

WEEKLY BULLETIN

Communicable Disease Threats Report

Week 9, 27 February - 5 March 2023

Today's disease topics

1. Weekly Summary
2. COVID-19 associated with SARS-CoV-2 - Multi-country (EU/EEA) - 2019 - 2023
3. Group A streptococcal infection - Multi-country - 2022 - 2023
4. Influenza – Multi-country – Monitoring 2022/2023 season
5. Middle East respiratory syndrome coronavirus (MERS-CoV) - Multi-country
6. Mpox - Multi-country - 2022-2023
7. Influenza A(H5N1) - Multi-country (World) - Monitoring human cases
8. Poliomyelitis - Israel - 2023
9. Marburg virus disease - Equatorial Guinea - 2023
10. Earthquakes - Türkiye, Syria - 2023

1. Weekly Summary

Overview:

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

- In week 8, 2023 (the week ending 26 February 2023), increasing trends in case rates among people aged 65 years and above were reported by 15 out of 26 EU/EEA countries, compared to the previous week. Over the past one to four weeks, increasing trends in severe disease and COVID-19 deaths have been observed in some countries. The values of these indicators remain below those observed in December 2022. However, increases of up to 50% have been observed in some countries.
- As of 3 March 2023, 66 650 sequences have been deposited in GISAID EpiCoV belonging to the XBB.1.5 lineage. Most of these submissions are from the United States (43 851 sequences), United Kingdom (5 981 sequences) and the rest of Europe (9 190 sequences). The presence of XBB.1.5 in the EU/EEA accounts a median proportion of 24% (range: 11–56%) in the countries that reported data for week 6, 2023.
- According to the China CDC's latest update on 25 February 2023, the COVID-19 situation in mainland China has stabilised to between 10 000 and 15 000 cases per day, with fluctuations within that range. The decreasing trend in hospitalisations and deaths is continuing.

Group A streptococcal infection - Multi-country - 2022 - 2023

- The number of iGAS cases peaked in Ireland in week 51, 2022, followed by a decrease in weekly cases in 2023. Since 1 January 2023 and till 18 February 2023, Ireland has reported 77 cases of iGAS.
- The Netherlands has notified 168 iGAS cases in January 2023. This is the highest number of iGAS cases reported in a month since 2017.

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.
- Influenza activity had been decreasing across the Region until week 4/2023, however an increase in positivity was noted between week 5 and 7/2023 related to increased type B virus circulation.
- Countries are experiencing a mixed distribution of circulating viruses with increasing circulation of A(H1)pdm09 and type B viruses.
- Overall this season, influenza A(H3) viruses have dominated in sentinel primary care specimens, however a higher circulation of A(H1)pdm09 and type B viruses was observed starting from week 50/2022 and week 2/2023, respectively. An almost even distribution of A(H1)pdm09 and A(H3) viruses was detected in non-sentinel specimens.
- Both influenza type A and type B viruses have been detected in hospitalized patients in ICU and other wards and influenza A(H1)pdm09 viruses have dominated in SARI specimens.

Middle East respiratory syndrome coronavirus (MERS-CoV) - Multi-country

- Since the previous update on 30 January 2023, and as of 28 February 2023, no new MERS-CoV cases and no related deaths have been reported by health authorities worldwide or by the World Health Organization (WHO).
- Since the beginning of 2023, and as of 28 February 2023, no MERS-CoV cases have been reported with date of onset in 2023 by health authorities worldwide or by the WHO.

Mpox - Multi-country - 2022-2023

- Since the last update on 14 February 2023, and as of 28 February 2023, two mpox cases have been reported from Spain and one death from Belgium.
- Overall, 21 181 confirmed cases of mpox have been reported from 29 EU/EEA countries, and six deaths from three EU/EEA countries.
- 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, reaching very low numbers since week 52, 2022.

Influenza A(H5N1) - Multi-country (World) - Monitoring human cases

- In February 2023, Cambodia reported two human infections (an 11-year-old girl and her father) with avian influenza A(H5N1), one of which was fatal. Virus sequencing showed the A(H5N1) virus belongs to clade 2.3.2.1c that has been circulating in southeast Asia since 2014, and differs from clade 2.3.4.4b circulating in Europe.
- On 28 February 2023, the Cambodian Ministry of Health reported that the second case of A(H5N1) was discharged from hospital (the father of the infected girl). Investigations revealed both cases were infected from birds.
- To date, no human-to-human transmission has been detected. Overall, 873 human cases with avian influenza A(H5N1), including 458 deaths (CFR: 52.5%), have been reported since 2004.
- The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to be low. The risk to occupationally exposed groups such as cullers has been assessed as low to medium.

Poliomyelitis - Israel - 2023

- On 2 March, the [Israel Ministry of Health reported](#) on three additional asymptomatic children testing positive for polio virus.
- On 27 February, the Israel [Ministry of Health has issued an official alert](#) describing a case of acute flaccid paralysis (AFP) that is highly suspicious for poliomyelitis.
- The case is an unvaccinated eight-year-old from the Safed area.
- Laboratory and epidemiological investigations are still ongoing.

Marburg virus disease - Equatorial Guinea - 2023

- On 13 February 2023, Equatorial Guinea confirmed the first Marburg virus disease (MVD) outbreak in the country.
- Overall, nine Marburg virus disease cases were reported in Equatorial Guinea, including one confirmed case, four probable, and four suspected cases. Additional suspected cases are under investigation.
- Epidemiological surveillance and contact tracing efforts are ongoing.
- WHO and partners are supporting Equatorial Guinea and neighbouring countries.

Earthquakes - Türkiye, Syria - 2023

- On 20 February 2023, a powerful [earthquake](#), with a magnitude of 6.3 in the Richter Scale, struck the Hatay Province in Türkiye.
- As of 27 February 2023, according to [a report](#) published by OCHA there have been 506 cases of cholera including 21 associated deaths in north-west Syria. In addition, 50 000 suspected cholera cases are estimated in the region.
- There is a need to ensure continuity of care for people with underlying conditions, prevention and control of infectious disease outbreaks by establishing ad hoc surveillance systems, and management of mental health issues.

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

Overview:

Summary:

In week 8, 2023 (week ending 26 February 2023), increasing trends in COVID-19 case rates among people aged 65 years and above, were reported by 15 out of 26 countries compared to the previous week. These trends are not new (of three to four weeks duration in nine countries). A larger number of countries reported increases compared to week 7.

