Among these cases, eight were confirmed by means of a cholera rapid diagnostic test (7) or culture test (1).

**Niger**: Since the previous CDTR, Niger has reported 118 suspected cholera cases including seven deaths. In 2021 and as of 12 December, a total of 5 587 cases, including 166 deaths (CFR 2.9%), have been reported in Niger. To date, 35 out of 72 health districts of the country have reported cases with three health districts currently reporting confirmed cases. The rainy season is still ongoing causing floods that might contribute to the spread of the outbreak.

**Nigeria**: Since the previous CDTR, Nigeria has reported 4 482 suspected cholera cases, including 76 deaths. In 2021 and as of 5 December, a total of 107 166 suspected cases, including 3 595 deaths (CFR 3.4%), from 32 Nigerian states have been reported in 2021. Media quoting Nigeria Centre for Disease Control (NCDC) reported that more people have died from cholera than SARS-CoV-2 in Nigeria this year. According to the report, approximately 3 600 Nigerian have died from cholera in the first 11 months of 2021, while 2 977 Nigerians have died (as of 1 December 2021) from SARS-CoV-2 since 2020 when the index case was recorded.

**Tanzania**: According to a media report, at least 37 suspected cholera cases have been reported in Tanzania’s southern region of Rukwa. This is the first-time cholera cases have been reported in Tanzania this year. According to this report, the outbreak is still ongoing.

**Togo**: Since previous CDTR, Togo has reported four suspected cholera cases. In 2021 and as of 12 December 2021, a total of 108 suspected cases, including four deaths (CFR 3.7%), have been reported from Togo.

**Uganda**: According to WHO, an active cholera outbreak is ongoing in Isingiro district of Uganda since 4 November 2021. As of 17 November 2021, a total of 163 cases with no associated deaths have been reported in the country.
Asia

Afghanistan: Since the previous CDTR, 2 116 suspected cholera cases including eight deaths have been reported in Afghanistan. In 2021 and as of 31 October, a total of 3 016 cases of acute watery diarrhoea (AWD), including eight deaths, have been reported from 13 districts in five of the 34 provinces of the country.

Bangladesh: Since the previous CDTR, 10 617 Acute Watery Diarrhoea (AWD) cases were reported in Rohingya Refugee Camp in Cox's Bazar, Bangladesh. In 2021, and as of 28 November, a total of 122 192 suspected cholera cases, including two deaths, have been reported. Among these cases, 309 tested positive by means of a cholera rapid diagnostic test or culture test.

India: Since the last update, 31 new cholera cases have been reported in Andhra Pradesh, India. In 2021, and as of 15 December, a total of 7 822 suspected cholera cases, including two deaths, have been reported in different parts of India.

Malaysia: During week 42 (ending 24 October 2021), one confirmed case of cholera with no associated deaths were reported from Selangor State in Malaysia. This is the first case of cholera reported from Malaysia in 2021. Last year a total of 43 cholera cases and no fatalities were reported in Malaysia.

Nepal: Since the previous CDTR update, 14 suspected cholera cases and three deaths have been reported in Nepal. In 2021, and as of 12 December, a total of 899 suspected cholera cases, including seven deaths, have been reported.

No updates were available on the outbreaks reported in Yemen earlier this year.

Disclaimer: Data presented in this report originate from several sources, both official public health authorities and non-official, such as the 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 and figures may not reflect the actual epidemiological situation.

ECDC assessment

Cholera cases continue to be reported in eastern Africa, the Horn of Africa, and the Gulf of Aden. Cholera outbreaks have also been reported in the western and southern part of Africa and in some areas of Asia. Despite the high number of cholera outbreaks reported worldwide, few cases are reported each year among returning EU/EEA travellers. The risk of cholera infection in travellers visiting countries with ongoing outbreaks remains low, although sporadic infections among EU/EEA travellers are possible. In 2018, 26 cases were reported in EU/EEA Member States, while 17 and 23 cases were reported in 2017 and 2016, respectively. All cases had travel history to cholera-affected areas. The risk of further transmission of Vibrio cholerae within the EU/EEA is very low.

According to WHO, vaccination should be considered for travellers at higher risk of infection, such as emergency and relief workers who are likely to be directly exposed. Vaccination is generally not recommended for other travellers.

