WEEKLY BULLETIN

Communicable Disease Threats Report

Week 3, 16–22 January 2023

Today's disease topics

1. COVID-19 associated with SARS-CoV-2 – Multi-country (EU/EEA) – 2019–2023
2. C. diphtheriae among migrants – Europe – 2022–2023
3. Influenza – Multi-country – Monitoring 2022/2023 season
4. Mpox – Multi-country – 2022–2023
5. Cholera – Multi-country (World) – Monitoring global outbreaks

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1. COVID-19 associated with SARS-CoV-2 – Multi-country (EU/EEA) – 2019–2023

Summary:

In the week ending 15 January, reported data showed a continuing overall improvement in the epidemiological situation in the EU/EEA. Pooled rates of case notification (all-age and among those aged 65 years and above), hospital, ICU admissions, and deaths have been falling in recent weeks following the substantial increases observed during December in both the general population and long-term care facilities. Please note that there may still be some residual impact from the end-of-year holidays on the quality of data reported in recent weeks, which could affect the accuracy of this interpretation.

Increasing trends compared to the previous week were observed in four of 27 countries reporting case notification data up to week 2, three of 24 countries with data on hospital or ICU admissions/occupancy, and two of 25 countries reporting data on COVID-19 deaths. These increases were recent (of 1–3 weeks duration) and the indicators remained relatively low in the affected countries.

Despite what appears to be an improving picture in many EU/EAA countries, the pandemic continues to have a considerable impact, with 1 624 COVID-19 deaths reported by 25 EU/EEA countries in week 2. In the most recent four weeks, 27% and 67% of deaths for which age was reported were in people aged 65–79 years and 80 years and above, respectively. This highlights the importance of booster doses of COVID-19 vaccines, particularly among groups vulnerable to severe illness. In one country (Greece), increasing trends were reported for cases among people aged 65 years and above, ICU admissions, and deaths. The cumulative uptake of a second booster was 34.4% (country range: 0.3–86.3%) among people aged 60 years and older in the EU/EEA.

Forecasts of cases, hospital admissions and deaths from the European COVID-19 Forecast Hub provide predictions for weeks 2 and 3. Compared with the previous week, decreasing trends in cases, hospital admissions and deaths are forecast for the EU/EEA overall by the end of week 3.

Among the 10 countries with an adequate volume of sequencing or genotyping for weeks 52–1 (26 December to 8 January 2023), the estimated distribution of variants of concern (VOC) or variants of interest (VOI) was 49.0% (13.2–77.7% from eight countries) for BQ.1, 24.3% (5.8–83.7% from 10 countries) for BA.5, 12.7% (0.2–35.1% from 10 countries) for BA.2.75, 2.7% (0.9–6.1% from eight countries) for XBB (which may include some XBB.1.5 due to a change in reporting), 1.4% (0.1–7.5% from six countries) for XBB.1.5, 0.8% (0.3–11.4%, 253 detections from eight countries) for BA.2, and 0.8% (0.1–1.4%, 140 detections from nine countries) for BA.4.

As of 20 June 2022, ECDC discontinued the data collection and publication of the number of COVID-19 cases and deaths worldwide. Please refer to World Health Organization (WHO) data on COVID-19 and WHO's Weekly Epidemiological and Weekly Operational Updates page for non-EU/EEA countries.

For the latest COVID-19 country overviews, please see the dedicated web page.

Other news

On 13 January 2023, the German Federal Government (Bundesregierung) informed that from 2 February 2023 masks will no longer be mandatory on long-distance trains and buses in Germany.

Weekly update on SARS-CoV-2 variants:

Since the last update on 12 January 2022 and as of 19 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 on variants, please see ECDC's webpage on variants.

ECDC assessment on the XBB.1.5 sub-lineage

XBB.1.5 is a sub-lineage of XBB with an additional spike RBD mutation S486P. This lineage was first detected in United States with the sample collection dates dated from 22 October 2022, and this lineage has been seen increasing in numbers since then. The parental lineage XBB and its sub-lineages including XBB.1.5 are categorised as a variant of interest (VOI) [**1**] by ECDC since 12 January 2023.

As of 16 January 2023, 6562 sequences have been deposited in GISAID EpiCoV belonging to XBB.1.5. The US CDC nowcast system estimates the current proportion of the variant around 43% (previous week 30.4%) in the USA. For the last week with complete data (week 51 2022), the US CDC reports 11.8% XBB.1.5 (previous week 7.4%).

Based on GISAID EpiCoV data as of 12 January 2023, XBB.1.5 is increasing from low proportions in all EU/EEA countries with adequate sequence reporting volume. These estimated proportions for week 52 2022 and week 51 2022 in parenthesis are: Austria 1.6% (1.4%), Belgium 1.0% (0.4%), Denmark 1.3% (0.9%), France 0.5% (0.3%), the Netherlands 2.9% (1.8%), Spain 2.6% (0.2%) and Sweden 1.2% (0.2%).

