WEEKLY BULLETIN

Communicable Disease Threats Report

Week 17, 23 - 29 April 2023

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Executive Summary

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

- Since the last update on 23 March 2023 and as of 24 April 2023, 49 857 new cholera cases, including 298 new deaths, have been reported worldwide.
- New cases have been reported from Afghanistan, Bangladesh, Burundi, Cameroon, Democratic Republic of the Congo, Dominican Republic, Ethiopia, Haiti, Kenya, Lebanon, Malawi, Mozambique, Nigeria, Pakistan, Somalia, South Africa, South Sudan, Syria, Zambia and Zimbabwe.
- Cholera cases have continued to be reported in western, eastern and southern parts of Africa, some parts of the Middle East, South-East Asia, and two countries in the Americas in recent months. The risk of cholera infection in travellers visiting these countries remains low, even though sporadic importation of cases to the EU/EEA remains possible.

Avian influenza A(H9N2) - Multi-country (World) - Monitoring human cases

- Three new cases of avian influenza A (H9N2) have been reported in China, bringing the overall number of human cases to 123, including two deaths, since 1998.
- Most of the cases have been reported in China (110).

- No human cases have been reported in the EU/EEA and related H9N2 viruses are not present in poultry populations in the EU/EEA.
- The risk of zoonotic influenza A (H9N2) transmission to the general public in EU/EEA countries is considered to be very low.

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

- In week 16, 2023 (ending 23 April 2023), decreasing or stable trends for COVID-19 associated with SARS-CoV-2 were observed in all EU/EEA indicators. The death rate remained stable compared to the previous week, with 691 deaths reported from 22 countries.
- The uptake of a first booster was 65.4% (country range: 11.3–87.1%) among adults aged 18 years and older, 84.9% (country range: 13.3–100.0%) among people aged 60 years and older, and 54.8% (country range: 9.2–75.8%) in the total population. The uptake of a second booster was 17.4% (country range: 0.2–42.0%) among adults aged 18 years and older, 35.5% (country range: 0.4–86.8%) among people aged 60 years and older, and 14.3% (country range: 0.2–33.7%) in the total population.
- The estimated distribution of variants of concern (VOC) or of interest (VOI) was 57.3% (55.6–87.3% from four countries) for XBB.1.5, 26.2% (0.3–33.3% from four countries) for XBB, 8.0% (3.3–83.0% from five countries) for BA.2.75, 3.2% (2.1–6.6% from four countries) for BQ.1, 0.8% (0.7–1.0%, 15 detections from two countries) for BA.2, and 0.5% (0.3–16.3%, 60 detections from five countries) for BA.5.

Invasive meningococcal disease - France - 2022/2023

- During the past winter months, France reported an increase of invasive meningococcal disease (IMD) cases compared to the previous two seasons. A report depicting long-term trends of IMD in France has been issued recently, showing continued higher, albeit declining rates of disease from January through March 2023, compared to the same period in previous years. French authorities continue to closely monitor the situation with meningococcal disease, recommending vaccination of target groups.
- Invasive meningococcal disease (IMD) is a major cause of meningitis and septicaemia. The disease often has a rapid progression, with an 8–15% case-fatality rate. Outbreaks of meningococcal disease are rare, but can occur in settings where people group together.
- ECDC recommendations on effective vaccination strategies to prevent the extent and impact of IMD outbreaks have been issued in the past. Additional prevention strategies include early detection, isolation and management of suspected meningitis cases, identification of close contacts, administration of chemoprophylaxis, and monitoring of close contacts for clinical symptoms for at least 10 days from the latest possible exposure.

Influenza – Multi-country – Monitoring 2022/2023 season

- The seasonal epidemic activity threshold of 10% positivity in sentinel specimens was first crossed in week 45, 2022.
- Following a peak in week 51, 2022 with 39% positivity, influenza activity has been decreasing across the WHO European Region until week 4, 2023 when it reached 21% positivity, before rising to fluctuate around 25% positivity between weeks 6 and 11, 2023 again, and then decreasing below 10% positivity in week 16, 2023 (9%).
- Overall this season, influenza A (H3) viruses have dominated in sentinel primary care specimens, however higher circulation of A(H1)pdm09 and type B viruses was observed starting from week 50, 2022 and week 2, 2023, respectively. In non-sentinel specimens, higher circulation of A(H1)pdm09 (55%) than A(H3) viruses (44%) was detected.
- Both influenza type A and type B viruses have been detected in hospitalised patients in ICU and other wards. Influenza A(H1)pdm09 viruses have dominated among severe acute respiratory infection (SARI) patients.
- Virus type and subtype prevalence by country and surveillance system have been variable across the season.
- The B/Yamagata viruses sporadically detected and reported by different countries have been further investigated and were proven to be live attenuated influenza vaccine (LAIV)-related detections.

Marburg virus disease - Equatorial Guinea - 2023

- According to the most recent epidemiological report by the Ministry of Health of Equatorial Guinea, as of 24 April 2023, the total number of confirmed Marburg virus disease (MVD) cases since the beginning of the outbreak is 17, with 12 deaths.
- Epidemiological surveillance and contact tracing efforts are ongoing. The average follow-up rate of contacts according to the World Health Organization (WHO) is 80–90%.
- WHO and partners are supporting Equatorial Guinea and neighbouring countries.