Travellers who plan to visit cholera-endemic areas should seek advice from travel health clinics ahead of their travel to assess their personal risk and be informed on precautionary sanitary and hygiene measures to prevent infection. These include drinking bottled water or water treated with chlorine, carefully washing fruit and vegetables with bottled or chlorinated water before consumption, regularly washing hands with soap, eating thoroughly cooked food, and avoiding the consumption of raw seafood products.

Actions

ECDC monitors cholera outbreaks globally through its epidemic intelligence activities in order to identify significant changes in epidemiology and to inform public health authorities. Reports are published on a monthly basis. The worldwide overview of cholera outbreaks is available on ECDC’s website.
Geographical distribution of cholera cases reported worldwide as of December 2021

Geographical distribution of cholera cases reported worldwide from October to December 2021

Middle East respiratory syndrome coronavirus (MERS-CoV) – Multi-country
Opening date: 24 September 2012  Latest update: 7 January 2022
Epidemiological summary

From 1 January 2021 to 31 December 2021, 19 MERS-CoV cases have been reported in Saudi Arabia (17) and the United Arab Emirates (2), including eight deaths. In Saudi Arabia, all were primary cases, 10 of whom reported contact with camels. These 17 cases were reported in Riyadh (10), Makkah (4), and the Eastern Province (3).

Since April 2012, and as of 31 December 2021, 2 600 cases of MERS-CoV, including 943 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 | WHO DON 1 | WHO DON 2

ECDC assessment

Human cases of MERS-CoV continue to be reported in the Arabian Peninsula, particularly in Saudi Arabia. However, the number of new cases detected and reported through surveillance has dropped to the lowest levels since 2014. The risk of sustained human-to-human transmission in Europe remains very low. The current MERS-CoV situation poses a low risk to the EU, as stated in ECDC's rapid risk assessment published on 29 August 2018, which also provides details on the last case reported in Europe.

ECDC published a technical report, Health emergency preparedness for imported cases of high-consequence infectious diseases, in October 2019, which will be useful for EU Member States wanting to assess their level of preparedness for a disease such as MERS. ECDC also published Risk assessment guidelines for infectious diseases transmitted on aircraft (RAGIDA) – Middle East Respiratory Syndrome Coronavirus (MERS-CoV) on 22 January 2020.

Actions

ECDC is monitoring this threat through its epidemic intelligence activities and reports on a monthly basis.

Geographical distribution of confirmed MERS-CoV cases by probable region of infection and exposure, from 1 January to 31 December 2021

Source: ECDC
Geographical distribution of confirmed MERS-CoV cases by country of infection and year, from April 2012 to 31 December 2021

Date of production: 04/01/2022

Meningitis – Democratic Republic of the Congo – 2021

Opening date: 10 September 2021 Latest update: 7 January 2022

Epidemiological summary

On 7 September 2021, the Democratic Republic of the Congo declared an outbreak of meningitis in the north-eastern Tshopo Province, with 261 suspected cases and 129 deaths initially reported (CFR: 49%). Confirmatory tests were carried out by Institut Pasteur in Paris where Neisseria meningitidis was detected. Health authorities emergency teams, and the World Health Organization (WHO) supported the response.

As of 31 October 2021, a total of 2,558 meningitis cases including 202 deaths (CFR: 7.9%), had been reported. In total, 181 samples were analysed of which 29 have been confirmed (27 for Neisseria meningitidis).

By the time the outbreak was declared over on 24 December 2021, 2,662 cases, including 205 deaths (CFR: 7.7%), had been reported.

Background: Meningitis is a serious infection of the meninges, the membranes covering the brain and spinal cord. The disease can be caused by many different pathogens, including bacteria, fungi or viruses, but the highest global burden is seen with bacterial meningitis. Several different bacteria can cause meningitis. Streptococcus pneumoniae, Haemophilus influenzae and Neisseria meningitidis are the most frequent ones. N. meningitidis, causing meningococcal meningitis, is the one with the potential to produce large epidemics. There are 12 serogroups of N. meningitidis that have been identified, six of which (A, B, C, W, X and Y) can cause epidemics. Meningococcal meningitis can affect anyone of any age, but mainly affects babies, preschool children, and young people. The disease can occur in a range of situations, from sporadic cases and small clusters to large epidemics throughout the world, with seasonal variations. Geographic distribution and epidemic potential differ according to serogroup. The largest burden of meningococcal meningitis occurs in the meningitis belt, an area of sub-Saharan Africa, which stretches from Senegal in the west to Ethiopia in the east and comprises 26 countries.