There is a risk that this variant may have an increasing effect on the number of cases of COVID-19 in the EU/EEA, but not within the coming month as the variant is currently only present at very low levels. Due to uncertainties associated with the growth rate of the variant this assessment is associated with a high degree of uncertainty. A threat assessment brief on XBB.1.5 has been published 13 January 2023.

Countries should remain vigilant for signals of increases in the proportion of XBB.1.5. Countries should therefore strengthen sentinel surveillance systems (primary care ILI/ARI and SARI) and continue to collect data on laboratory-confirmed cases (from non-sentinel sites) to maintain sensitive and representative testing and genomic surveillance with timely sequence reporting. Countries should continue to monitor COVID-19 case rates - especially in people aged 65 and older - and severity indicators such as hospitalisations, ICU admissions, ICU occupancy and death.

Improving COVID-19 vaccine uptake of the primary course and booster dose remains a priority for all eligible individuals that are not up-to-date with the recommended schedule, especially among population groups at higher risk of severe disease and in countries with lower vaccine uptake.

Countries are encouraged to perform and share results of field investigations and laboratory assessments with ECDC to improve understanding of the potential impacts on COVID-19 epidemiology, severity, effectiveness of public health and social measures, diagnostic methods, immune responses, antibody neutralization, and other relevant characteristics.

Laboratories in countries that have cases of this variant are encouraged to pursue virus isolation and sharing of virus isolates with other laboratories if possible. Virus characterisation services are available through ECDC.

Public Health Emergency of International Concern (PHEIC):
On 30 January 2020, the World Health Organization (WHO) 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, ninth, tenth, eleventh, twelfth, and thirteenth 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, 22 October 2021, 13 January 2022, 11 April 2022, 8 July 2022, and 13 October 2022 respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

As of 20 June 2022, ECDC discontinued the data collection and publication of the number of COVID-19 cases and deaths worldwide. Please refer to World Health Organization (WHO) data on COVID-19 and WHO's

Weekly Epidemiological Updates and Monthly Operational Updates page for non-EU/EEA countries.

For the latest COVID-19 country overviews, please see the dedicated web page**.**

ECDC assessment:

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

Actions:

On 27 January 2022, ECDC published its Rapid Risk Assessment, 'Assessment of the further spread and potential impact of the SARS-CoV-2 Omicron variant of concern in the EU/EEA, 19th update'.

Detailed country-specific COVID-19 updates are available on ECDC's website. For the latest update on SARS-CoV-2 variants of concern, please see ECDC's webpage on variants.

ECDC invites countries to use the EpiPulse event (**2022-IRV-00008**) on BQ.1 and sub-lineages to discuss and share information on this variant as it becomes available. Of particular interest is information on virus

characterisation and evidence regarding changes in disease severity, virus transmissibility, immune evasion, and effects on diagnostics and therapeutics. Case reporting should continue through TESSy.

COVID-19 associated with SARS-CoV-2 – China – 2022–2023

Sources: China CDC, media, media, media, media, GISAID

Update

On 19 January 2023, the World Health Organization (WHO) published the Weekly epidemiological update on COVID-19. According to the update, China has reported 190 451 new cases and 802 new fatalities for the period 9 to 15 January 2023, which constitutes a 26% decrease in new cases and an increase in 3% in new fatalities compared to previous week. There were 63 307 new hospitalizations, an increase of 70%, compared with the previous week (37 215 new hospitalizations for week 2 to 8 January). However, the WHO is awaiting detailed provincial data disaggregated by week of reporting.

Information on variants from public sources

From 1 December 2022 to 20 January 2023, China has deposited 1545 sequences, out of which 1530 sequences were being deposited since 25 December 2022. As of 20 January 2023, of the total 1545 sequences submitted from China, 1195 had recent sample collection dates between 1 December 2022 and 11 January 2023 in GISAID EpiCoV. 28% of these sequences are reported local cases, 16% are imported cases and 57% are not reported as either local or imported. These sequences mainly belonged to the lineages (including their sub-lineages) BF.7 (43%), BA.5.2 (41%), BQ.1 (7%), BA.2.75 sub-lineages including BN.1, CH.1.1 and others (3%), XBB (2%), BA.2 (1%). No new variant has been detected.

On 4 January 2023, a statement was issued by the Technical Advisory Group on Virus Evolution (TAG-VE) that met on 3 January 2023.

Other news

On 16 January 2023, the Greek Civil Aviation Service (CAA) published a news item informing that all inbound passenger arriving in a direct flight from China will be required to present a negative COVID-19 test (PCR or RAT test taken 48 and 24 hours before departure, respectively). In addition, all travelers from China are required to wear a respirator (FFP2, N95 or KN95) during the flight and their stay at the airport. The measures will apply from 15 January to 31 January.