Concurrently over the past one to four weeks, increasing trends in severe disease and COVID-19 deaths have been observed in some countries. Increases were observed in seven out of 21 countries with data on hospital admissions/occupancy, six out of 21 countries with data on ICU admissions/occupancy, and four out of 25 countries with data on COVID-19 deaths. The values of these indicators remain below those observed in December 2022. However, increases of up to 50% have been observed in some countries.

EU/EEA indicators based on pooled country data show increasing trends in case rates among people aged 65 years and above, a small increase in ICU occupancy, and a decreasing COVID-19 death rate and number of hospitalisations. In week 8, 2023, 793 deaths were reported in the EU/EEA. Current pooled values of all indicators remain low relative to those seen in the previous 12 months.

The cumulative uptake of a first booster was 65.4% (country range: 11.3–87.0%) among adults aged 18 years and above, 84.9% (country range: 13.3–100.0%) among people aged 60 years and above, and 54.7% (country range: 9.2–75.8%) in the total population. The cumulative uptake of a second booster was 17.2% (country range: 0.2–41.9%) among adults aged 18 years and above, 35.4% (country range: 0.4–86.6%) among people aged 60 years and above, and 14.1% (country range: 0.2–33.6%) in the total population.

Among the 10 countries with an adequate volume of sequencing or genotyping for weeks 6–7, 2023 (6 February to 19 February 2023), the estimated distribution of variants of concern (VOC) or of interest (VOI) was 33.8% (15.8–46.9% from eight countries) for XBB.1.5, 26.8% (12.9–54.9% from eight countries) for BQ.1, 22.2% (10.4–35.5% from nine countries) for BA.2.75, 7.0% (4.4–64.4% from 10 countries) for BA.5, 5.7% (0.6–14.2% from eight countries) for XBB, 1.2% (0.2–30.4% from eight countries) for BA.2, and 0.3% (0.1–2.1%, 21 detections from six countries) for BA.4.

For the latest COVID-19 country overviews, please see the [dedicated web page](#).

Weekly update on SARS-CoV-2 variants:

As of 3 March 2023, ECDC will de-escalate BA.2, BA.4 and BA.5 from its list of SARS-CoV-2 variants of concern (VOC), as these parental lineages are no longer circulating. ECDC will continue to categorise and report on specific SARS-CoV-2 sub-lineages in circulation that are relevant to the epidemiological situation.

ECDC categorised Omicron (B.1.1.529) as a VOC in November 2021, on the basis that this variant was predicted to have a substantial negative impact on the COVID-19 epidemiological situation in the EU/EEA. Omicron was the most highly mutated SARS-CoV-2 variant to-date, with substantial immune escape capabilities relative to prior SARS-CoV-2 variants. Omicron quickly established itself as the dominant SARS-CoV-2 lineage globally, resulting in a surge of COVID-19 cases.

In early 2022, a large number of Omicron-descendent sub-lineages emerged (BA.1, BA.2, BA.3, BA.4, BA.5), with ECDC categorising these sub-lineages separately to better distinguish their relative impacts on the epidemiological situation. Amongst these sub-lineages, BA.2, BA.4 and BA.5 consistently circulated in the EU/EEA until late 2022.

The current epidemiological situation is characterised by a highly diverse landscape of co-circulating BA.2 and BA.5 descendent variants, which have different properties from their parental lineages and require individual assessment. ECDC currently lists the most prominent amongst these under the categories, 'variant of interest' (VOI) and 'variant under monitoring' (VUM):

Variant of interest (VOI)

BQ.1 (BA.5 descendent)

BA.2.75 (BA.2 descendent)

XBB (BA.2.10.1 / BA.2.75 descendent)

XBB.1.5 (BA.2.10.1 / BA.2.75 descendent) new VOI

Variant under monitoring (VUM)

BF.7 (BA.5 descendent)

BA.2.3.20 (BA.2 descendent)

CH.1.1 (BA.2.75 descendent)

BN.1 (BA.2.75 descendent)

XBC (Delta (21I) / BA.2 recombinant)

XAY (Delta (AY.45) / BA.2 recombinant)

The absence of SARS-CoV-2 variants categorised as 'of concern' reflects the current stable epidemiological situation in the EU/EEA. However, it does not signal the end of the threat posed by SARS-CoV-2, and possible future variants which may emerge.

Recommendations for public health authorities

ECDC encourages countries to remain vigilant, by reinforcing representative surveillance systems, sequencing capacity, and reporting, as outlined in the guidance published in July 2022, [Operational considerations for respiratory virus surveillance in Europe](#) and more recently published, [COVID-19 surveillance and study protocols](#). Establishing strong and sustainable respiratory virus surveillance in the community will be critical in moving forward to reliably assess the relative contribution of different SARS-CoV-2 variant threats to the EU/EEA. For the latest information about variants, please see [ECDC's webpage on variants](#).

ECDC assessment of the XBB.1.5 sub-lineage

The XBB.1.5 is a sub-lineage of XBB with an additional spike RBD mutation S486P. This lineage was first detected in the United States with the sample collection dated from 22 October 2022, and it 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].

As of 3 March 2023, 66 650 sequences have been deposited in GISAID EpiCoV belonging to the XBB.1.5 lineage. Most of these submissions are from the United States (43 851 sequences), the United Kingdom (5 981 sequences) and the rest of Europe (9 190 sequences).

The [US CDC nowcast system](#) estimates the current proportion of the variant at around 85% (previous week 79.1%) in the US. For the last week with complete data (week 5, 2023), the US CDC reports the proportion of XBB.1.5 at 62% (previous week 53%).

This lineage is currently estimated to have a large growth advantage relative to the previously circulating lineages in North America (60%) and Europe (64%) (estimates provided by [CoV-spectrum](#), based on data from GISAID EpiCoV), though these estimates are associated with significant uncertainty. The US CDC reports a doubling time of the proportion of XBB.1.5 of nine days. The rapid growth in the US does not necessarily mean that the variant will become dominant in the EU/EEA, major differences in variant circulation between North America and Europe have been observed several times before during the pandemic.