Marburg virus disease - Tanzania - 2023

- On 24 April 2023, the World Health Organization (WHO) reported that as of 16 April 2023, there are nine confirmed cases and six deaths (case fatality rate (CFR) 66.7%) from Marburg virus disease (MVD) in Tanzania.
- The Ministry of Health of Tanzania has sent a rapid response team to the affected area. Contact tracing, case management, and risk communication are being carried out.

Seizure of reference laboratory by armed group - Sudan - 2023

- On 25 April 2023, media reported that one of the groups involved in the Sudanese conflict had seized the National Public Health Laboratory in Khartoum and removed its laboratory personnel.
- The National Public Health Laboratory handles samples of pathogens such as SARS-CoV-2, poliomyelitis, dengue and measles viruses, tuberculosis, and cholera.
- The main risks from this seizure include the leakage of biological or chemical materials in the environment, loss of the diagnostic capacity of the laboratory, and the destruction of the blood bank.
- ECDC is in contact with partners to verify the list of pathogens in storage in the laboratory and to obtain further information on the situation.

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

Summary

Since the last update on 23 March 2023 and as of 24 April 2023, 49 857 new cholera cases, including 298 new deaths, have been reported worldwide. The five countries reporting the greatest number of new cases are Pakistan (77 714), Bangladesh (18 150), Mozambique (17 023), Syria (13 310), and Malawi (3 943). The five countries reporting the greatest number of new deaths are Nigeria (94), Malawi (81), Mozambique (68), Haiti (59), and Kenya (46). In addition, 99 136 new cases were reported or collected retrospectively from before 23 March 2023.

New cases have been reported from Afghanistan, Bangladesh, Burundi, Cameroon, Democratic Republic of the Congo, Dominican Republic, Ethiopia, Haiti, Kenya, Lebanon, Malawi, Mozambique, Nigeria, Pakistan, Somalia, South Africa, South Sudan, Syria, Zambia and Zimbabwe.

New deaths have been reported from Afghanistan, Democratic Republic of the Congo, Ethiopia, Haiti, Kenya, Malawi, Mozambique, Nigeria, Somalia, South Sudan, Syria, Zambia and Zimbabwe.

Since 1 January 2023 and as of 21 April 2023, 295 039 cholera cases, including 1 806 deaths, have been reported worldwide. In comparison, since 1 January 2022 and as of 21 April 2022, 502 949 cholera cases, including 231 deaths, had been reported worldwide.

Since the last update, new cases and new deaths have been reported from:

Asia:

Afghanistan: Since 25 February 2023 and as of 20 March 2023, 3 156 new cases have been reported. Since 1 January 2023 and as of 20 March 2023, 22 848 cases, including seven deaths have been reported. In comparison, since 1 January 2022 and as of 31 March 2022, 5 207 cases had been reported.

Bangladesh: Since 11 February 2023 and as of 8 April 2023, 18 150 new cases have been reported. Since 1 January 2023 and as of 8 April 2023, 34 060 cases have been reported. In comparison, since 1 January 2022 and as of 12 April 2022, 495 433 cases, including 29 deaths had been reported.

Lebanon: Since 14 March 2023 and as of 17 April 2023, 474 new cases have been reported. Since 1 January 2023 and as of 17 April 2023, 1 574 cases have been reported.

Pakistan: Since 1 January 2023 and as of 20 March 2023, 77 714 cases have been reported.

Syria: Since 15 February 2023 and as of 19 March 2023, 13 310 new cases, including three new deaths have been reported. Since 1 January 2023 and as of 19 March 2023, 53 080 cases, including seven deaths have been reported.

No updates have been reported by: India and the Philippines.

Africa:
Burundi: Since 13 March 2023 and as of 8 April 2023, 71 new cases have been reported. Since 1 January 2023 and as of 8 April 2023, 247 cases, including one death have been reported.

Cameroon: Since 5 March 2023 and as of 30 March 2023, 51 new cases have been reported. Since 1 January 2023 and as of 30 March 2023, 214 cases, including 10 deaths have been reported. In comparison, since 1 January 2022 and as of 27 March 2022, 2 886 cases, including 65 deaths had been reported.

Democratic Republic of the Congo: Since 10 March 2023 and as of 19 March 2023, 1 959 new cases, including eight new deaths have been reported. Since 1 January 2023 and as of 19 March 2023, 7 243 cases, including 47 deaths have been reported. In comparison, since 1 January 2022 and as of 17 April 2022, 5 131 cases, including 73 deaths had been reported.

Ethiopia: Since 12 March 2023 and as of 3 April 2023, 661 new cases, including 18 new deaths have been reported. Since 1 January 2023 and as of 3 April 2023, 1 616 cases, including 30 deaths have been reported. In comparison, since 1 January 2022 and as of 31 January 2022, 674 cases, including seven deaths had been reported.

Kenya: Since 6 March 2023 and as of 4 April 2023, 2 522 new cases, including 46 new deaths have been reported. Since 1 January 2023 and as of 4 April 2023, 5 243 cases, including 78 deaths have been reported.