Summary

The number of COVID-19 cases has reached record levels in mainland China. There continues to be limited data on COVID-19 cases, hospital admissions, deaths and ICU capacity and occupancy in China. High levels of SARS-CoV-2 infections and increased pressure on healthcare services in China are anticipated due to low population immunity and the relaxation of non-pharmaceutical interventions. Projection models published by the Institute for Health Metrics and Evaluation at the University of Washington anticipate steep increases in infections, hospitalisations, and deaths through April 2023. However, in the absence of more detailed and timely data from official sources on epidemiological indicators and sequencing, the public health impact, and the size and severity of the current surge of COVID-19 cases are difficult to assess.

Assessment

ECDC Assessment for the European Union (EU) / European Economic Area (EEA)
Given the higher population immunity in the EU/EEA, and the fact that the variants currently circulating in China have already been circulating in the EU/EEA, the current surge in cases of these variants in China is not expected to have any significant impact on the COVID-19 epidemiological situation in the EU/EEA. There is currently no data suggesting the emergence of new variants of concern in China. The ECDC assessment is based on the information currently available. ECDC will revisit its assessments as new information becomes available.

ECDC actions
ECDC liaises on a regular basis with the European Commission and the Member States in the Health Security Committee.

ECDC is in contact with the Chinese Center for Disease Prevention and Control (China CDC) on a regular basis to receive updated information on the epidemiological situation. ECDC is also in contact with the Public Health Agency of Canada (PHAC), the Japanese CDC, the Australian CDC, the US CDC as well as with WHO's headquarters and

WHO's Regional Office for Europe to cross-check and validate data and assessments with partners outside of China, including on sequencing data from Chinese travellers.

ECDC continues to routinely monitor and report on emerging SARS-CoV-2 variant threats via its Strategic Analysis of Variants in Europe (SAVE) Working Group, where variants and epidemiological trends in the EU/EEA as well as worldwide will continue to be evaluated. ECDC participates in the global WHO Technical Advisory Group on SARS-CoV-2 Virus Evolution (TAG-VE).

2. C. diphtheriae among migrants – Europe – 2022–2023

Summary: As of 17 January 2023, and since the last update on 11 January 2023, Austria has reported two new cases of diphtheria.

Background: Since the beginning of 2022, and as of 17 January 2023, there have been 240 cases of diphtheria among migrants reported by eight EU/EEA countries: Austria (70), Belgium (25), France (14), Germany (116), Italy (2), the Netherlands (5), Norway (7), and Spain (1). Cases have also been reported in Switzerland (25) and the United Kingdom (73), bringing the overall number for Europe to 338.

Among these cases, more than two thirds (69%) presented with an exclusively cutaneous form of the disease (n=236). A total of 53 cases had a respiratory presentation; of those, six cases had both respiratory and cutaneous presentations. Thirty cases were asymptomatic, and information was missing for 19 cases. All cases were caused by toxigenic *C. diphtheriae*, and the majority were detected in male migrants aged 8–49 years.

ECDC has no data indicating further transmission and outbreaks of *C. diphtheriae* in the broader EU/EEA population resulting from the increased number of diphtheria cases.
On 11 November 2022, the United Kingdom Health Security Agency (UKHSA) published updated guidelines on the **public health control and management of diphtheria in England** as well as a **supplementary guidance** document for cases and outbreaks in asylum-seeker accommodation settings.

On 3 November 2022, **a rapid communication** published in *Eurosurveillance* reported two *C. diphtheriae* isolates in Switzerland possibly linked to the increase observed in the EU/EEA, and an unusually broad predicted resistance to common oral and parenteral antibiotics. According to the authors, these findings challenged the treatment options for bacterial co-infections in the wounds of the cases.

On 17 November 2022, **another rapid communication** was published in *Eurosurveillance*, in which phenotypic and predicted resistance data from cases in Germany confirmed the predicted resistance profile observations from the two isolates in Switzerland.

On 1 December 2022, the UK HSA published **'Supplementary guidance for cases and outbreaks in asylum seeker accommodation settings'**, in which antimicrobial susceptibility testing of all *C. diphtheriae* isolates is recommended.

ECDC assessment:

Diphtheria is a rare disease in EU/EEA countries. According to **WHO/UNICEF**, immunisation coverage estimates for DTP3 in 2021 in the EU/EEA varied across Member States, ranging from 85% (Austria) to 99% (Greece, Hungary, Luxembourg, Malta, and Portugal). Universal immunisation is the only effective method for preventing the toxin-mediated disease. This includes the administration of a booster dose of diphtheria toxoid if more than 10 years have passed since the last dose. The occurrence of the disease in fully vaccinated individuals is very rare.

The increase in cases reported among this group and the recent occurrence of similar outbreaks in several EU/EEA countries is unusual and needs to be carefully monitored alongside the implementation of necessary public health measures to avoid the occurrence of more cases and further spread.

In this context, the probability of developing the disease is very low for individuals residing in the community, provided they have completed a full diphtheria vaccination series and have an up-to-date immunisation status.