The most likely explanation of the growth advantage is the already high level of immune escape capabilities demonstrated by XBB, combined with the effect of the spike change S486P. This mutation has previously been rare during the pandemic, probably due to it requiring two nucleotide substitutions in the same codon to change from Phenylalanine to Proline. Other variants with this change have however emerged without becoming successful. A recent [preprint](#) demonstrates that XBB.1.5 is not associated with a higher reduction in neutralisation by vaccine and convalescent sera compared to XBB.1, but that it is associated with a higher ACE2 affinity, which could indicate that the advantage of XBB.1.5 compared to XBB.1 might be caused by an increase in intrinsic transmissibility. Further laboratory and epidemiological investigations are required to elucidate the mechanism of the growth advantage conferred by this change specifically in the XBB variant. There is currently not enough information available to assess any change in infection severity associated with the variant.

Based on GISAID EpiCoV data as of 27 February 2023, XBB.1.5 is increasing in proportions in most EU/EEA countries with adequate sequence reporting volume. The estimated proportions for week 6, 2023 and week 5, 2023 (in parenthesis) are: Austria 18% (9.1%), Belgium 20% (19%), Denmark 31% (15%), Finland 11% (9.7%), France 32% (23%), Germany 26% (18%), Iceland 52% (37%), Ireland 56% (38%), Italy 17% (15%), the Netherlands 41% (30%), Poland 21% (15%), Spain 52% (31%) and Sweden 15% (14%). The presence of XBB.1.5 in the EU/EEA accounts a median proportion of 24% (range: 11–56%) in the countries that reported data for week 6, 2023.

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](#) was published on 13 January 2023.

Other News

On 1 March 2023, the German Federal Government published an [update](#) on protection measures against COVID-19. According to the update, from 1 March onwards, employees and residents in healthcare facilities and nursing homes will be exempted from wearing masks. However, visitors to healthcare facilities and nursing homes will still be required to wear masks.

On 24 February 2023, the European Medicines Agency (EMA) published a [resolution](#) on Lagevrio (molnupiravir) refusing its marketing authorisation. According to the resolution, the clinical benefits of Lagevrio could not be demonstrated in the treatment of adults with COVID-19, who do not require supplemental oxygen and are at increased risk of developing severe COVID-19. Lagevrio was developed as a medicine for the treatment of adults with COVID-19, who did not require supplemental oxygen and were at increased risk of developing severe COVID-19.

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](#), [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:

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 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.

Further information:

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

Sources: [China CDC](#), [media](#), [media](#), [media](#), [media](#), [GISAID](#)

Update

On 25 February 2023, the China CDC [published](#) an epidemiological update on the COVID-19 situation in mainland China including data until 23 February 2023. According to the update, as of 23 February 2023, 12 738 positive nucleic acid tests and 6 800 positive antigen tests have been reported. Following the peak on December 2022, the COVID-19 situation in mainland China has stabilised between 10 000 and 15 000 cases per day with fluctuations within that range. Additionally, there were eight severe COVID-19 cases hospitalised on 23 February 2023 (99.9% decrease compared to the 128 000 severe cases hospitalised during the peak on 5 January 2023). Seven deaths were reported in hospitals from 17 February to 23 February 2023. The decreasing trend in hospitalisations and deaths is continuing.

According to the [WHO COVID-19 Dashboard](#), since 3 January 2020 and as of 28 February 2023, a total of 99 030 129 COVID-19-confirmed cases and 119 865 deaths have been reported to WHO (including Taiwan and Special Administrative Regions).

Information on variants from public sources

From 1 January 2023 to 3 March 2023, China has deposited 13 917 sequences. As of 24 February 2023, out of the total 14 880 sequences submitted by China, 6 067 had recent sample collection dates between 1 January 2023 and 26 February 2023 in GISAID EpiCoV. These sequences mainly belonged to the lineages, BA.5.2.48 (60%), BF.7.14 (29%), BA.5.2.49 (6.4%). Other lineages (including their sub-lineages) circulating in minor proportions include: BA.5.2 (3.0%), BF.7 (0.5%), BA.5.1 (0.5%), BA.2.75 sub-lineages, including BN.1 and CH.1.1 (0.2%) and BQ.1 (0.1%).

Several new sub-lineages of Omicron have been assigned from sequence data released by China, which is expected as the virus accumulates random mutations. Most of these lineages carry no spike protein changes compared to previously known lineages, while a few sub-lineages of BF.7 carry single-spike protein changes, a part of BF.7.14.1 carries V83F, BF.7.14.2 carries Q14H and BF.7.14.3 carries S626V. None of these changes are likely to provide the virus with a substantial transmission advantage and none of the associated lineages show signs of rapid expansion.

Assessment

ECDC Assessment for the European Union (EU) / European Economic Area (EEA)

There are currently no data suggesting the emergence of new variants of concern in China. The China CDC is currently providing weekly epidemiological updates which show a significant improvement in the epidemiological situation across the country for all monitored indicators. The surge of cases in China between December and January did not influence the epidemiological situation in the EU/EEA.

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 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, the WHO headquarters and the WHO Regional Office for Europe to cross-check and validate data and assessments with partners outside of China, including 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 and worldwide will continue to be evaluated. ECDC participates in the global WHO Technical Advisory Group on Virus Evolution (TAG-VE).

3. Group A streptococcal infection - Multi-country - 2022 - 2023

Overview:

Update

Since the previous report, the following countries have reported updates on invasive group A streptococcal disease (iGAS):

Ireland: On 22 February 2023, the Irish Health Protection Surveillance Centre (HPSC) in their weekly epidemiological [update](#) on notifiable infectious diseases, report 13 iGAS cases for the period, 12–18 February 2023. Of these, three are probable cases. Since the start of 2023 and as of 18 February 2023, a total of 77 iGAS cases have been reported in Ireland. As a comparison, in the same period in 2022, five iGAS cases had been reported. Overall, the number of iGAS cases [peaked](#) in week 51, 2022 in Ireland, followed by a decrease in 2023.

Since October 2022, 13 fatalities associated with iGAS have been [reported](#) in Ireland. Of these, four have been reported in children from 0–18 years old, and nine in adults from 50–96 years.

The Netherlands: According to an [update](#) provided by the National Institute for Public Health and the Environment (RIVM), cases of iGAS have continued to increase in the Netherlands since November 2022. The highest number of monthly notifications were registered in January 2023, when 168 iGAS cases were reported. Among these, 15 were reported in children from 0–5 years of age. This is the highest notification rate of iGAS cases since 2017.