Malawi: Since 16 March 2023 and as of 20 April 2023, 3 943 new cases, including 81 new deaths have been reported. Since 1 January 2023 and as of 20 April 2023, 40 615 cases, including 1 165 deaths have been reported. In comparison, since 1 January 2022 and as of 17 April 2022, 64 cases, including three deaths had been reported.

Mozambique: Since 12 March 2023 and as of 14 April 2023, 17 023 new cases, including 68 new deaths have been reported. Since 1 January 2023 and as of 14 April 2023, 23 105 cases, including 113 deaths have been reported. In comparison, since 1 January 2022 and as of 18 March 2022, 265 cases had been reported.

Nigeria: Since 28 February 2023 and as of 13 March 2023, 2 995 new cases, including 94 new deaths have been reported. Since 1 January 2023 and as of 13 March 2023, 3 667 cases, including 119 deaths have been reported. In comparison, since 1 January 2022 and as of 8 April 2022, 1 358 cases, including 31 deaths had been reported.

Somalia: Since 12 February 2023 and as of 1 April 2023, 2 725 new cases, including 14 new deaths have been reported. Since 1 January 2023 and as of 1 April 2023, 4 032 cases, including 15 deaths have been reported.

South Africa: Since 4 March 2023 and as of 6 April 2023, four new cases have been reported. Since 1 January 2023 and as of 6 April 2023, eight cases, including one death have been reported. In comparison, in 2022, no cases had been reported.

South Sudan: Since 12 March 2023 and as of 30 March 2023, 339 new cases, including one new death have been reported. Since 1 January 2023 and as of 30 March 2023, 608 cases, including two deaths have been reported.

Zambia: Since 12 March 2023 and as of 9 April 2023, 106 new cases, including three new deaths have been reported. Since 1 January 2023 and as of 9 April 2023, 331 cases, including eight deaths have been reported. In comparison, since 1 January 2022 and as of 13 April 2022, four cases had been reported.

Zimbabwe: Since 5 March 2023 and as of 27 March 2023, 259 new cases, including eight new deaths have been reported. Since 1 January 2023 and as of 27 March 2023, 317 cases, including eight deaths have been reported. In comparison, since 1 January 2022 and as of 27 January 2022, one case had been reported.

No updates have been reported by: Benin and Tanzania.

Americas:
Dominican Republic: Since 6 March 2023 and as of 16 March 2023, two new cases have been reported. Since 1 January 2023 and as of 16 March 2023, 91 cases have been reported.

Haiti: Since 9 March 2023 and as of 14 April 2023, 3 529 new cases, including 59 new deaths have been reported. Since 1 January 2023 and as of 14 April 2023, 18 426 cases, including 195 deaths have been reported.

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:

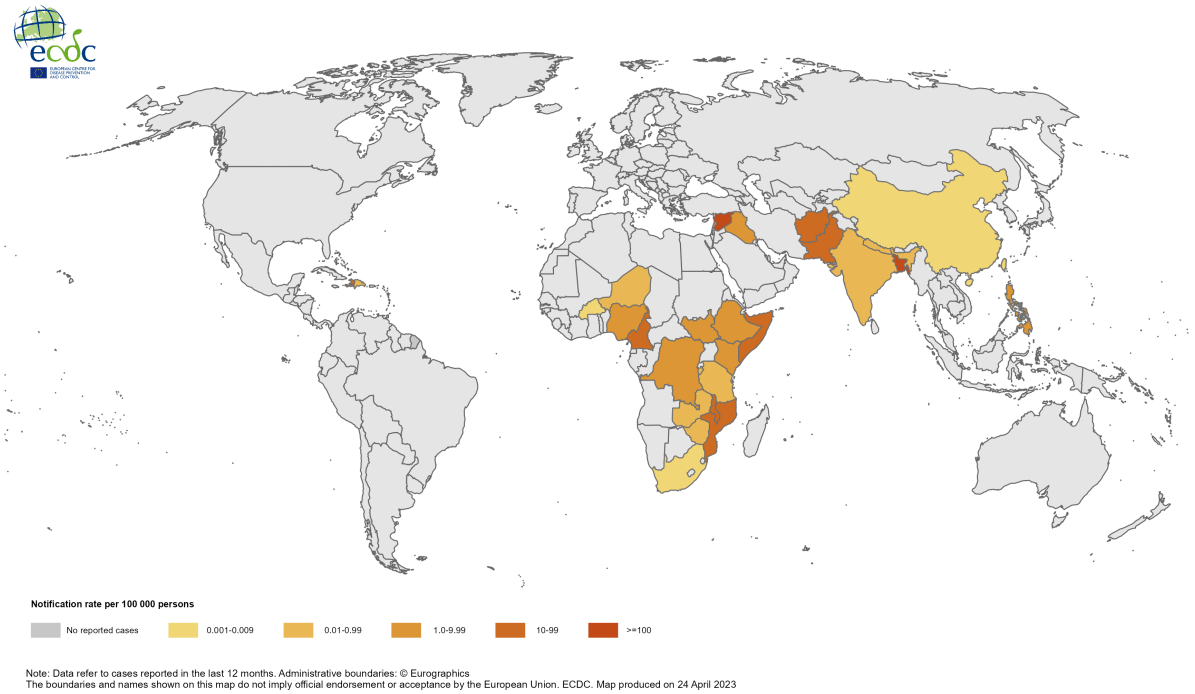
Cholera cases have continued to be reported in western Africa, and South-East Asia over the past months. Cholera outbreaks have also been notified in the eastern and southern parts of Africa, parts of the Middle East and two countries in the Americas. Despite the number of cholera outbreaks reported 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 to 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 World Health Organization (WHO), vaccination should be considered for travellers at higher risk, such as emergency and relief workers who are likely to be directly exposed. 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 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 timely updates to public health authorities. Reports are published on a monthly basis. The worldwide overview of cholera outbreaks is available on ECDC's website.