Nevertheless, the possibility of secondary infections in the community cannot be excluded and severe clinical diphtheria is possible in unvaccinated or immunosuppressed individuals.

In exposed unvaccinated or immunosuppressed people in migrant centres, a severe outcome following a diphtheria infection is possible. Nevertheless, the impact of the disease for people with a completed course of diphtheria vaccination is considered to be low. Given the moderate probability of exposure and the potential individual impact as described above, the risk is considered to be moderate for unvaccinated or immunosuppressed people in migrant reception centres or other similar crowded settings in the EU/EEA, but low for fully vaccinated people in those settings.

The occurrence of isolates (in other European countries) showing a genomic profile suggestive of antimicrobial resistance similar to that observed in Switzerland and Germany cannot be ruled out. However, **these findings** are preliminary and more evidence would be needed before assessing the potential implications of these observations, including the adaptation of the currently recommended antibiotic treatment regimes. In view of these ongoing developments, ECDC recommends, as a precautionary measure, that antimicrobial susceptibility testing is performed on all *C. diphtheriae* isolates.

On 6 October 2022, ECDC published a **Rapid Risk Assessment (RRA)** on the increase of reported diphtheria cases among migrants in Europe due to *Corynebacterium diphtheriae*, stressing the importance of universal immunisation with diphtheria toxoid-containing vaccines. Options for responses recommended in this RRA included:

- Identification and vaccination of individuals residing in migrant centres who have incomplete vaccination status.
- Provision of information to migrant centres’ health service providers for the rapid identification and isolation of possible cases pending diagnostic confirmation.
- Respiratory droplet isolation of all confirmed or suspected cases with respiratory diphtheria.
- Contact precautions, such as avoiding contact with wounds and the dressing of wounds, for confirmed and suspected cases of cutaneous diphtheria.
- Isolation of all confirmed cases (respiratory and cutaneous presentation) until the elimination of the organism is demonstrated by two negative cultures obtained at least 24 hours apart after the completion of antimicrobial treatment.
- Identification of close contacts, including the personnel providing assistance, especially if they have performed procedures without appropriate personal protective equipment (PPE).
- Antimicrobial post-exposure prophylaxis and vaccination of incompletely vaccinated or unvaccinated close contacts.
- Alerting clinicians to the possibility of cutaneous and/or respiratory diphtheria among migrants and travellers returning from endemic areas.
- Collection of data on the country of origin and migratory route from all suspected diphtheria cases.
- Up-to-date vaccination status for all personnel working in reception centres for migrants.
- Limiting situations of overcrowding in migrant centres, verification of the availability of laboratory diagnostics in each country.
- Timely reporting to authorities of cases confirmed according to the EU case definition for diphtheria.
- Enhanced surveillance, including molecular typing and whole genome sequencing of patient isolates to improve the understanding and monitoring of transmission patterns.

Additional ECDC tools may be of relevance during outbreak investigation activities, such as, the '**Expert Opinion on the public health needs of irregular migrants, refugees or asylum seekers across the EU's southern and south-eastern borders**', the '**Handbook on implementing syndromic surveillance in migrant reception/detention centres and other refugee settings**', and the '**Handbook on using the ECDC preparedness checklist tool to strengthen preparedness against communicable disease outbreaks at migrant reception/detention centres**'.

Actions:

ECDC continues to monitor this event through its epidemic intelligence activities and will provide weekly updates. The latest information available can be found on EpiPulse.

On 6 October 2022, ECDC published a **Rapid Risk Assessment (RRA)** on the increase of reported diphtheria cases among migrants in Europe due to *Corynebacterium diphtheriae*. The conclusions and options for response proposed in this RRA remain valid for this event. Additionally, on 5 December 2022, ECDC published an epidemiological update on the '**Increase of reported diphtheria cases among migrants in Europe due to *Corynebacterium diphtheriae*, 2022**'.

3. Influenza – Multi-country – Monitoring 2022/2023 season

Overview:

Week 02/2023 (09 January– 15 January 2023)

- The percentage of sentinel primary care specimens from patients presenting with ILI or ARI symptoms that tested positive for an influenza virus remained above the epidemic threshold (10%) and decreased to 22% (23% in EU/EEA) from 29% (30% in EU/EEA) in the previous week in the European Region.
- Thirty-three of 40 countries or areas reported high or very-high intensity and/or widespread activity indicating high seasonal influenza virus circulation across the Region.
- Finland, Poland, and Slovenia reported seasonal influenza activity above 40% positivity in sentinel primary care.
- Both influenza type A and type B viruses were detected with A(H1)pdm09 viruses dominating in both sentinel and non-sentinel surveillance systems.
- Hospitalised patients with confirmed influenza virus infection were reported from ICU, other wards (with mainly influenza type A unsubtyped viruses reported) and SARI surveillance (with mainly influenza A(H1)pdm09 subtype viruses reported). Twelve countries or areas reported influenza positivity rates above 10% in SARI surveillance.

