WEEKLY BULLETIN

Communicable Disease Threats Report

Week 40, 1 - 7 October 2023

Today's disease topics

1. Autochthonous cases of dengue - France - 2023
2. Autochthonous dengue cases - Italy - 2023
3. West Nile virus One Health seasonal surveillance – 2023
4. Mass gathering monitoring – Rugby World Cup 2023, France
5. COVID-19 associated with SARS-CoV-2 – Multi-country (EU/EEA) – 2019–2023
6. Chikungunya and dengue – Multi-country (World) – Monitoring global outbreaks
7. Middle East respiratory syndrome coronavirus (MERS-CoV) - Multi-country
8. Mpox Multi-country 2022 - 2023

Executive Summary

Autochthonous cases of dengue - France - 2023

- In the 2023 transmission season, as of 2 October 2023, six clusters of autochthonous dengue virus transmissions with a total of 31 cases have been reported so far in mainland France.
- In the Provence-Alpes-Côte d'Azur region, in the Bouches-du-Rhône department, seven autochthonous cases of dengue virus infection were reported in patients residing in Boulbon and four cases in Gardanne. In the Alpes-Maritimes department, there was one case in a patient residing in Nice, who visited Castellet and La Garde, Var department.
- In the Occitània region, 11 autochthonous cases of dengue virus infection were detected in Perpignan, Pyrénées Orientales department and six cases in Gagnières in the Gard department.
- In the Auvergne Rhône-Alpes region, two cases are being confirmed in Bourg les Valence in the Drôme department.
- Response and control measures are being implemented by the French public health authorities. These include vector control, information to healthcare providers and the general public, and door-to-door surveys.
- Further cases connected to this transmission event or autochthonous secondary transmission from imported cases of dengue in other areas cannot be excluded.

Autochthonous dengue cases - Italy - 2023

- Since the first week of August and as of 2 October 2023, 42 locally acquired dengue fever cases have been detected in the Lombardy (27) and Lazio (15) regions in Italy.
- The cases are grouped in three clusters in the province of Lodi, Lombardy region (27), in the metropolitan city of Rome (13) and in the province of Latina (2), Lazio region.

- Symptom onset for the first case dates back to 2 August 2023.
- Response and control measures are being implemented by Italian public health authorities. These include case finding, vector control activities, information to healthcare providers and the general public, and preventive measures for donors of substances of human origin (e.g. blood and organs).
- Further autochthonous cases may occur in the affected regions, and in Italy overall, and surveillance has been strengthened to detect new cases early, identify transmission chains, define areas at risk and quantify the level of risk.
- Since the mosquito vector *Aedes albopictus* is established in most of Europe, further virus introductions leading to secondary autochthonous transmissions may occur in most of the southern countries of the EU/EEA.

West Nile virus One Health seasonal surveillance – 2023

- Since the last update, and as of 4 October 2023, 42 human cases of West Nile virus (WNV) infection have been reported by EU/EEA countries and two by an EU-neighbouring country.
- The following areas reported autochthonous human cases of WNV infection for the first time: Haute-Corse in France and Cosenza and Bari in Italy.
- Since the beginning of the 2023 transmission season, 599 human cases of WNV infection have been reported by EU/EEA countries and 85 by EU-neighbouring countries.
- There have been 79 outbreaks among equids and 198 outbreaks among birds reported by EU/EEA countries since the beginning of the 2023 WNV transmission season, as of 4 October 2023.

Mass gathering monitoring – Rugby World Cup 2023, France

- ECDC is monitoring infectious disease events possibly associated with the Rugby World Cup in 2023.
- An update is provided in relation to an ongoing measles outbreak in the town of Guilherand Granges, Ardèche department, France, with 31 children affected as of information on 6 October 2023.
- Although no cross-border events have been reported so far, ECDC does not yet have the full information to assess the risk of spread into the larger community of attendants to the sporting events.