Summary

On 2 December 2022, an increase in iGAS and scarlet fever notifications caused by diverse emm types was observed in the EU/EEA and the UK, including associated fatalities. Following the first reports on the increase of iGAS and scarlet fever notifications, retrospective studies on surveillance data showed an increase in iGAS and scarlet fever cases since the beginning of 2022 in some EU/EEA countries. Other countries outside the EU/EEA have also issued [alerts](#) on recent increases in iGAS among children. In the EU/EEA, the increase in iGAS notifications has been reported by [France](#), [Ireland](#), the [Netherlands](#), and [Denmark](#). Other EU/EEA [countries](#) have reported an increase in iGAS cases compared to the previous season, but with a lower incidence than before the pandemic.

The age groups most affected are children <10 years old and people aged >65 years. According to available data, consultations for scarlet fever and iGAS notifications peaked in the pre-Christmas period in December 2022, followed by a decreasing trend in January 2023.

On 12 December 2022, ECDC published a [news item](#) in collaboration with the WHO Regional Office for Europe, advising countries to remain vigilant against increases in GAS and iGAS infections and to increase awareness among healthcare professionals and parents of young children.

ECDC assessment:

Group A streptococcus (GAS) is considered the most common cause of bacterial pharyngitis in school-aged children. It may also affect the younger siblings of affected children. The incidence of GAS pharyngitis usually peaks during winter months and early spring. Outbreaks in kindergartens and schools are frequently reported. GAS pharyngitis is easily diagnosed by a rapid antigen detection test (Rapid Strep) and/or bacterial culture and treated with antibiotics and supportive care. Good hand hygiene and general personal hygiene (e.g. avoid sharing utensils, drinking glasses, and personal items, etc.) can help to control transmission within these settings.

Invasive GAS (iGAS) infections are rare life-threatening systematic infections, complicating simple scarlet fever or pharyngitis. Children recovering from viral infections e.g. varicella (chickenpox), influenza, etc. are at higher risk of developing iGAS infection.

Neither GAS nor iGAS infections are notifiable at the EU level, and the ability to assess increased circulation in EU/EEA countries is limited as a result. However, WHO and ECDC currently assess that the risk posed by iGAS to the general population is low, given that the current increase in iGAS cases is relatively low overall, the reported cases are not caused by a new strain, and the disease is easily treatable with antibiotics.

This season, typing data suggest that the surge of iGAS cases is not related to a specific or new strain or an increase in antibiotic resistance of GAS. The most common emm types reported are emm 1 and emm 12. Countries experiencing an increased number of cases are encouraged to share any emm-typing, M-typing, multilocus sequence typing (MLST), and/or whole genome sequencing (WGS) data via the related EpiPulse event page.

Actions:

ECDC has opened an EpiPulse item and invited EU/EEA countries and the UK to share information on GAS and iGAS infections. In addition, in collaboration with the WHO Regional Office for Europe, EU/EEA countries and the UK have been contacted by ECDC through EpiPulse about the current situation related to GAS and iGAS infections.

In collaboration with the WHO Regional Office for Europe, ECDC has also published a [news item](#) advising countries to be vigilant against increases in GAS and iGAS infections, and to increase awareness among healthcare professionals and parents of young children.

ECDC is continuing to monitor this event through its epidemic intelligence activities and will report when relevant epidemiological updates are available.

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

Overview:

Week 8, 2023 (20 February – 26 February 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 from 28% in the previous week to 25% in week 8, 2023. This remains above the epidemic threshold (10%).
- Twenty-one out of 38 countries or areas reported medium or high intensity, and 21 out of 37 countries reported widespread activity indicating substantial seasonal influenza virus circulation across the WHO European Region.
- Out of the 22 countries with seasonal activity above the epidemic threshold of 10% positivity, Sweden, Slovenia, the Netherlands, France, and Slovakia reported activity above 40% positivity in sentinel primary care.
- Influenza type A and type B viruses were detected in sentinel and non-sentinel surveillance, with influenza type B predominating in both systems.
- Hospitalised patients with confirmed influenza virus infection were reported from ICUs (with similar proportions of influenza type A and type B), other wards (with similar proportions of influenza type A and type B) and SARI surveillance (with mainly influenza A(H1N1)pdm09 subtype viruses reported). Eight countries or areas reported influenza positivity rates above 10% in SARI surveillance.

Source: [Flu News Europe](#)

ECDC assessment:

Seasonal influenza activity is still widespread in the EU/EEA, with an increase in positivity in sentinel primary care between weeks 5 and 7, 2023 related to increased type B virus circulation. Influenza activity peaked in week 51, 2022 in the EU/EEA.

Actions:

ECDC and WHO monitor influenza activity in the WHO European Region. Data are available on the [Flu News Europe](#) website.

5. Middle East respiratory syndrome coronavirus (MERS-CoV) - Multi-country

Overview:

Update: Since the previous update on 30 January 2023, and as of 28 February 2023, no new MERS-CoV cases and no related deaths have been reported by health authorities worldwide or by the World Health Organization (WHO).

Summary: Since the beginning of 2023, and as of 28 February 2023, no MERS-CoV cases have been reported with date of onset in 2023 by health authorities worldwide or by the WHO.

Since April 2012, and as of 28 February 2023, a total of 2 613 cases of MERS-CoV, including 945 deaths, have been reported by health authorities worldwide.

Sources: [ECDC MERS-CoV page](#) | [WHO MERS-CoV](#) | [ECDC factsheet for professionals](#) | [WHO updated global summary and assessment of risk \(November 2022\)](#) | [Qatar MoPH Case #1](#) | [Qatar MoPH Case #2](#) | [FAO MERS-CoV situation update](#) | [WHO DON Oman](#) | [WHO DON Saudi Arabia](#)

ECDC assessment:

Human cases of MERS-CoV continue to be reported in the Arabian Peninsula. 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.