Source: Flu News Europe

ECDC assessment:
Seasonal influenza activity is still increasing in some EU/EEA countries while other countries have already passed their peak period of seasonal activity. Sentinel positivity for influenza virus detections above 40% for a minimum of 10 tested specimens were observed in the following countries: Finland (55%), Slovenia (47%), and Poland (41%).

Actions:
ECDC and WHO monitor influenza activity in the WHO European Region. Data are available on the **Flu News Europe** website.

4. Mpox – Multi-country – 2022–2023

Update:

Since the last update on 3 January 2023, and as of 17 January 2023, 18 mpox cases have been reported from 7 EU/EEA countries. No new cases have been reported from the Western Balkans and Türkiye.

Summary:

EU/EEA

Since the start of the mpox outbreak and as of 17 January 2023, 21 127 confirmed cases of mpox have been reported from 29 EU/EEA countries: Spain (7 514), France (4 114), Germany (3 676), Netherlands (1 260), Italy (959), Portugal (943), Belgium (790), Austria (327), Sweden (257), Ireland (227), Poland (215), Denmark (192), Norway (94), Greece (86), Hungary (80), Czechia (71), Luxembourg (57), Romania (47), Slovenia (47), Finland (42), Croatia (33), Malta (33), Iceland (16), Slovakia (14), Estonia (11), Bulgaria (6), Latvia (6), Cyprus (5) and Lithuania (5).

Deaths have been reported from: Spain (3), Belgium (1) and Czechia (1).

Western Balkans and Türkiye:

Since the start of the mpox outbreak and as of 17 January 2023, the following Western Balkan countries have reported confirmed cases of monkeypox: Serbia (40), Bosnia and Herzegovina (9) and Montenegro (2). In addition, 12 cases have been reported from Türkiye.

Disclaimer: data presented in this update are compiled from TESSy.

A detailed summary and analysis of data reported to TESSy can be found in the Joint ECDC-WHO Regional Office for Europe Mpox Surveillance Bulletin published weekly.

Public Health Emergency of International Concern (PHEIC): On 23 July 2022, the Director-General of the World Health Organization (WHO) declared the global mpox outbreak a Public Health Emergency of International Concern (PHEIC). On 1 November 2022, WHO advised that the multi-country outbreak of mpox still met the criteria included in the definition of a PHEIC, as set out in Article 1 of the International Health Regulations (2005) (IHR).

ECDC assessment:

The weekly number of mpox cases reported in the EU/EEA peaked in July 2022 and since then a steady declining trend has been observed.

Multiple factors have probably contributed to the decline, including efforts in risk communication and community engagement which have resulted in behavioural changes, increasing immunity in the most affected population groups due to natural immunity and vaccination, and a decrease in the number of large cultural and social events frequented by the main risk groups for this outbreak after the summer.

Based on evidence from the current outbreak and the declining number of new infections, the overall risk of mpox infection is assessed as moderate for MSM and low for the broader population in the EU/EEA.

Response options for EU/EEA countries include creating awareness among health professionals and supporting sexual health services to continue case detection, contact tracing, and management of cases; continuing to offer testing for orthopoxvirus; vaccination strategies and continuing risk communication and community engagement, despite the decreasing number of cases.

Given the limitations in vaccine supplies, primary preventive vaccination (PPV) and post-exposure preventive vaccination (PEPV) strategies may be combined to focus on individuals at substantially higher risk of exposure and close contacts of cases, respectively. PPV strategies should prioritise gay, bisexual, or other men or transgender people who have sex with men, who are at higher risk of exposure, as well as individuals at risk of occupational exposure, based on epidemiological or behavioural criteria. Health promotion interventions and community engagement are also critical to ensure effective outreach and high vaccine acceptance and uptake among those most at risk of exposure.

Actions:

ECDC is closely monitoring the mpox epidemiological situation and will review the level of mpox risk of infection with the data that will be available in the coming weeks.
A rapid risk assessment, 'Mpox multi-country outbreak', was published on 23 May 2022, the first update was published on 8 July 2022 and a second update was published on 18 October 2022. For the latest updates, visit ECDC's mpox page.

ECDC offers laboratory support to Member States and collaborates with stakeholders on risk communication activities, such as targeted messaging for the general public and MSM communities. ECDC also provided guidance to countries hosting events during the summer. ECDC offers guidance on clinical sample storage and transport, case and contact management and contact tracing, IPC guidance, cleaning and disinfection in healthcare settings and households, and vaccination approaches.

5. Cholera – Multi-country (World) – Monitoring global outbreaks

Overview:

Since the last update on 20 December 2022, 74 761 cholera cases, including 745 fatalities, have been reported worldwide.

Countries and territories reporting new cases since the previous update are Afghanistan, Bangladesh, Burundi, Cameroon, the Democratic Republic of the Congo, the Dominican Republic, Haiti, Iraq, Kenya, Lebanon, Malawi, Mozambique, Nigeria, the Philippines, Somalia, Syria, and Tanzania.