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

- By the end of week 39 (ending 1 October 2023), rates of respiratory illness in the community and numbers of COVID-19 cases continued to increase in over half of EU/EEA countries reporting data. Increased transmission of SARS-CoV-2 has translated into increases in hospital or ICU admissions and even deaths in some countries, although the impact is still limited.
- Since the last update on 28 September 2023, and as of 6 October 2023, the following changes have been made to ECDC's variant classifications for variants of concern (VOCs), variants of interest (VOIs), variants under monitoring (VUMs) or de-escalated variants: **XBB.1.5-like+L455F+F456L**, the XBB.1.5-like lineages with additional mutations L455F and F456L is added as Variant under monitoring (VUM). **DV.7.1** (the sub-lineage of BA.2.75) has been added as Variant under monitoring (VUM). CH.1.1 lineage (BA.2.75 sub-lineage) has been de-escalated from VUM to de-escalated variants
- XBB.1.5-like + F456L lineages currently dominate the global and EU/EEA SARS-CoV-2 variant landscape. As of 2 October 2023, the 12 EU/EEA countries reporting at least 10 sequences to GISAID EpiCoV for week 37 (11–17 September 2023) showed the following proportions of XBB.1.5-like + F456L lineages: Austria (63%), Belgium (73%), Denmark (56%), France (59%), Germany (86%), Ireland (64%), Italy (68%), the Netherlands (65%), Portugal (65%), Romania (33%), Spain (66%) and Sweden (71%). The overall proportion of XBB.1.5-like + F456L lineages continues to increase in the EU/EEA, although the trend is less pronounced compared to previous weeks.
- BA.2.86 is an emerging SARS-CoV-2 lineage characterised by a high number of spike mutations that are distinct from ancestral BA.2 and currently circulating XBB-derived variants. BA.2.86 is circulating in low proportions in the EU/EEA, (median 0.15% in EU/EEA countries and up to 7% in Denmark).

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

- In 2023, and as of 30 September, approximately 440 000 cases and over 350 deaths have been reported worldwide as a result of chikungunya virus disease. Most of the cases were reported in South America.
- In 2023, and as of 2 October, over 4.2 million cases and over 3 000 dengue-related deaths have been reported globally.
- As of 2 October 2023, 74 autochthonous/non-travel associated dengue cases have been reported in Europe from Italy (42), France (31), and Spain (1).
- No autochthonous cases of chikungunya virus disease have been reported in Europe to date this year.
- The current likelihood of local transmission events of chikungunya and dengue viruses occurring in areas where the vector is present in mainland EU/EEA is high, as the environmental conditions are favourable for vector activity and virus replication in vectors.

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

- Since the previous update on 4 September 2023, no new MERS-CoV cases have been reported by WHO or national health authorities.
- Since the beginning of 2023, and as of 2 October 2023, two MERS-CoV cases have been reported with the date of onset in 2023 by United Arab Emirates (1) and Saudi Arabia (1).

Mpox Multi-country 2022 - 2023

- Since the last update on 7 September 2023 and as of 5 October, 56 mpox cases have been reported to The European Surveillance System (TESSy) from nine EU/EEA countries: Spain (21), Portugal (14), Norway (5), Netherlands (4), France (3), Italy (3), Austria (2), Ireland (2) and Sweden (2).
- Overall, 21 473 confirmed cases of mpox have been reported from 29 EU/EEA countries in TESSy.
- According to the World Health Organization (WHO), since 1 January 2022 and as of 27 September 2023, 90 618 confirmed cases of mpox, including 157 deaths have been reported from 115 countries globally.

1. Autochthonous cases of dengue - France - 2023

Overview:

On 4 August 2023, the French public health agency (Santé publique France) reported two autochthonous cases of dengue virus infection in patients residing in Gardanne, Bouches-du-Rhône department, Provence-Alpes-Côte d'Azur region. Following the door-to-door case finding investigation, two additional cases were identified. None of the cases had travelled abroad recently.

The index case presented with fever, asthenia, headaches, myalgia and purpura on 27 July 2023, and dengue was confirmed by PCR. Onset of symptoms of the four cases was between 18 July and 4 August 2023.

A case of dengue imported from the French Caribbean and living in proximity to the autochthonous cases was notified on 12 July; onset of symptoms of this case was at the end of June. The patient stayed home for the entire duration of the viremia. Vector control was implemented on 18 July around the residence of the imported case.

Vector control measures were implemented around the house of the autochthonous cases. Healthcare professionals were informed, including general practitioners, public and private laboratories, and pharmacists and hospitals. The general population was informed through local and national media.