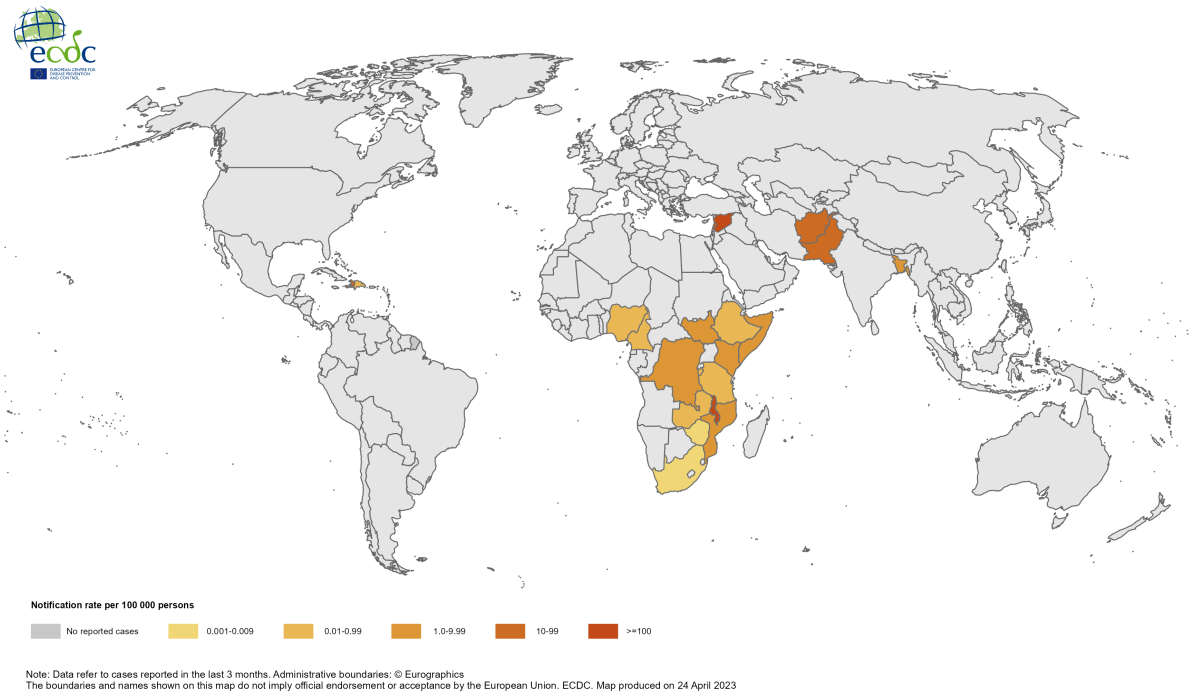
Maps and graphs

Figure 1. Geographical distribution of cholera cases reported worldwide from May 2022 to April 2023



Source: ECDC

Figure 2. Geographical distribution of cholera cases reported worldwide from February to April 2023



Source: ECDC

2. Avian influenza A(H9N2) - Multi-country (World) - Monitoring human cases

Update: As of 27 April 2023, and since the previous cases reported on 30 March 2023, three new cases of human infection with avian influenza A (H9N2) have been reported in China, all with mild symptoms:

- A 10-year-old girl from the Hunan province with onset of mild symptoms on 19 October 2022. Exposure to poultry is unknown.
- A three-year-old girl from Jiangxi province with an onset date on 31 January 2023. She had a suspected exposure to poultry in the Hunan province.
- A two-year-old boy from the Hunan province with onset of mild symptoms on 5 February 2023. He had an exposure to backyard poultry.

No other cases have been detected or reported among family members of these three cases.

Summary: As of 27 April 2023, and since 1998, a total of 123 laboratory-confirmed cases, including two deaths, of human infection with avian influenza A (H9N2) viruses have been reported in eight countries: China (110), Egypt (4), Bangladesh (3), Cambodia (2), Oman (1), Pakistan (1), India (1), and Senegal (1). Most of the cases were children with mild disease.