A list of all countries reporting new cases since our previous update can be found below.

Americas

Haiti: Since the last update, 6 808 suspected cholera cases, including 90 fatalities, have been reported in Haiti. In 2023 and as of 12 January, a total of 3 355 suspected cholera cases, including 44 deaths, have been reported in the country. In 2022, there were 20 593 suspected cholera cases including 253 fatalities.

Dominican Republic: An outbreak of cholera has been reported in the Dominican Republic. In 2023, and as of 15 January, a total of eight cholera cases have been reported in the Dominican Republic. Cases have been reported in La Zurza sector in Santo Domingo. The PAHO is providing local support to Dominican health authorities. In 2022, a total of six cholera cases were reported in the country. In October 2022, an imported cholera case from Haiti was detected.

No additional cholera cases have been reported in other regions of the Americas in 2023.

Africa

Burundi: On 1 January 2023, Burundi's Minister of Public Health declared a cholera outbreak in the Bujumbura, the capital of the country. In 2023, and as of 6 January, 42 suspected cholera cases, including two fatalities, have been reported in Burundi. Four districts have reported cholera cases: Bujumbura North, Cibitoke, Isale, and Bujumbura Centre. In 2022, between 30 and 31 December, 12 confirmed cholera cases were reported.

Cameroon: Since the last update, 1 207 suspected cholera cases including three fatalities have been reported in Cameroon. In 2022 and as of 8 December, a total of 15 003 suspected cases including 298 fatalities have been reported in the country.

The Democratic Republic of the Congo (DRC): Since the last update, 577 suspected cholera cases, including 20 fatalities, have been reported in DRC. In 2022, and as of 27 November, a total of 14 290 suspected cholera cases, including 262 fatalities (CFR: 1.7%), have been reported in 97 health zones across 17 provinces of the Democratic Republic of Congo. According to the World Health Organization (WHO) Regional Office for Africa, the most affected provinces are South Kivu, Haut-Lomami, Tanganyika, and North Kivu.

Kenya: Since the last update, 1 407 suspected cases including 25 fatalities have been reported in Kenya. In 2022, and as of 18 December, a total of 2 959 cases including 55 fatalities (CFR 1.9%) have been reported in the country. The outbreak has affected 12 counties: Nairobi, Kiambu, Nakuru, Uasin Gishu, Kajiado, Murang'a, Machakos, Garissa, Meru, Nyeri, Wajir and Tana River.

Malawi: Since the last update, Malawi has reported 14 806 confirmed cholera cases, including 531 deaths. In 2023, and as of 16 January, a total of 8 010 cholera cases, including 265 fatalities, have been reported in the country. In 2022, a total of 17 448 cholera cases, including 576 fatalities, were reported in Malawi. According to Malawian Ministry of Health, 29 districts have reported cholera cases since the start of the outbreak in March 2022. To date, the outbreak has been controlled in two health districts but is still ongoing in 27 districts. The most affected districts are Mangochi, Biantyre, Lillongwe, Sallma, and Nkhata Bay.

Mozambique: Since the last update, 72 suspected cholera cases including two fatalities have been reported in Mozambique. In 2022 and as of 28 December, a total of 3 930 suspected cholera cases including 21 fatalities (CFR 0.5%) have been reported in the country.

Niger: Since the last update, no new cholera cases have been reported in Niger. In 2022, a total of 72 suspected cases, including one death, have been reported in the country.

Nigeria: Since the last update, 1 540 suspected cases, including 32 fatalities, have been reported in Nigeria. In 2022 and as of 27 November, a total of 20 768 cases, including 498 fatalities (CFR 2.4%), have been reported from 31 Nigerian states. Three states, Borno, Taraba, and Yobe, have reported a combined total of 15 495 suspected cases and 382 fatalities. The most affected age groups are children aged under five years and aged five to 14 years.

Somalia: Since the last update 2 083 suspected cholera cases, including 27 fatalities, have been reported in Somalia. In 2022 and as of 27 November, a total of 13 383 suspected cholera cases, including 71 fatalities, have been reported in the country. The most affected districts are Daynile, Dharknely, Kahda, and Kismayo, with Kismayo being the epicentre of the outbreak.

South Sudan: Since the last update, no new suspected cholera cases have been reported in South Sudan. In 2022 and as of 20 November, a total of 424 suspected cholera cases, including one fatality, have been reported in the country.

Tanzania: Since the last update, 18 new suspected cholera cases, including one fatality, have been reported in Tanzania. All new cases have been reported in Babati District Council. In 2022 and as of 17 November, a total of 359 cases and seven fatalities (CFR: 1.9%) have been reported in the country.

No updates were available on previous outbreaks reported in **Benin**, **Burkina Faso**, **Ethiopia**, **Togo**, **Uganda**, **Zambia**, and **Zimbabwe**.