As of 2 October, France reported 31 autochthonous cases of dengue virus infection, in three regions, in six clusters. In the Provence-Alpes-Côte d'Azur region, four autochthonous cases of dengue virus infection were reported in patients residing in Gardanne, Bouches-du-Rhône department. The symptom onset of these cases was between the second half of July and August. Since the previous report from the French authorities of 26 September, a further seven cases were detected in Boulbon, also in the Bouches-du-Rhône department, with onset between the beginning and middle of September. Another case was identified in the Provence-Alpes-Côte d'Azur region in the beginning of September. That patient resides in Nice, the Alpes-Maritimes department and visited Castellet and La Garde, Var department. In the Occitània region, 11 autochthonous cases of dengue virus infection were detected so far in Perpignan, Pyrénées Orientales department. Also, in the Occitània region, in the Gard department, a total of six cases were reported in Gagnières (five of these were reported since the previous report from the French authorities of 26 September). In the Auvergne Rhône-Alpes region, two recent cases are being confirmed in Bourg les Valence in the Drôme department.

Santé publique France and the French local and national health authorities are monitoring the situation closely until the end of the dengue transmission season in November.

Source: ARS PACA, Epipulse

ECDC assessment:

Six outbreaks with a total of 31 cases of autochthonous human dengue virus infections were reported so far in mainland France for the 2023 transmission season. In 2022, France reported nine outbreaks with a total of 65 locally-acquired cases of dengue, which was the highest number of autochthonous cases and outbreaks in the EU/EEA in this century so far.

In Europe, the dengue virus is transmitted by the mosquito vector *Aedes albopictus*, which is established in a large part of Europe.

The current weather conditions in most of the areas in continental EU/EEA, where the competent vectors are established, are favourable for vector propagation, dengue virus propagation in vectors, and vectoral transmission of dengue virus. Therefore, further cases connected to this transmission event or autochthonous secondary transmission from imported cases of dengue in other areas cannot be excluded, as exemplified by the ongoing dengue outbreak(s) in Italy and in Spain.

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

Actions:

ECDC continues to monitor the epidemiological situation of dengue both globally and in the EU/EEA. Relevant changes in the epidemiological situation and risk levels will be reported.

Last time this event was included in the CDTR: 05 October 2023

2. Autochthonous dengue cases - Italy - 2023

Overview:

Summary

On 18 August 2023, Italian authorities reported a locally-acquired dengue case in a person from the Lombardy region with no recent travel history outside of the region. The onset of symptoms was on 3 August. As of 2 October 2023, the total number of cases reported from the province of Lodi, Lombardy region is 27. This is an increase of 2 cases since the previous report from the Italian authorities of 25 September.

On 21 August 2023, Italian authorities reported a locally acquired dengue case in a person from the Lazio region with no recent travel history outside of the region. The onset of symptoms was on 2 August. As of 26 September 2023, the total number of cases in the metropolitan city of Rome, Lazio region is 13. This is an increase of 4 cases, since the previous report from the Italian authorities of 25 September. These cases have been exposed to mosquitoes in different parts of the city, and investigations are ongoing to establish any epidemiological links.

A third cluster of two locally-acquired dengue cases was detected in the province of Latina, Lazio region (Circeo). The cases have an epidemiological link with an imported case of dengue. The onset of symptoms was on 29-30 August 2023.

All cases were laboratory confirmed by PCR. A DENV-1 serotype virus was identified in the cases in Lombardy and in the metropolitan city of Rome, Lazio region. Epidemiological investigations have not identified any link between the cases in Lombardy and the cases identified in the Lazio region. A DENV-3 serotype was detected in the cluster of cases in the province of Latina, Lazio region, indicating that this outbreak is independent from the other two in Italy. All cases have recovered or are improving.

Italian authorities have implemented vector control measures in the areas and have established preventive measures for donors of substances of human origin at municipal and national level.

Background

Autochthonous dengue cases were reported in Italy for the first time in 2020 in the Veneto region. At that time, an outbreak of 10 autochthonous dengue cases was reported among household co-habitants following an imported case that had returned to Italy after a trip to South East Asia. Since then, no further cases of autochthonous dengue have been reported in Italy.

Since 2019 and as of 2023, 160 autochthonous dengue cases have been reported in mainland EU/EEA. France is the country with the highest number of autochthonous dengue cases reported in mainland EU/EEA during this period.

ECDC assessment:

It is not unusual that autochthonous dengue cases occur during the summer months in parts of southern Europe. The most recent reports of additional cases in all three clusters indicate that virus transmissions were still ongoing in the second half of August. Enhanced surveillance, as implemented by Italy, will be crucial for early detection of cases and the application of adequate control measures around these cases.