Source: WHO Influenza at the human-animal interface (from 4 March to 24 April 2023)

ECDC assessment:

Sporadic human cases of avian influenza A (H9N2) have been observed, but no cases of human-to-human transmission have been documented. The use of personal protective measures for people directly exposed to poultry and birds potentially infected with avian influenza viruses will minimise the risk of infection. The risk of

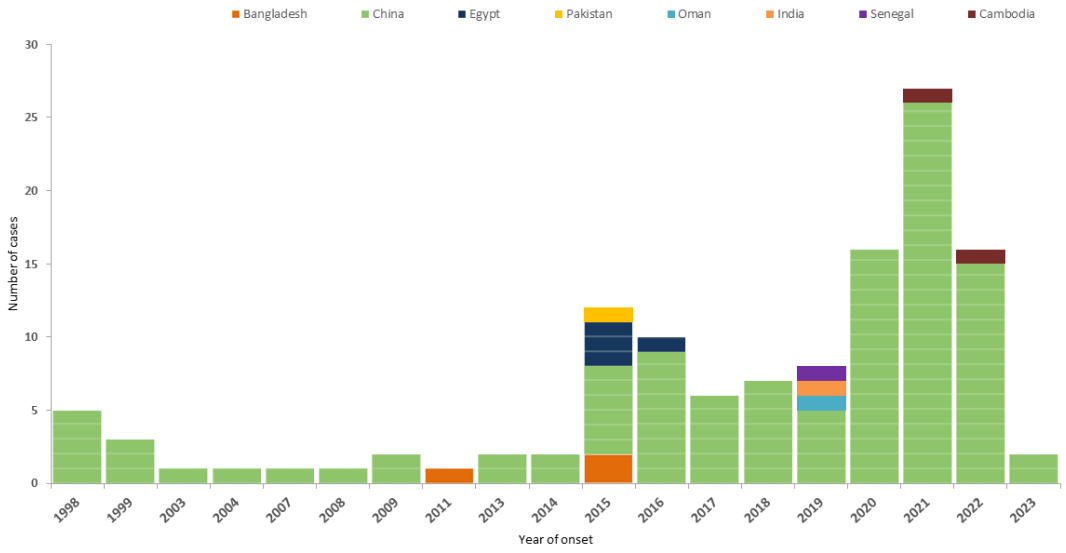
zoonotic influenza transmission to the general public in EU/EEA countries is considered to be very low as relevant A (H9N2) viruses are not circulating in the poultry population or present in wild birds in Europe.

Actions:

ECDC monitors avian influenza strains through its epidemic intelligence activities, disease experts and in collaboration with the European Food Safety Authority (EFSA) and the EU reference laboratory for avian influenza, 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 March 2023.

Maps and graphs

Figure 3. Distribution of confirmed human cases of avian influenza A(H9N2) virus infection by year of onset and country, 1998 to 27 April 2023 (n=123)



Source: ECDC

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

Summary:
At the pooled EU/EEA level, the epidemiological picture over the past 12 months since the initial large Omicron peak has been characterised by periodic waves of infection approximately every 2–3 months. There has been a general downward trend in the height of the associated peaks in reported cases, hospitalisations, ICU admissions, and deaths in this period.

By the end of week 16, 2023 (ending 23 April 2023), decreasing or stable trends were observed in all EU/EEA indicators based on pooled country data. The pooled COVID-19 death rate remained stable compared to the previous week, with 691 deaths reported from 22 countries.

There is some variation in country-level trends across the EU/EEA, with increasing trends reported by a limited number of countries. Overall, values of reported indicators remain low to moderate, relative to the pandemic

maximum. The key indicator section provides a detailed overview of country and EU-level indicators and trends.

The cumulative uptake of a first booster was 65.4% (country range: 11.3–87.1%) among adults aged 18 years and older, 84.9% (country range: 13.3–100.0%) among people aged 60 years and older, and 54.8% (country range: 9.2–75.8%) in the total population. The cumulative uptake of a second booster was 17.4% (country range: 0.2–42.0%) among adults aged 18 years and older, 35.5% (country range: 0.4–86.8%) among people aged 60 years and older, and 14.3% (country range: 0.2–33.7%) in the total population.

Among the five countries with an adequate volume of sequencing or genotyping for weeks 14–15 (3 April to 16 April 2023), the estimated distribution of variants of concern (VOC) or of interest (VOI) was 57.3% (55.6–87.3% from four countries) for XBB.1.5, 26.2% (0.3–33.3% from four countries) for XBB, 8.0% (3.3–83.0% from five countries) for BA.2.75, 3.2% (2.1–6.6% from four countries) for BQ.1, 0.8% (0.7–1.0%, 15 detections from two countries) for BA.2, and 0.5% (0.3–16.3%, 60 detections from five countries) for BA.5.

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

Weekly update on SARS-CoV-2 variants:
Since the last update on 20 April 2023, and as of 27 April 2023, no changes have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring or deescalated variants.

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

Other News
On 20 April 2023, Eurosurveillance published a rapid communication reporting the detection of a cryptic SARS-CoV-2 lineage on two mink farms in Poland, between September 2022 and January 2023. Genome sequencing revealed that the B.1.1.307 lineage was present in both farms among asymptomatic minks. This lineage was most closely related to sequences collected from patients in the same region about two years earlier, suggesting it went undetected until 2023.

The source of this identified virus is inconclusive but a silent circulation in farmed mink has been observed in other occasions. Other larger wild animal populations have also been identified to enable sustained transmission. The suggested sequencing of isolates from animals and particularly from viruses circulating in mink farms is in line with the proposed measures outlined in the joint EFSA and ECDC scientific opinion from February 2023: 'The genomic surveillance of viruses circulating in mink and in general in all animal species is considered relevant to monitor the circulating genetic variants of the virus and comparing the genetic type from mink to currently circulating variants in humans.' The opinion also analysed the different animal species regarding susceptibility and becoming a reservoir.