Asia

Afghanistan: Since the last update, 12 053 suspected cholera cases, including two fatalities have been reported in Afghanistan. In 2023, and as of 7 January, a total of 2 940 suspected cholera cases have been reported. According to WHO, approximately 55.4% of all reported cases were children below 5 years of age. In 2022, a total of 242 562 suspected cholera cases including 87 deaths have been reported.

Bangladesh: Since the last update, 1 873 suspected cholera cases have been reported in Rohingya Refugee Camp in Bangladesh. In 2022, a total of 603 511 suspected cholera cases including 29 fatalities have been reported from the country. Among these cases, 461 611 cases including 29 deaths have been reported from different parts of the country between January and April this year. The remaining 141 900 cases have been reported in the Rohingya Refugee Camps in Cox's Bazar between January and December 2022.

Iraq: Since the last update, 30 new suspected cholera cases have been reported in Iraq. In 2023, and as of 8 January, 13 suspected cholera cases have been reported in Iraq. Most of the cases were reported in the northern Kurdistan region. In 2022, a total of 1 025 confirmed cholera cases and five associated fatalities have been reported in the country.

Lebanon: Since the last update, 801 confirmed cholera cases have been reported from Lebanon. In 2023, and as of 15 January 2023, 319 confirmed cholera cases have been reported in the country. So far cases have been reported from all eight governorates (Akkar, Baalbeck-Hermel, Beirut, Bekaa, Mount Lebanon, North Lebanon, Nabatiyeh, and South Lebanon). In 2022, a total of 5 810 confirmed cholera cases and 23 associated fatalities were reported in the country. This is the first cholera outbreak in the country since 1993.

Nepal: Since the last update, no cholera cases have been reported in Nepal. In 2022, and as of 9 September, 76 cholera cases have been reported in the Kathmandu valley.

Pakistan: Since the last update, no new cholera cases have been reported in Pakistan. In 2022, and as of 15 August, a total of 258 139 cholera cases, including 30 deaths, have been reported in the country.

Philippines: Since the last update, 266 suspected cholera cases and seven associated fatalities have been reported in the Philippines. In 2022, and as of 10 December, 6 126 cholera cases and 74 associated fatalities have been reported in the country.

Syria: Since the last update, 31 152 suspected cholera cases, including three fatalities, have been reported in Syria. In 2023, and as of 7 January, a total of 24 682 suspected cholera cases and three associated fatalities have been reported in Syria. The most affected governorates are Idleb, Deir-ez-Zor, Aleppo, and Ar-Raqqa. In 2022, a total of 52 879 suspected cholera cases, including 97 fatalities, have been reported in the country.

Taiwan**:** Since the last update, no new cholera cases have been reported in Taiwan. In 2022, Taiwan reported its first domestic cholera case. The case most likely contracted the disease from seafood, which she prepared and ate at home. According to media reporting, the case was hospitalised with symptoms and fully recovered after a few days.

No updates were available on previous outbreaks reported in India.

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 western Africa and south-east Asia over the past months. Cholera outbreaks have also been notified in the eastern and southern parts of Africa as well as in some parts of the Middle East. Despite the number of cholera outbreaks reported worldwide, few cases are reported each year among returning EU/EEA travellers. In this context, the risk of cholera infection in travellers visiting these countries remains low, even though sporadic importation of cases in the EU/EEA remains possible. In 2021, two cases were reported in EU/EEA Member States, while three and 26 cases were reported in 2020 and 2019 respectively. All cases had travel history to cholera-affected areas. According to the WHO, vaccination should be considered for travellers at higher risk, such as emergency and relief workers who are likely to be directly exposed to cholera.