In Europe, the dengue virus is transmitted by the mosquito vector *Aedes albopictus*, which is established in a large part of Europe.

The current weather conditions in most of the EU/EEA areas where *Aedes albopictus* is established are favourable for vector propagation, dengue virus replication in vectors, and vectoral transmission of dengue.

Therefore, further cases connected to this transmission event or autochthonous secondary transmission from imported cases of dengue in other areas cannot be excluded.

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

Actions:

ECDC continues to monitor the epidemiological situation of dengue both globally and in the EU/EEA. Relevant changes in the epidemiological situation and risk levels will be reported.

Last time this event was included in the CDTR: 05 October 2023

3. West Nile virus One Health seasonal surveillance – 2023

Overview:

This is the 19th weekly update of the 2023 West Nile virus (WNV) monitoring season.

Since last week's update, and as of 4 October 2023, European Union (EU) and European Economic Area (EEA) countries reported 42 human cases of West Nile virus (WNV) infection and one death related to WNV infections. Cases were reported by Italy (17), Greece (10), France (6), Romania (5), Spain (3) and Hungary (1). Deaths were reported by Italy (1). Two cases of WNV infection were reported by the EU-neighbouring country of Serbia. No deaths related to WNV infections were reported by EU-neighbouring countries.

This week, among the reporting countries, the following NUTS 3 or GAUL1 regions have reported autochthonous human cases of WNV infection for the first time: Haute-Corse in France and Cosenza and Bari in Italy.

This week, among the reporting countries, the following NUTS 3 or GAUL1 regions have reported autochthonous human cases of WNV infection for the first time since the start of this season: Haute-Corse in France, Cosenza and Bari in Italy and Neamţ and Suceava in Romania.

Since the beginning of the 2023 transmission season and as of 4 October 2023, EU/EEA countries have reported 599 human cases of WNV infection in Italy (295), Greece (153, of which two with unknown place of infection), Romania (68), France (33), Hungary (28), Spain (11), Croatia (6), Germany (4) and Cyprus (1). EU/EEA countries have reported 47 deaths in Greece (19), Italy (18), Romania (9) and Spain (1). EU-neighbouring countries have reported 85 human cases of WNV infection in Serbia (84) and North Macedonia (1). No deaths related to WNV infections were reported by EU-neighbouring countries.

During the current transmission season, within the reporting countries, autochthonous human cases of WNV infection were reported from 124 different NUTS 3 or GAUL 1 regions, of which the following regions reported autochthonous human cases of WNV infection for the first time ever: Gironde, Charente-Maritime, Alpes-Maritimes, Charente and Haute-Corse in France, Sömmerda in Germany, Kastoria and Ioannina in Greece, Imperia, Taranto, Lecce, Cosenza and Bari in Italy, Huelva, Valencia/València, Barcelona and Cáceres in Spain.

Since the beginning of the 2023 transmission season, 79 outbreaks among equids and 198 outbreaks among birds have been reported by EU/EEA countries. Outbreaks among equids have been reported by Spain (27), Hungary (23), Italy (12), France (10), Germany (6) and Portugal (1). Outbreaks among birds have been reported by Italy (154), Germany (18), Spain (14), Bulgaria (6), Hungary (3), France (2) and Greece (1).

Please refer to the **West Nile virus infection webpage** for maps and a dashboard.

Sources: The European Surveillance System (TESSy), Animal Disease Information System (ADIS)

ECDC assessment:

Haute-Corse in France and Cosenza and Bari in Italy, the regions that reported for the first time have had cases reported in the neighbouring regions in humans or animals in the current or past years.

Although the intensity of WNV circulation is expected to decrease in October, the weather conditions in most of the affected areas are still favourable for vector-borne transmission. Therefore, further human cases are expected in the coming weeks.

The combined totals from Italy and Greece accounted for 75% of all reported autochthonous cases. This follows the trend from the previous year: Italy and Greece reported the highest number of cases in 2022.

In accordance with the **Commission Directive 2014/110/EU**, prospective blood donors should be deferred for 28 days after leaving a risk area for locally acquired WNV infection, unless the result of an individual nucleic acid test is negative.

Actions:

During WNV transmission seasons, ECDC publishes a dashboard and an epidemiological summary every Friday.