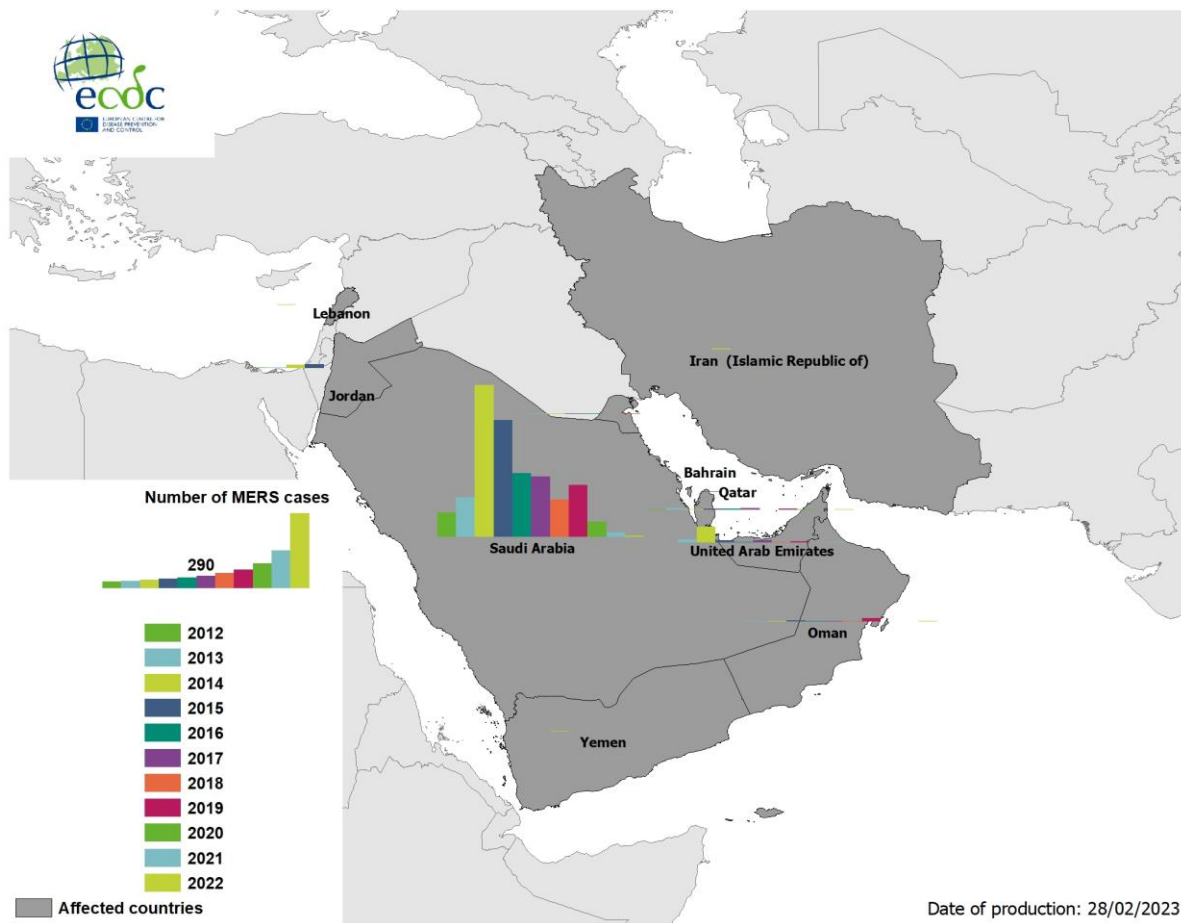
ECDC published a technical report [Health emergency preparedness for imported cases of high-consequence infectious diseases](#) in October 2019, which will be useful for EU Member States wanting to assess their level of preparedness for a disease such as MERS-CoV. ECDC also published [Risk assessment 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.

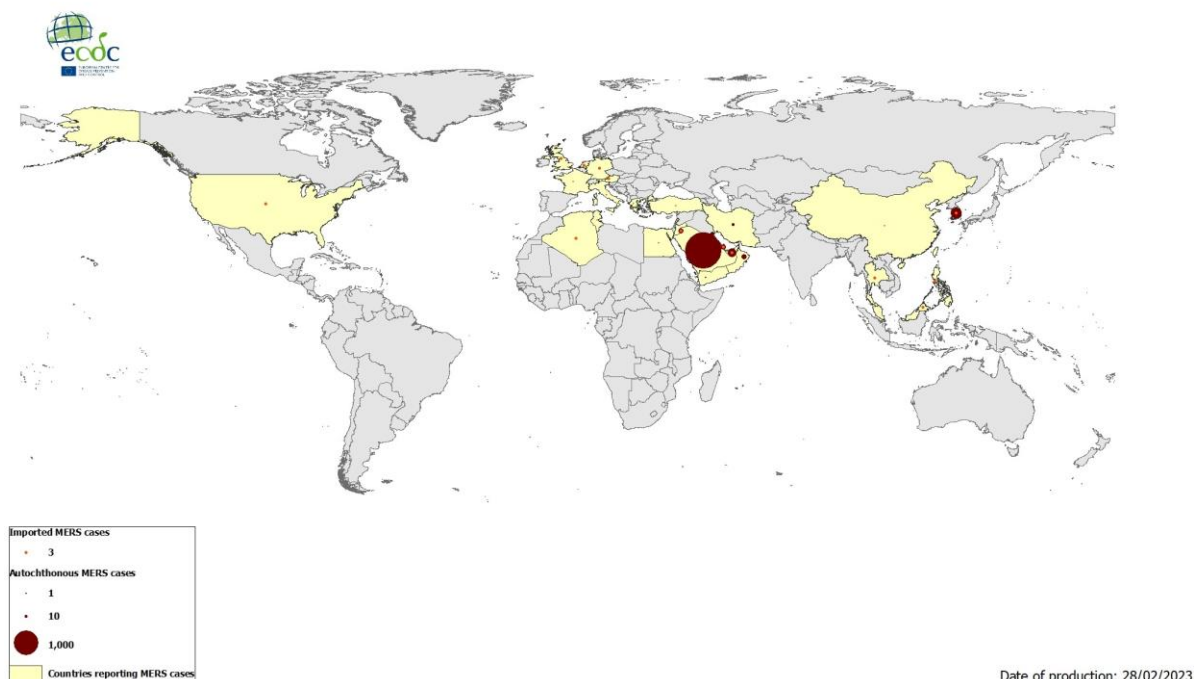
Maps and graphs

Figure 1. Geographical distribution of confirmed MERS-CoV cases, by country of infection and year, from April 2012 to February 2023



Source: ECDC

Figure 2. Geographical distribution of confirmed cases of MERS-CoV by reporting country, April 2012 – February 2023



Source: ECDC

6. Mpox - Multi-country - 2022-2023

Overview:

Update:

Since the last update on 14 February 2023, and as of 28 February 2023, two mpox cases have been reported by Spain and one death has been reported by Belgium.