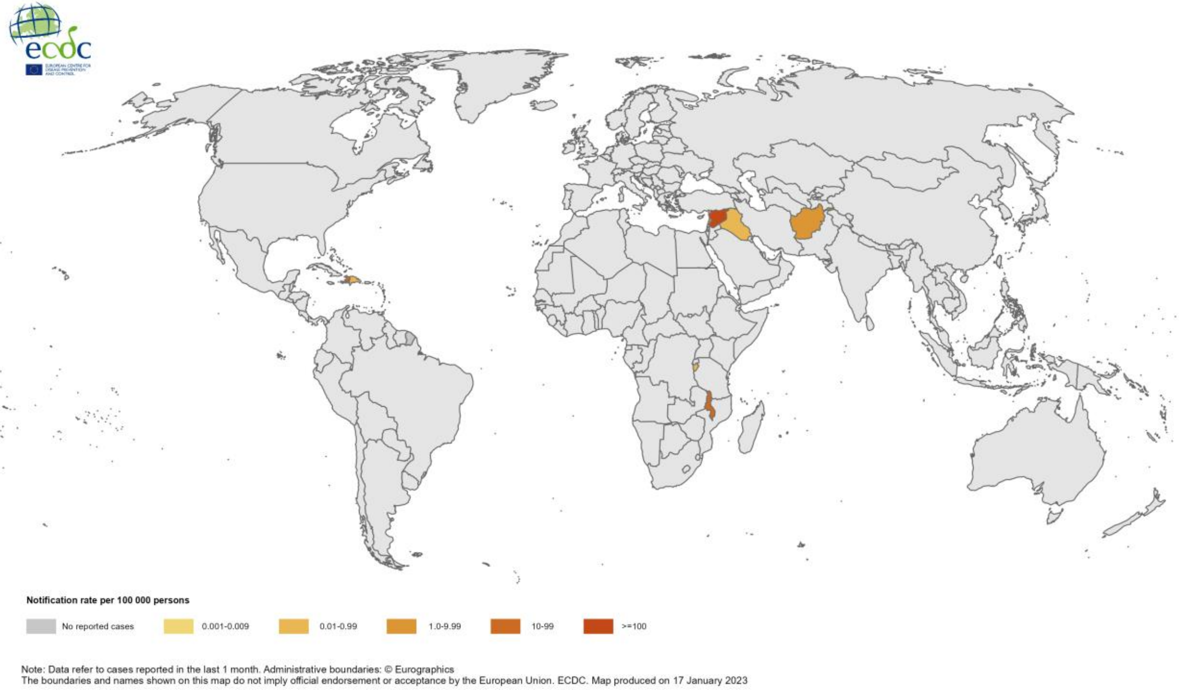
Vaccination is generally not recommended for other travellers. Travellers to cholera-endemic areas should seek advice from travel health clinics to assess their personal risk and apply precautionary sanitary and hygiene measures to prevent infection. These can include drinking bottled water or water treated with chlorine, carefully washing fruits 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 continues to monitor cholera outbreaks globally through its epidemic intelligence activities in order to identify significant changes in epidemiology, and to facilitate updates to public health authorities. Reports are published on a monthly basis. The worldwide overview of cholera outbreaks is available on ECDC's website.

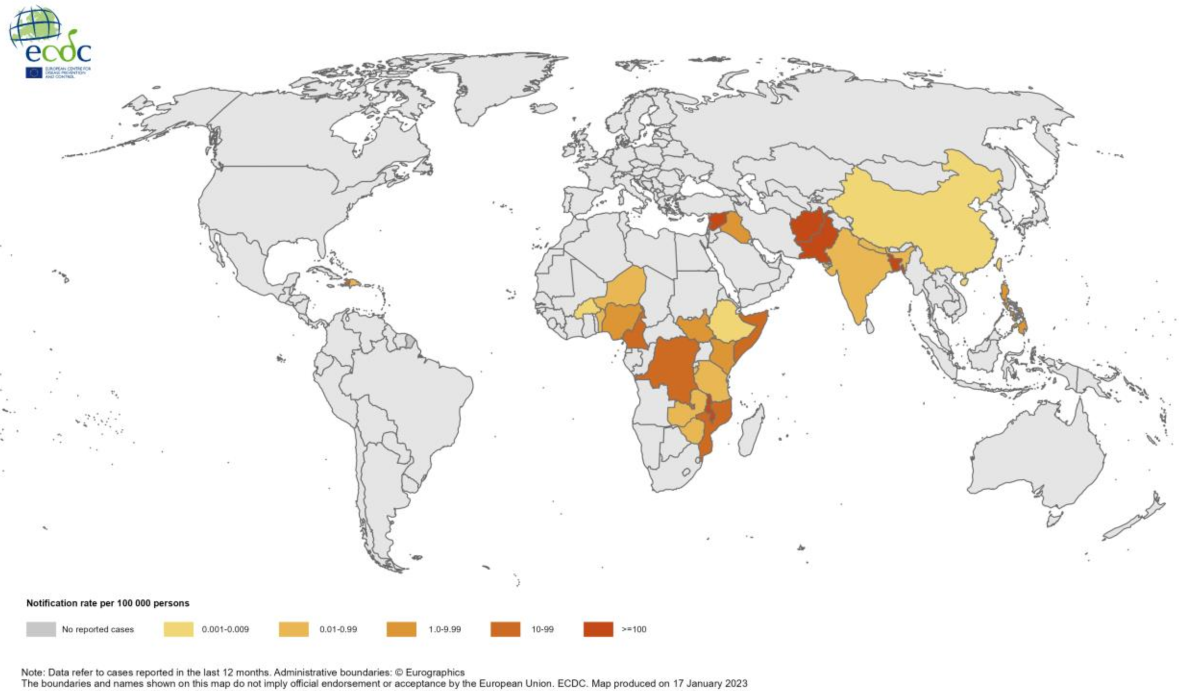
Maps and graphs

Figure 1. Geographical distribution of cholera cases reported worldwide in January 2023



Source: ECDC

Figure 2. Geographical distribution of cholera cases reported worldwide from January 2022 to January 2023



Source: ECDC