Further information:

Data on human cases of WNV are collected via The European Surveillance System (TESSy), managed by ECDC. Imported cases are not included in this report. The following EU-neighbouring countries reported human cases of WNV infection to ECDC: Albania, Kosovo*, Montenegro, North Macedonia, Serbia and Türkiye.

Animal data (i.e. outbreaks among equids and birds) are collected through the Animal Disease Information System (ADIS) of the European Commission. Reporting of WNV in equids and birds is mandatory at the EU/EEA level.

The distribution of human infections covers EU/EEA and EU-neighbouring countries, whereas the distribution of outbreaks among equids and birds only relates to EU/EEA countries.

**This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.*

Last time this event was included in the CDTR: 29 September 2023

4. Mass gathering monitoring – Rugby World Cup 2023, France

Overview:

The Rugby World Cup 2023 (RWC) is taking place in France from 8 September to 28 October 2023, with matches played in nine venues across 10 host cities. In total, 20 teams are participating, including teams from four EU/EEA countries, and there will be 48 matches. The participating teams are from France, New Zealand, Italy, Uruguay, Namibia, South Africa, Ireland, Scotland, Tonga, Romania, Wales, Australia, Fiji, Georgia, Portugal, England, Japan, Argentina, Samoa and Chile. The games are taking place in nine stadiums across the country in Bordeaux, Lille, Lyon, Marseille, Nantes, Nice, Saint Denis, Saint-Saint-Étienne and Toulouse. The capacity of the stadiums ranges from 33 103 in Stadium de Toulouse to 80 023 in Stade de France, Saint Denis, where the final matches will be played.

More than 600 000 international visitors are expected to visit France for the Rugby World Cup, with over 2.5 million tickets sold, according to a media report. Over half of the international visitors are from the United Kingdom (UK), followed by Australia, the Netherlands, New Zealand and other countries.

As with other sporting events and large gatherings, crowding and high-risk behaviour with prolonged close contact may occur both inside and outside of the hosting venues. Participants and spectators are therefore encouraged to follow a list of recommendations, as described in ECDC's weekly CDTR report for week 36.

Weekly monitoring update
As of 6 October 2023, the Auvergne-Rhône-Alpes Regional Health Agency reported 31 persons diagnosed with measles, including one hospitalisation. Most of the cases were students in the the middle school in Guilherand-Granges (Ardèche) and several students from primary school. The first case was reported on 19 September 2023. Outbreak investigation is ongoing, including active contact tracing. Health authorities are encouraging the public to monitor for symptoms, check their vaccination status and consult a healthcare provider for those not vaccinated or with incomplete vaccination.

As of 2 October 2023, six clusters of autochthonous dengue virus transmissions with a total of 31 cases have been reported so far in mainland France. More details are provided in relevant item in this week's CDTR.

No new cross-border public health events related to the RWC have been detected during the period 30 September–06 October 2023.

Other events of interest
No other events of interest have been detected this week.

ECDC assessment:

The risk for EU/EEA citizens of infection with communicable diseases during the Rugby World Cup 2023 is considered low, if preventive measures are applied. As with other mass gathering events, the risk of communicable disease outbreaks is greatest for respiratory, food- and waterborne diseases, and vector-borne diseases.

Actions:

ECDC is monitoring this event through its epidemic intelligence activities for mass gatherings between 4 September and 3 November 2023 in collaboration with the French authorities and will include weekly updates in the Communicable Disease Threats Report (CDTR).

Last time this event was included in the CDTR: 29 September 2023

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

Overview:

Summary:
By the end of week 39 (ending 1 October 2023), rates of respiratory illness in the community and numbers of COVID-19 cases continued to increase in over half the EU/EEA countries reporting data. Increased transmission of SARS-CoV-2 has translated to relatively small increases in hospital or ICU admissions and deaths in some countries.

Consultation rates of patients presenting to sentinel general practitioners with respiratory illness (influenza-like illness (ILI)/acute respiratory infection (ARI)) are increasing in most of the countries reporting data up to week 39, with the steepest increases observed among young children. In general, rates remain at similar levels to those observed in the same period last year. In the past two weeks, 10 countries reported at least 10 weekly sentinel tests with an average weekly SARS-CoV-2 positivity between 5% and 29.5%.

Half of the 20 countries reporting age-specific data on positive COVID-19 tests taken outside sentinel systems have observed increases in case numbers for up to 11 weeks among people aged 65 years and above. As the oldest age groups have the highest risk of severe disease, these figures highlight the importance of continuing to monitor disease and implement protective measures in older age groups.