On 28 February 2023, Belgium reported a death due to mpox in a severely immunosuppressed person who was hospitalised for multiple months. During this period the patient had continuously tested positive for mpox by polymerase chain reaction (PCR), and eventually died due to a variety of complications related to mpox.

Summary:

EU/EEA

Since the start of the mpox outbreak and as of 28 February 2023, 21 181 confirmed cases of mpox have been reported from 29 EU/EEA countries: Spain (7 543), France (4 127), Germany (3 676), the Netherlands (1 260), Italy (957), Portugal (945), Belgium (793), Austria (327), Sweden (260), Ireland (228), Poland (215), Denmark (196), Norway (95), 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 (2) and Czechia (1).

Western Balkans and Türkiye:

Since the start of the mpox outbreak, and as of 28 February 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). Following the advice of the International Health Regulations (2005) (IHR) Emergency Committee after their fourth meeting held on 9 February 2023, the PHEIC classification for the mpox outbreak will be [maintained](#).

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, reaching a plateau with very low numbers since week 52, 2022.

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 after the summer frequented by the main risk groups for this outbreak.

Based on evidence from the current outbreak and the declining number of new infections in the WHO European Region, the overall risk of mpox infection is assessed as moderate for men who have sex with men (MSM) and low for the broader population in the EU/EEA.

Response options for EU/EEA countries include creating awareness among healthcare 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, transgender people, or other men 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, 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 risk of mpox 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, infection prevention and control (IPC) guidance, cleaning and disinfection in healthcare settings and households, and vaccination approaches.

7. Influenza A(H5N1) - Multi-country (World) - Monitoring human cases

Overview:

Update: On 28 February 2023, the [Ministry of Health of Cambodia](#) reported that the second A(H5N1) case, the father of the deceased girl has been discharged from hospital. According to the same report, both cases were infected from birds. To date no human-to-human transmission of influenza A(H5N1) has been reported.

Virus sequencing, from the sample taken from the girl, showed the A(H5N1) virus belongs to clade 2.3.2.1c ([MoH report](#)), similar to circulating viruses in poultry in southeast Asia since 2014, and different from clade 2.3.4.4b circulating in Europe.

In addition, on 24 February 2023, the World Health Organization ([WHO](#)) classified a previously reported case from Ecuador as A(H5N1). One more case was reported from China according to the same report, bringing the total number of A(H5N1) cases to 873.

Summary:

Globally, as of 27 February 2023, there have been 873 cases, including 458 deaths (Case Fatality Rate: 52.6%), of human infection with avian influenza A(H5N1) reported in 22 countries. To date, no human-to-human transmission has been detected.

[Cambodia](#) reported a family cluster in Sithor Kandal district, Prey Veng province in February 2023, with two people infected with avian influenza A(H5N1) virus **clade 2.3.2.1c**. The index case, an 11-year-old girl developed symptoms on 16 February. She was hospitalised three days later and died on 22 February. The second case, detected through contact tracing, a 49-year-old man and the father of the girl was reportedly asymptomatic, isolated at the referral hospital and was discharged several days later. During the epidemiological investigation, all samples taken from 12 contacts of the girl (index case), apart from the father, tested negative for avian influenza A(H5N1). According to [media](#) quoting Cambodian health authorities, an additional 29 contacts of these cases, 13 of which were symptomatic, tested negative for the avian influenza virus. On 26 February, the Cambodian Ministry of Health reported the virus sequencing from a sample taken from the girl showed that the A(H5N1) virus belongs to clade 2.3.2.1c (**MoH report**).

Deaths among backyard poultry and wild birds were previously reported in the village where the two cases originated, and the [Ministry of Health](#) confirmed that both cases were due to infected birds.

An educational communication campaign has been initiated by the MoH with precautionary measures to avoid infection and seek immediate medical attention in case of symptoms.

This is the first event of avian influenza A(H5N1) detected in humans in Cambodia since 2014. In the past, Cambodia reported 56 cases including 37 deaths between 2005 and 2014. Overall, there have been 58 cases with avian influenza A(H5N1) infection, including 38 deaths reported in Cambodia.

Sources: [ECDC news item](#), [ECDC Avian influenza](#), [ECDC Avian influenza overview: Latest situation update of the avian influenza in EU/EEA](#), [the Ministry of Health of Cambodia](#), [media report 1](#), [media report 2](#), [media report 3](#), [media report 4](#), [WHO DON](#), [MoH report 1](#), [MoH report 2](#)

ECDC assessment:

Sporadic human cases of different avian influenza A(H5Nx) subtypes have been previously reported globally. Current epidemiological and virological evidence suggests that A(H5N1) viruses remain avian-like. Transmission to humans remains a rare event and no sustained transmission between humans has been observed.

Overall, the risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to be low. The risk to occupationally exposed groups such as cullers has been assessed as low to medium. 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. The recent severe cases in Asia and South America in children and people exposed to infected sick and dead backyard poultry underline the risk associated with unprotected contacts to infected birds in backyard farm settings and suggests the appropriate use of personal protective equipment.

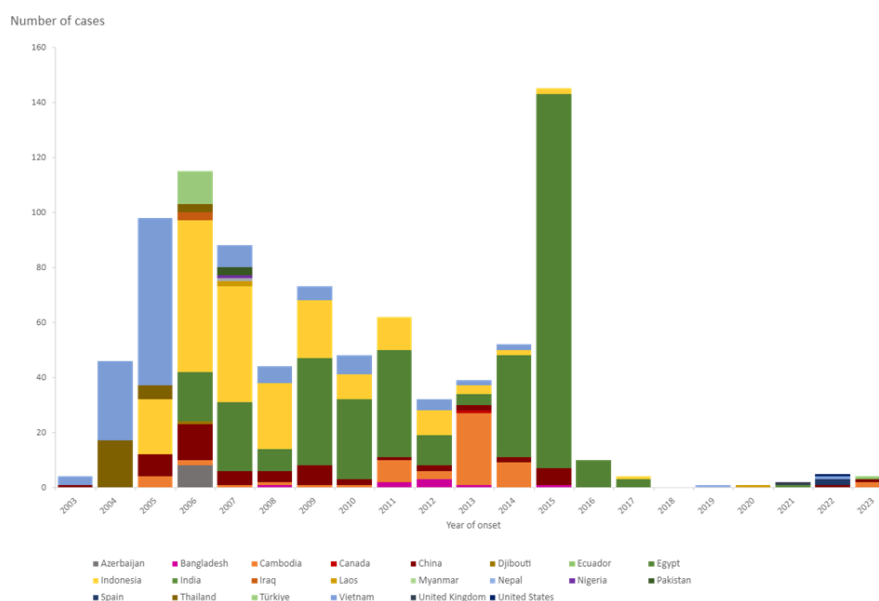
Actions:

ECDC has been in contact with WHO and other partners to obtain more information on the current event in Cambodia and has published a [news item](#) on 1 March 2023.