Public Health Emergency of International Concern (PHEIC):
On 30 January 2020, the World Health Organization (WHO) declared that the outbreak of COVID-19 constituted 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, thirteenth, and fourteenth 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, 13 October 2022, and 27 January 2023 respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

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

Please refer to the data reported by the World Health Organization (WHO) on COVID-19 and WHO's Weekly Epidemiological Updates and Monthly Operational Updates page for non-EU/EEA countries.

ECDC assessment:

SARS-CoV-2 continues to circulate in the EU/EEA with varying intensity. The epidemiological picture in the EU/EEA over the past 12 months has been characterised by periodic waves of infection, approximately every 2–3 months, with an overall downward trend in the height of the associated peaks in reported cases, hospitalisations, ICU admissions, and deaths in this period. Emergence of new variants of concern or waning of population immunity over time may impact the future epidemiological situation.

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

Actions:

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.

For EU/EEA and country-specific epidemiological trends and forecasts, visit ECDC's Country Overview Report (updated on Fridays). In addition to actions described in the latest COVID-19 risk assessments, on 5 April 2023 ECDC published Interim public health considerations for COVID-19 vaccination roll-out during 2023 to support countries with vaccination strategy decision-making. This guidance aims to offer advice on the optimal timing and targeting of vaccination campaigns in order to limit the continued burden of disease experienced by the elderly and those with comorbidities. It complements the Long-term qualitative scenarios guidance published in August 2022 to support country preparedness activities in the post-acute phase of the COVID-19 pandemic.

4. Invasive meningococcal disease - France - 2022/2023

On 20 April 2023, the French Public Health Institute (Santé publique France) published a report on the current epidemiological situation of invasive meningococcal disease (IMD) in France. An increase of IMD cases was reported during the 2022/23 season, following two years of low incidence during the COVID-19 pandemic. The peak incidence was reported in December 2022 (week 52). The number of cases remained higher than in previous years from January through March. Serogroups largely varied among regions. Serogroup B was identified in Auvergne-Rhône-Alpes in 2022 where a vaccination campaign was initiated. The situation is currently considered under control by French public health authorities, while vaccination recommendations and surveillance are in place.

From the EU/EEA perspective, so far, this increase has been observed in one country and does not have a multi-country dimension.

Background
According to the ECDC Surveillance Atlas of Infectious Diseases, in 2021, 612 confirmed cases of invasive meningococcal disease (IMD), including 55 deaths, were reported in EU/EEA countries. France, Poland, Germany and Spain, accounted for 59% of all confirmed cases in 2021. In France, overall, 214 cases of IMD were reported to ECDC in 2020 and 117 in 2021. In the EU/EEA, serogroup B caused 54% of the cases in all age groups in 2021. Serogroup distribution varies by region. Serogroup B causes the biggest burden of IMD in Europe, followed by C, W, and Y. Serogroup B is dominant in all age groups under 65 years of age. In the past few years, there has been an increase in serogroup W.

ECDC assessment:

Invasive meningococcal disease (IMD) is a major cause of meningitis and septicaemia. The disease often has a rapid progression, with an 8–15% case-fatality rate. Outbreaks of meningococcal disease are rare, but can occur in settings where people group together. Ongoing surveillance including molecular surveillance as well as susceptibility testing is essential to inform implementation of prevention and control measures. Once a case is detected, contact tracing and administration of chemoprophylaxis to close contacts is important to reduce the risk of clusters. In addition, efforts should be made to ensure that all eligible individuals receive vaccination. Several vaccines targeting different serogroups are available for the prevention of IMD. The information on case vaccination status should be collected, including specific information about which serogroup(s) the different meningococcal vaccines was indicated for.

Preventative action such as vaccination is the most effective way to prevent IMD and its consequences. Additional actions include early detection, isolation and management of suspected meningitis cases, identification of close contacts of cases, provision of chemoprophylaxis, and monitoring of close contacts for clinical symptoms for at least 10 days from the latest possible exposure.

ECDC has published a factsheet on meningococcal disease where recommended case management and treatment are described. An ECDC Expert Opinion on the introduction of the meningococcal B (4CMenB) vaccine in the EU/EEA, is also available online.

Actions:

ECDC is monitoring the epidemiological situation through epidemic intelligence activities and will update information again should relevant epidemiological updates become available.

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

Week 16, 2023 (17 April–23 April 2023)

- The percentage of all sentinel primary care specimens from patients presenting with influenza-like illness (ILI) or acute respiratory infection (ARI) symptoms that tested positive for an influenza virus decreased to 9% from 10% in the previous week, which is below the epidemic threshold set at 10%.
- Only one country or area reported high intensity, three reported medium intensity, and 18 of 37 countries or areas reported low intensity. Nine of 36 countries across the WHO European Region reported widespread activity.
- Nine countries with more than ten specimens tested reported sentinel primary care specimen influenza virus positivity above the 10% epidemic threshold.
- Both influenza type A and type B viruses were detected in both sentinel and non-sentinel surveillance, with influenza B viruses predominating in both systems.
- Hospitalised patients with confirmed influenza virus infection were reported from ICU (with higher proportions of type B viruses) and SARI surveillance (with higher proportions of type B viruses). No countries or areas reported influenza virus positivity rates above 10% in SARI surveillance.