Of 13 countries with data on hospital or ICU admissions/occupancy up to week 39, two reported an increasing trend in at least one of these indicators compared with the previous week. Although levels remain relatively low, increases in death rates for up to four weeks were reported in those aged 65 years and above by six of 15 countries with age-specific death data.

Among the 14 countries reporting at least 10 results from SARS-CoV-2 sequencing or genotyping for weeks 37–38 (11 September to 24 September 2023), the estimated distribution of variants of concern (VOC) or of interest (VOI) was 66.2% (28.8–85.7% from 14 countries) for XBB.1.5+F456L, 27.8% (9.5–71.2% from 14 countries) for XBB.1.5, 3.1% (1.7–12.1% from 11 countries) for BA.2.75, and 2.0% (0.3–4.4% from four countries) for XBB.

Weekly update on SARS-CoV-2 variants:
Since the last update on 28 September 2023, and as of 6 October 2023, the following changes have been made to ECDC's variant classifications for variants of concern (VOCs), variants of interest (VOIs), variants under monitoring (VUMs) or de-escalated variants:

- **XBB.1.5-like+L455F+F456L**, the XBB.1.5-like lineages with additional mutations L455F and F456L is added as Variant under monitoring (VUM)
- **DV.7.1**, the sub-lineage of BA.2.75 lineages has been added as Variant under monitoring (VUM)
- CH.1.1 lineage (BA.2.75 sub-lineage) has been de-escalated from VUM to de-escalated variants

XBB.1.5-like+L455F+F456L variants show increasing trends and circulation up to 17% in EU/EEA countries. The lineages mainly present in this umbrella are HK.3 lineages, GK* lineages. Preliminary studies indicate that XBB.1.5-like+L455F+F456L variants may bind more efficiently to human ACE-2 and have immune evasive properties compared to XBB.1.5-like+F456L variants and XBB.1.5-like+L455F variants. Virtually all of the lineages are already included in the existing VOIs XBB.1.5-like+F456L and BA.2.75 but monitoring specifically as VUM.

The combination of these mutations is also seen increasing in BA.2.75 background, **DV.7.1** variants that carry these mutations, L455F and F456L have seen with increased detections. These are circulating in the median 2,15% (range: 0-11%). DV.7.1 is a sub-lineage of CH.1.1 and since the parental lineage CH.1.1 is no longer circulating, DV.7.1 has been added as VUM and CH.1.1 lineage has been de-escalated from VUM to de-escalated variants.

XBB.1.5-like + F456L lineages currently dominate the global and EU/EEA SARS-CoV-2 variant landscape.

As of 2 October 2023, the 12 EU/EEA countries reporting at least 10 sequences to GISAID EpiCoV for week 37 (11–17 September 2023) showed the following proportions of XBB.1.5-like + F456L lineages: Austria (63%), Belgium (73%), Denmark (56%), France (59%), Germany (86%), Ireland (64%), Italy (68%), the Netherlands (65%), Portugal (65%), Romania (33%), Spain (66%) and Sweden (71%). The overall proportion of XBB.1.5-like + F456L lineages continues to increase in the EU/EEA, although the trend is less pronounced compared to previous weeks.

More information on BA.2.86 is available in '**Epidemiological update: COVID-19 transmission in the EU/EEA, SARS-CoV-2 variants, and public health considerations for Autumn 2023**' published on 7 September 2023.

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

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.

In the fifteenth IHR Emergency Committee meeting held in Geneva on 4 May 2023, the Director-General of WHO agreed with the advice offered by the Committee and determined that COVID-19 is no longer a public health emergency of international concern (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 two to three months, with an overall downward trend in the height of the associated peaks in reported cases, hospitalisations, ICU admissions and deaths during this period. The emergence of new variants of concern or population immunity waning over time may have an impact on the epidemiological situation in the future.

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 the actions described in the latest COVID-19 risk assessments, ECDC published guidance entitled Interim public health considerations for COVID-19 vaccination roll-out during 2023 on 5 April 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 continuing burden of disease experienced by older population groups (those aged 60 years and above), individuals with underlying medical conditions and other selected groups. It complements the previous guidance, Long-term qualitative scenarios and considerations of their implications for preparedness and response to the COVID-19 pandemic in the EU/EEA, published in August 2022 to support country preparedness activities in the post-acute phase of the COVID-19 pandemic.