ECDC monitors avian influenza strains through its influenza surveillance programme and epidemic intelligence activities 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 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 20 December 2022 and next one will be published in March 2023.

Maps and graphs

Figure 3. Distribution of confirmed human cases of avian influenza A(H5N1) virus infection by year of onset and country, 2003–2023 (updated on 27 February 2023, n=873)



Source: ECDC

8. Poliomyelitis - Israel - 2023

Overview:

Update:

On 2 March 2023, the [Israel Ministry of Health reported](#) on three additional children testing positive for polio virus. All three children were asymptomatic with unknown vaccination status. They were close contacts to the previously described acute-onset flaccid paralysis (AFP) case and identified through epidemiological investigation.

Summary:

On 27 February 2023, the Israel [Ministry of Health issued an official alert](#) describing a case of acute flaccid paralysis (AFP). The case is an unvaccinated eight-year-old from the Safed area. The child arrived at the hospital with limb weakness and a sample was found positive for the polio virus with further laboratory investigations ongoing. According to Israeli authorities, there is evidence of the continued existence of polio in the sewage of many localities. The poliovirus type is unknown as of now. Epidemiological investigations are still ongoing.

ECDC assessment:

According to [this source](#), authorities in Israel have begun contact tracing activities and corresponding investigations to categorise the poliovirus sample isolated from the eight-year-old from the Safed area. In March 2022, one case of AFP due to cVDPV3 was confirmed in an unvaccinated girl in Jerusalem City. In addition to the cVDPV3 case, sewage samples collected between January to June 2022 from the Jerusalem District were found positive for cVDPV2. In Israel, the last cases of wild poliovirus type 1 (WPV1) occurred in 1988, during an outbreak in the Hadera district resulting in 15 cases of acute flaccid paralysis (AFP).

The WHO European Region including the EU/EEA has remained polio-free since 2002. However, as long as there are unvaccinated or partially vaccinated population groups in European countries and poliomyelitis is not eradicated, the risk of the virus being reintroduced into Europe remains. To limit the risk of reintroduction and sustained transmission of poliovirus in the EU/EEA, it is crucial to maintain high-vaccine coverage in the general population, and to increase the vaccination uptake in the pockets of under-immunised populations. EU/EEA countries should review their polio vaccination coverage data, ensure there are no immunity gaps in the population, and there is capacity to identify virus circulation through well-performing surveillance systems.

ECDC links: [ECDC comment on risk of polio in Europe](#) | [ECDC risk assessment](#)

Actions:

ECDC is in contact with the WHO Regional Office of Europe, and will continue to monitor the event through epidemic intelligence activities.

9. Marburg virus disease - Equatorial Guinea - 2023

Overview:

Update: On 25 February 2023, the [Ministry of Health and Social Welfare of Equatorial Guinea](#) reported that the epidemiological alert system, activated on 23 February 2023, has since received eight notifications – two of which were deceased individuals with symptoms consistent with Marburg virus disease (MVD). On 28 February 2023, the [Ministry of Health and Social Welfare](#) stated the two latest deaths are not yet confirmed as caused due to MVD.

Additionally, [48 contacts](#) were being followed up as of 25 February 2023.

Prior to the report of the MoH, on 25 February 2023, the World Health Organization (WHO) released a [Disease Outbreak News item](#) reporting that as of 21 February 2023, the cumulative number of MVD cases in Equatorial Guinea was nine, including one confirmed case, four probable, and four suspected cases. All the nine cases have died – one individual died in a healthcare facility and the other eight in the community. No cases had been reported among healthcare workers.

Summary: On 13 February 2023, [Equatorial Guinea](#) confirmed the first Marburg virus disease outbreak in the country. On 8 February 2023, the [Ministry of Health in 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.

[Nine deaths](#) have been reported so far, with symptoms including fever, weakness, bloody vomit, and diarrhoea. Additional suspect cases are under investigation. The [index case](#) died in [early January 2023](#) and the Ministry of Health of Equatorial Guinea was notified on 7 February 2023.

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.

Within the context of this outbreak, a suspected case is [defined](#) as:

- any person alive or deceased who presents three of the symptoms under surveillance and who has been in a risk zone;
- contacts of probable or confirmed cases who present with only one symptom;
- all natural deaths that occur in a sudden and unexplained way in the community;
- any person with unexplained bleeding.

The National Technical Committee of Health Emergencies is [working](#) closely with the Ministry of Health and Social welfare in the Kié-Ntem province to coordinate and strengthen disease control and prevention. [WHO](#) and its [partners](#) are supporting Equatorial Guinea and [neighbouring countries](#).

[Marburg virus disease](#) (MVD), formerly known as Marburg haemorrhagic fever, is a severe disease in humans caused by *Marburg Marburgvirus* (MARV), with a [fatality ratio of up to 88%](#). Although MVD is uncommon, MARV 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 Uganda, the Democratic Republic of the Congo (DRC), and Angola. The latest occurrence of MVD, prior to the current outbreak in Equatorial Guinea, was in 2022 in Ghana, where three cases were reported.

Please refer to the ECDC [factsheet](#) about MVD for additional information.

ECDC assessment:

Previous outbreaks and sporadic cases of MVD in Africa have been reported in Angola, the Democratic Republic of the Congo, Kenya, South Africa, Uganda, Guinea, and Ghana. This is the first 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 or residing in Western Kié-Ntem Province (Equatorial Guinea) is currently very low. As a result, the risk of infection by MARV for EU/EEA citizens travelling 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 spread of the virus 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 like 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, both alive and 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.

Further information:

- On 13 February 2023, Equatorial Guinea confirmed the first Marburg virus disease (MVD) outbreak in the country.
- Overall, nine Marburg virus disease cases were reported in Equatorial Guinea, including one confirmed case, four probable, and four suspected cases. Additional suspected cases are under investigation.
- Epidemiological surveillance and contact tracing efforts are ongoing.
- WHO and partners are supporting Equatorial Guinea and neighbouring countries.