Source: Flu News Europe

ECDC assessment:

Following a peak in week 51, 2022, influenza activity has been decreasing across the WHO European Region until week 4, 2023 when it reached 21% positivity, before rising to fluctuate around 25% positivity between weeks 6 and 11, 2023 again, and is coming to an end with positivity falling below the 10% seasonal threshold in week 16, 2023 (9%).

Actions:

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

6. Marburg virus disease - Equatorial Guinea - 2023

Overview:

Update:
According to the most recent **epidemiological report** by the Ministry of Health of Equatorial Guinea, as of 24 April 2023, the total number of confirmed Marburg virus disease (MVD) cases since the beginning of the outbreak is 17, with 12 deaths. The last confirmed case was **reported** on 21 April in Bata district, Litoral province. The case is a first-order relative of another confirmed case in Bata who was reported on **6 April**.

Summary: On 8 February 2023, the **Ministry of Health of Equatorial Guinea** published an epidemiological alert regarding an unknown disease causing haemorrhagic fever in two neighbouring communities in the district Nsok-Nsomo, in the province of Kié-Ntem. On 13 February 2023, **Equatorial Guinea** confirmed the first MVD outbreak in the country. The **index case** died in **early January 2023** and the Ministry of Health of Equatorial Guinea was notified on 7 February 2023.

On 18 April 2023, the **World Health Organization (WHO)** reported that one new case of MVD has been detected in a healthcare worker from Bata district, Litoral province who was being monitored following exposure to a previous MVD case. The healthcare worker is currently receiving treatment. According to the **Ministry of Health of Equatorial Guinea**, as of 24 April 2023, 17 confirmed MVD cases, including 12 deaths, had been reported from four districts in four provinces: Ebibeyin, Kié-Ntem province (three cases, including two deaths); Evinayong, Centro Sur province (two cases including two deaths); Nsok, Wele-Nzas province (one case, including one death); Bata, Litoral province (11 cases, including seven deaths). Of the **16 confirmed cases** for which information is available,

10 are female and six are male, and 35% are between 30–44 years old. Five of the confirmed cases are healthcare workers, two of whom have died. According to the latest **Disease Outbreak News item,** published on 15 April 2023 by WHO, the average follow-up rate of contacts is around 80–90%. As of **24 April,** 1 451 contacts have been listed, 126 of which were under follow-up.

On 14 February 2023, during an **emergency meeting of the Marburg virus vaccine consortium (MARVAC)**, the **World Health Organization** representative for Equatorial Guinea reported that epidemiological surveillance in the country was increasing, including intensified contact tracing. A 30-day response plan was also being developed to assess the needs and impact of the current situation.

The National Technical Committee of Health Emergencies is **working** closely with the Ministry of Health and Social Welfare to coordinate and strengthen disease control and prevention. **WHO** and its **partners** are supporting Equatorial Guinea and **neighbouring countries.**

Marburg virus disease is a severe disease in humans caused by Marburg marburgvirus, with a case **fatality ratio of up to 88%**. Although MVD is uncommon, the virus has the potential to cause epidemics with significant case fatality rates. All recorded MVD outbreaks have originated in Africa.

Since 1967, when MVD was first detected, approximately **600 MVD cases** have been reported in outbreaks in Angola, the Democratic Republic of the Congo, Ghana, Guinea, Equatorial Guinea, Kenya, South Africa, Tanzania and Uganda.

Please refer to ECDC's **factsheet** on MVD for additional information.

ECDC assessment:

This is the first MVD outbreak to occur in Equatorial Guinea.

Although the disease is severe with a high fatality rate, the likelihood of exposure and infection by MARV for EU/EEA citizens travelling to or residing in the affected areas in Equatorial Guinea is currently very low. As a result, the risk of infection by MARV for EU/EEA citizens travelling to or residing in Equatorial Guinea is currently very low.

The most likely route of introduction of MARV into the EU/EEA would be via infected travellers. While importation of the virus cannot be excluded, it is currently very unlikely to occur. Should a case be imported nonetheless, the likelihood of the virus spreading within the EU/EEA is considered to be very low.

Direct contact with blood and other body fluids of infected people or indirect contact with contaminated surfaces and materials such as clothing, bedding, and medical equipment should be avoided. Furthermore, habitats that may be populated by bats, such as caves or mines in areas where MVD has been reported, as well as any form of close contact with wild animals, including monkeys, forest antelopes, rodents, and bats, alive or dead, and the manipulation or consumption of any type of bushmeat should be avoided.

Actions:

ECDC is monitoring this event through its epidemic intelligence activities and will report when relevant information is available.

ECDC is in contact with partners.

7. Marburg virus disease - Tanzania - 2023

Update: On 24 April 2023, the **World Health Organization (WHO)** reported that as of 16 April 2023, there are nine confirmed cases and six deaths (case fatality rate (CFR) 66.7%) from Marburg virus disease (MVD) in Tanzania. All cases have been reported from the Bukoba Rural district, Kagera Region in northwest Tanzania. Of the 212 contacts identified, 206 have concluded their monitoring period.