ECDC assessment

18/25
Meningitis outbreaks have occurred in several provinces of the Democratic Republic of the Congo in the past. In 2009, an outbreak in Kisangani infected 214 people and caused 15 deaths - a CFR of 8%. In this outbreak, the case fatality rate 7.7% (2 662 cases, including 205 deaths). The health authorities in the DRC successfully controlled the outbreak.

**Actions**

ECDC will continue to monitor the event through its epidemic intelligence activities and report relevant news on an *ad hoc* basis.

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

**Opening date: 27 January 2017**  **Latest update: 7 January 2022**

**Epidemiological summary**

**Europe**

**Chikungunya virus disease:** No autochthonous cases of chikungunya virus disease have been detected in Europe in 2021.

**Dengue:**  
France: In 2021, one autochthonous confirmed case has been reported.

**Americas and the Caribbean**

**Chikungunya virus disease:**  
Belize: In 2021, and as of 29 May 2021, 737 cases and no deaths have been reported.

Bolivia: In 2021, and as of 20 November 2021, 359 cases, including 43 confirmed cases and no deaths, have been reported. This is an increase of 16 cases, including three confirmed cases since 23 October 2021.

Brazil: In 2021 and as of 27 November 2021, 127 487 cases, including 62 642 confirmed cases and 11 deaths, have been reported. This is an increase of 8 468 cases, including 5 421 confirmed cases and 3 deaths since 16 October 2021.

Colombia: In 2021, and as of 18 December 2021, 64 cases and no deaths have been reported. This is an increase of 17 cases since 6 November 2021.

Costa Rica: In 2021, and as of 11 December 2021, 34 cases and no deaths have been reported. This is an increase of seven cases since 6 November 2021.

El Salvador: In 2021, and as of 11 December 2021, 106 cases and no deaths have been reported. This is an increase of five cases since 6 November 2021.

Guatemala: In 2021, and as of 6 November 2021, 1 951 cases and no deaths have been reported.

Honduras: In 2021, and as of 30 October 2021, 31 cases and no deaths have been reported.

Mexico: In 2021, and as of 4 December 2021, four confirmed cases and no deaths have been reported.

Nicaragua: In 2021, and as of 11 December 2021, 11 cases, including one confirmed case and no deaths, have been reported. This is an increase of one case since 30 October 2021.

Paraguay: In 2021, and as of 18 December 2021, 311 cases and no deaths have been reported. This is an increase of three cases since 6 November 2021.

Peru: In 2021, and as of 25 December 2021, 480 cases, including 401 confirmed cases and no deaths, have been reported.

Saint Lucia: In 2021, and as of 11 December 2021, one confirmed case and no deaths have been reported.

Venezuela: In 2021, and as of 4 December 2021, 57 cases and no deaths have been reported. This is an increase of three cases since 6 November 2021.
since 23 October 2021.

**Dengue:**

In 2021, and as of 25 December, the Pan American Health Organization (PAHO) reported 1 179 311 dengue cases, including 496 382 confirmed cases and 391 associated deaths, in the Americas. The five countries reporting most cases are: Brazil (916 096), Colombia (50 582), Peru (48 713), Nicaragua (35 433), and Mexico (35 413). This is an increase of 97 269 cases and 72 deaths since 13 November 2021.

All four dengue virus serotypes (DENV 1, DENV 2, DENV 3, and DENV 4) are currently circulating in the Americas, which increases the risk of severe disease. The figures for each country of the Americas region can be found on the [PAHO Health Information Platform](https://www.paho.org/es/healthinformation/). Dengue fever surveillance indicators are at low levels or even zero in the French Antilles (Guadeloupe, Martinique, Saint-Martin, and Saint-Barthélemy). Martinique and Guadeloupe officially declared the end of the dengue epidemics in these two French departments on 29 April and 20 May 2021, respectively.