10. Earthquakes - Türkiye, Syria - 2023

Overview:

Update: Following the major earthquakes on 6 February 2023 and numerous severe aftershocks, as of 28 February 2023, the European Civil Protection and Humanitarian Aid Operations ([DG ECHO](#)) reported 44 218 deaths and 108 068 injuries in Türkiye, and over 5 914 deaths and 10 857 injuries in north-west Syria. As of 27 February 2023, according to a [report](#) published by the United Nations (UN) Office for the Coordination of Humanitarian Affairs (OCHA) there have been 506 cases of cholera including 21 associated deaths in north-west Syria. In addition, 50 000 suspected cholera cases are estimated in the region.

Background: On 6 February 2023, a major earthquake, with a magnitude of 7.8 on the Richter Scale, and several aftershocks also measuring high on the Richter Scale struck south-eastern Türkiye and northern Syria. These earthquakes caused significant destruction in both the countries, claiming thousands of lives and damaging or destroying essential infrastructure, including healthcare, water and sanitation facilities. On 20 February 2023 a powerful earthquake, with a magnitude of 6.3 followed by a second earthquake of 5.8 on the Richter Scale, struck the Hatay Province in Türkiye. A three-month state of emergency has been declared in the provinces affected by the earthquakes.

On 9 February 2023, according to the [United Nations Satellite Centre \(UNOSAT\)](#), flooding occurred along the Orontes (Al Assi) River on the Syria-Türkiye border close to the Al-Tloul and Jakara towns.

Health threats arising from infectious diseases such as cholera, COVID-19, and seasonal influenza are expected to be a cause for concern in the coming two to four weeks. Currently, no events related to infectious diseases have been detected in open sources.

This earthquake is one of the strongest to have occurred in the region in the last century, prompting a global humanitarian response at the request of the Government of Türkiye.

ECDC assessment:

The effects of this natural disaster on public health in the affected areas are enormous. In addition to the immediate need to provide care for the many severely injured people and safe accommodation for those who have lost access to their homes, there is a need to ensure continuity of care for people with underlying conditions, prevention and control of infectious disease outbreaks by establishing ad hoc surveillance systems, and management of mental health issues. Among other public health interventions, the rapid re-establishment of disease prevention and control programmes is essential to mitigate the longer-term impact of this event. Providing access to healthcare, potable water and shelter will substantially mitigate the risk of infectious disease threats, including cholera, to the survivors. A surge of cholera cases in the affected areas is a significant possibility. Cholera is a particular concern in north-west Syria, as the country is trying to control an outbreak since September 2022. A vaccination campaign against cholera in north-west Syria, which was planned before the earthquakes, should be accelerated as soon as a resolution is reached on sheltering the survivors.

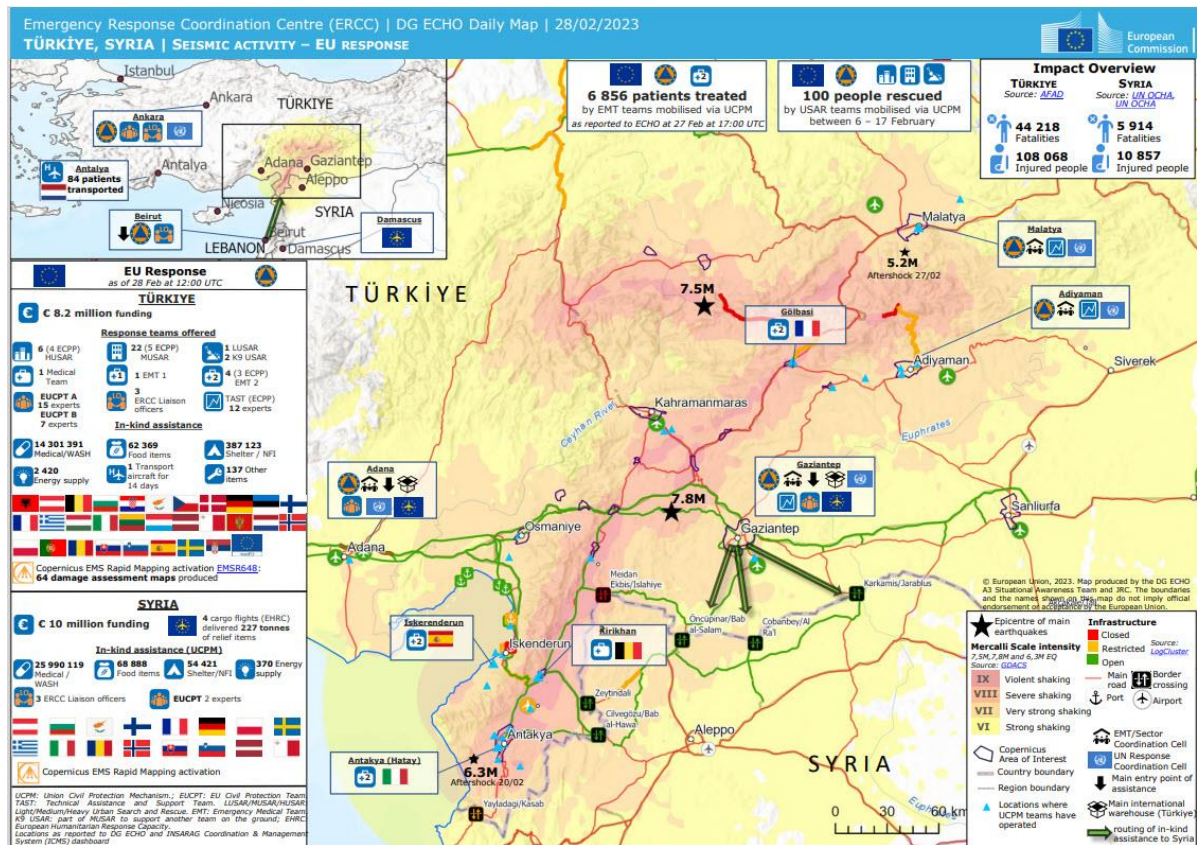
Actions:

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

ECDC published a [news item](#) on the earthquake in Türkiye and Syria on 20 February 2023.

Maps and graphs

Figure 4. Seismic activity - EU Response - DG ECHO Daily Map



Source: DG ECHO