Summary: On 17 March 2023, the **Ministry of Health of Tanzania** reported seven people affected by an undiagnosed disease in Kagera, northern Tanzania, including five deaths and two people treated at hospitals. The affected individuals presented with symptoms of fever, vomiting, bleeding from various parts of their body, and kidney failure. An investigation was initiated to determine the cause of the outbreak.

On 21 March 2023, according to the **Africa Centres for Disease Control and Prevention (Africa CDC)**, the Ministry of Health confirmed an outbreak of Marburg virus disease (MVD) in the Bukoba Rural district, Kagera

Region of northwest Tanzania. On 8 April 2023, the **WHO AFRO bulletin for week 15 (3–9 April 2023)** reported that there were 212 contacts identified, including 89 healthcare workers. As of 16 April 2023, according to the **WHO AFRO bulletin for week 16 (10–16 April 2023)**, the cumulative number of MVD cases reported in Tanzania was nine, including six deaths (CFR 66.7%). All cases were reported from the Bukoba Rural district in the Kagera Region.

This is the first reported outbreak of **MVD** in Tanzania. The Kagera region borders Uganda, Rwanda, and Burundi. The **population** in this region is highly mobile, creating the risk of cross-border spread. MVD outbreaks have been previously reported in Uganda in regions neighbouring the currently affected area in Tanzania, which is remote, not densely populated, and not often frequented by tourists.

The Ministry of Health of Tanzania has sent a rapid response team to the affected area. Contact tracing, case management, and risk communication are being carried out. The **Africa CDC**, and **WHO** are also assisting the Ministry of Health with the deployment of teams of experts. On 21 March 2023, during a **press conference**, a WHO representative emphasised the internal capacity and preparedness of Tanzania for managing the situation and stated that WHO is committed to supporting the Tanzanian government in their response.

Marburg virus disease is a severe disease in humans caused by Marburg marburgvirus, with a case **fatality ratio of up to 88%**. Although MVD is uncommon, the virus has the potential to cause epidemics with significant case fatality rates. All recorded MVD outbreaks have originated in Africa.

Since 1967, when MVD was first detected, approximately **600 MVD cases** have been reported in outbreaks in Angola, the Democratic Republic of the Congo, Ghana, Guinea, Equatorial Guinea, Kenya, South Africa, Tanzania and Uganda.

Please refer to the ECDC **factsheet** on MVD for additional information.

ECDC assessment:

This is the first MVD outbreak to occur in Tanzania.

Although the disease is severe with a high fatality rate, the likelihood of exposure and infection by MARV for EU/EEA citizens travelling to or residing in the Kagera region of Tanzania is currently very low. As a result, the risk of infection by MARV for EU/EEA citizens travelling to or residing in the affected region is currently very low, provided they adhere to the recommended precautionary measures.

The most likely route of introduction of MARV into the EU/EEA would be via infected travellers. While importation of the virus cannot be excluded, it is currently very unlikely to occur. Should a case be imported nonetheless, the likelihood of the virus spreading within the EU/EEA is considered to be very low.

Direct contact with blood and other body fluids from infected people, or indirect contact with contaminated surfaces and materials such as clothing, bedding, and medical equipment should be avoided. It is advisable to avoid habitats that may be populated by bats, such as caves or mines in areas/countries where MVD has been reported, as well as any form of close contact with wild animals, including monkeys, forest antelopes, rodents, and bats, alive or dead, and the manipulation or consumption of any type of bushmeat.

Actions:

The ECDC epidemic intelligence team is closely monitoring this event through its epidemic intelligence activities and will update this EpiPulse item as soon relevant information is available.

8. Seizure of reference laboratory by armed group - Sudan - 2023

On 25 April 2023, media reported that one of the groups involved in the Sudanese conflict had seized the National Public Health Laboratory in Khartoum and removed laboratory personnel.

As stated on the website of the National Public Health Laboratory, it is the only reference laboratory for polio and serves as the National Influenza Centre (BSL2) in Sudan. The lab has capacity for routine diagnostic testing of bacterial/viral diseases and for the following pathogens: polio, measles, SARS-CoV-2, dengue, and other arboviruses, cholera, and M. tuberculosis (including MDR TB). The laboratory also holds a large blood bank which is at risk of spoilage following power cuts to the facility. The National Public Health Laboratory is near the centre of Khartoum and is in close proximity to the Khartoum International Airport. The laboratory is located just outside the territory of Sudan's military headquarters, and is in an area where much of the fighting has been occurring.

Background
On 15 April 2023, a conflict erupted in the capital of Sudan, Khartoum, between the Sudanese Armed Forces (SAF) and a paramilitary group, the Rapid Support Forces (RSF). Fighting has been concentrated in residential areas leading to civilian casualties and international evacuations.

ECDC assessment:

The main risks from this seizure include leakage of biological or chemical materials in the environment with consequent risk for the local population, the loss of diagnostic capacity of the reference laboratory as well as the destruction of the blood bank, as a direct result of the electric power cut. ECDC is trying to verify the list of pathogens in storage in this particular laboratory. According to the initial information obtained, it appears unlikely that high-threat agents were stored there.

Actions:

ECDC is monitoring this event through its epidemic intelligence activities and will report when relevant updates are available.