**Asia**

**Chikungunya virus disease:**

[Cambodia](https://www.paho.org/es/countries/cambodia): In 2021, and as of 9 June 2021, 514 cases and no deaths have been reported.

[India](https://www.paho.org/es/countries/india): In 2021, and as of 31 October 2021, 91 477 cases, including 8 806 confirmed cases and no deaths, have been reported.

[Malaysia](https://www.paho.org/es/countries/malaysia): In 2021, and as of 4 December 2021, 1 335 cases and no deaths have been reported. This is an increase of 114 cases since 6 November 2021.

[Thailand](https://www.paho.org/es/countries/thailand): In 2021, and as of 29 December 2021, 633 cases and no deaths have been reported. This is an increase of 110 cases since 18 November 2021.

**Dengue:**

[Afghanistan](https://www.paho.org/es/countries/afghanistan): In 2021 and as of 14 November 2021, 423 cases, including one death, have been reported. This is an increase of 123 cases and one death since 24 October 2021.

[Bangladesh](https://www.paho.org/es/countries/bangladesh): According to media, in 2021 and as of 7 December 2021, 27 839 cases, including 100 deaths, have been reported. This is an increase of 1 386 cases and two deaths since 22 November 2021.

[Cambodia](https://www.paho.org/es/countries/cambodia): In 2021 and as of 6 November 2021, 1 523 cases, including four deaths, have been reported. This is an increase of 117 cases and one death since 23 October 2021.

[China](https://www.paho.org/es/countries/china): In 2021 and as of 6 November 2021, 44 cases and no deaths have been reported. This is an increase of 10 cases since 4 November 2021.

[India](https://www.paho.org/es/countries/india): In 2021, and as of 31 October 2021, 123 106 cases, including 90 deaths have been reported. Although there were no official updated reports available since the last CDTR report, according to several media reports, dengue outbreaks are ongoing in the country ([1](https://www.paho.org/en/healthinformation/weeklyupdates), [2](https://www.paho.org/en/healthinformation/weeklyupdates/reports-weekly)), [3](https://www.paho.org/en/healthinformation/weeklyupdates/reports-weekly).

[Laos](https://www.paho.org/es/countries/laos): In 2021 and as of 4 December 2021, 1 328 cases and no deaths have been reported. This is an increase of 77 cases since 18 November 2021.

[Malaysia](https://www.paho.org/es/countries/malaysia): In 2021 and as of 11 December 2021, 24 589 cases, including 19 deaths, have been reported. This is an increase of 2 488 cases and two deaths since 6 November 2021.

[Maldives](https://www.paho.org/es/countries/maldives): In 2021 and as of 30 November 2021, 120 cases and no deaths have been reported. This is an increase of 22 cases since 31 October 2021.

[Nepal](https://www.paho.org/es/countries/nepal): In 2021 and as of 25 December 2021, 372 cases and no deaths have been reported. This is an increase of 34 cases since 14 November 2021.

[Pakistan](https://www.paho.org/es/countries/pakistan): In 2021 and as of 25 November 2021, 48 906 cases, including 279 confirmed cases and 183 deaths have been reported.
This is an increase of 23,428 cases and 65 deaths since 27 October 2021. According to the WHO Disease outbreak news report, as of 25 November, Punjab province reported the highest number of cases with 24,146 cases and 127 deaths (CFR: 0.5%) accounting for 49.4% and 69.4% of all cases and deaths, respectively. The deaths were mainly reported from Lahore district.

**Philippines**: In 2021 and as of 13 November 2021, 66,655 cases, including 237 deaths, have been reported. This is an increase of 5,485 cases and 21 deaths since 23 October 2021.

**Singapore**: In 2021 and as of 31 December 2021, 5,259 cases and no deaths have been reported. This is an increase of 480 cases since 18 November 2021.

**Sri Lanka**: In 2021 and as of 31 December 2021, 19,087 cases and no deaths have been reported. This is an increase of 2,489 cases since 22 November 2021.

**Thailand**: In 2021 and as of 31 December 2021, 7,180 cases, including two deaths, have been reported. This is an increase of 727 cases since 14 November 2021.

**Vietnam**: In 2021 and as of 21 November 2021, 68,268 cases, including 21 deaths, have been reported. This is an increase of 6,964 cases since 7 November 2021.

**Yemen**: In 2021, and as of 31 August 2021, 5,224 cases and no deaths have been reported.

**Africa**

**Chikungunya virus disease**: Democratic Republic of the Congo: In 2021, and as of 28 March 2021, 104 cases and no deaths have been reported.

**Dengue**:

**Angola**: In 2021, and as of 11 June 2021, 86 cases, including 38 confirmed cases and no deaths have been reported.

**Côte d’Ivoire**: In 2021, and as of 14 September 2021, one case and no deaths have been reported.

**Ethiopia**: In 2021, and as of 4 February 2021, 207 cases and no deaths have been reported.

**Kenya**: In 2021 and as of 7 November 2021, 2,392 cases, including 36 confirmed cases and two deaths have been reported. This is an increase of 1,418 cases since 26 August 2021.

**Réunion**: In 2021 and as of 23 December 2021, 29,850 confirmed cases, including 21 deaths, have been reported. This is an increase of 91 cases and one death since 10 November 2021.

**Senegal**: In 2021 and as of 18 November 2021, 86 cases, including 25 confirmed cases and no deaths have been reported. This is an increase of 39 cases since 23 October 2021.

**Sudan**: In 2021, and as of 21 November 2021, 229 cases, including five deaths, have been reported.

**Australia and the Pacific**

Chikungunya virus disease: No cases of chikungunya virus disease have been reported in Australia and the Pacific in 2021.

**Dengue**:

**Australia**: In 2021 and as of 7 November 2021, five cases and no deaths have been reported. This is an increase of one case since 24 October 2021.

**Cook Islands**: In 2021, and as of 11 July 2021, 217 cases and no deaths have been reported.

**Fiji**: In 2021, and as of 7 February 2021, 300 cases and no deaths have been reported.

**French Polynesia**: In 2021, and as of 6 November 2021, 20 cases, including one confirmed case, and no deaths have been reported.
Marshall Islands: In 2021, and as of 14 March 2021, 12 cases and no deaths have been reported.

New Caledonia: In 2021, and as of 15 November 2021, 116 cases, including 92 confirmed cases, and no deaths have been reported.

Vanuatu: In 2021, and as of 14 November 2021, 26 confirmed cases and no deaths have been reported.

Wallis and Futuna: In 2021 and as of 27 November 2021, 68 confirmed cases and no deaths have been reported.

N.B: The data presented in this report originate from several sources, both official public health authorities and non-official sources 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. Please note that case definitions may differ between countries and comparisons should be made with caution.

ECDC assessment
Chikungunya virus disease and dengue affect people in most countries in the tropics and sub-tropics. EU/EEA citizens travelling to the affected areas should apply personal protective measures against mosquito bites.

The likelihood for onward transmission of dengue and chikungunya virus disease in mainland EU/EEA is, among other things, linked to importation of the virus by viraemic travellers into receptive areas with established and active competent vectors (i.e. Aedes albopictus). Aedes albopictus is established in a large part of mainland Europe. The current likelihood of the occurrence of vector-borne events of chikungunya and dengue viruses in mainland EU/EEA is negligible, as the environmental conditions are not favourable to the growth of mosquito populations and virus replication in the vector. To date, all autochthonous outbreaks of chikungunya virus disease and dengue in mainland EU/EEA have occurred between July and November.

More information is available on ECDC's dedicated webpage on autochthonous transmission of chikungunya and dengue virus in the EU/EEA, as well as on ECDC's dengue and chikungunya factsheets.

Actions
ECDC monitors these threats through its epidemic intelligence activities and reports on a monthly basis. A summary of the worldwide overview of dengue and chikungunya virus disease is available on ECDC's website.
Geographical distribution of chikungunya virus disease cases reported worldwide, October to December 2021

Source: ECDC

Geographical distribution of chikungunya virus disease cases reported worldwide, January to December 2021

Source: ECDC
Geographical distribution of dengue cases reported worldwide, January to December 2021

Source: ECDC

Geographical distribution of dengue cases reported worldwide, October to December 2021

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