Last time this event was included in the CDTR: 29 September 2023

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

Overview:

Chikungunya virus disease (CHIKVD)
In 2023 and as of 30 of September, approximately 440 000 CHIKVD cases and over 350 deaths have been reported worldwide. A total of 24 countries reported CHIKVD cases from the Americas (16), Africa (4), and Asia (4). The countries reporting CHIKVD cases in September for the first time in 2023 are Burkina Faso and Gambia.

Most countries reporting high CHIKVD burden are from the Americas, in South and Central America. Countries reporting highest number of cases are Brazil (218 613), Paraguay (123 451), Argentina (1 965), and Bolivia (1 365). Additional countries reporting CHIKVD cases in the Americas can be found at PAHO's dedicated website.

Outside of the Americas, CHIKVD cases were reported in Asia from India (93 455), Philippines (1 409), Thailand (1 014), and Malaysia (159). Four African countries reported CHIKVD cases in 2023: Senegal (210), Burkina Faso (89), Gambia (1), and Namibia (1).

No autochthonous cases of CHIKVD have been reported in Europe in 2023.

CHIKVD associated deaths were reported from Paraguay (272) and Brazil (78).

Updates on CHIKVD from selected countries
CHIKVD cases in Senegal continued to increase during the recent weeks, reaching a total of 210 cases by 30 September 2023. First cases were detected in early June 2023. CHIKVD cases are mainly located in the region of Keougou, where previous CHIKVD outbreaks were reported in 2015 and 2010.

Recently, Burkina Faso reported an outbreak of CHIKVD in Pouytenga. A total of 89 cases of CHIKV have been reported in September 2023. Even if Burkina Faso is considered a country with no current or previous local CHIKVD transmission, seroepidemiological studies suggest undetected circulation of CHIKVD until 2001, with sporadic outbreaks occurring in the country.

Dengue
In 2023, and as of 2 October, over 4.2 million cases and over 3 000 dengue-related deaths have been reported from 79 countries/territories globally. The 10 countries reporting most cases are: Brazil (256 9746), Peru (254 296), Bangladesh (203 406), Bolivia (139 339), Argentina (129 327), Mexico (115 219), Philippines (111 813), Nicaragua (103 002), India (94 198), and Colombia (65 068). As of 2 October 2023, 74 autochthonous/non-travel associated dengue cases have been reported in Europe from Italy (42), France (31), and Spain (1).

In the French Antilles, Martinique and Guadeloupe are currently experiencing increasing dengue trends and they have entered an epidemic phase (Santé Publique France 23/08/2023). According to the epidemiologic report published on 28 September, the number of patients presenting with dengue symptoms in Guadeloupe has stabilised in the past three weeks, while in Martinique there is still an increasing trend. In Saint-Martin, sporadic confirmed cases have been reported, whilst in Saint-Barthélemy confirmed cases have been increasing since week 31 (Dengue Surveillance Bulletin 28 September 2023). Dengue cases have also been reported in 2023 in Réunion (low activity) and in French Guyana, where the seasonal increase observed during the most recent weeks is lower compared to previous years.

Globally, the region of the Americas has reported the majority of cases in 2023 as of 2 October 2023 (over 3.5 million cases, 1.6 of which are confirmed, and over 1600 deaths) (PAHO – Dengue Indicators). The region has been reporting significant outbreaks since the beginning of 2023 (WHO Disease Outbreak News: Dengue – the Region of the Americas). According to data reported by PAHO, until September 2023, most cases in the region were reported from Brazil and Peru, the latter of which is experiencing one of the largest dengue outbreaks in its history. According to the Ministry of Health of Peru, as of week 32, the cases reported in the country show a decreasing trend since week 21. All four dengue virus serotypes (DENV 1, DENV 2, DENV 3, and DENV 4) are currently circulating in the Americas. The figures for each country of the Americas region can be found on the **PAHO Health Information Platform**.

Dengue outbreaks have been reported in India, where according to provisional data, 94 198 cases and 91 deaths have been recorded up to 17 September 2023. As of 2 October 2023, Bangladesh, where dengue is endemic, reported 79 598 dengue cases in September 2023. The seasonal case increases started earlier than previous years, according to the WHO Disease Outbreak News item published on 11 August.

In Africa, dengue cases have been reported in Angola, Burkina Faso, Chad, Côte d'Ivoire, Egypt, Ethiopia, Guinea, Mali, Mauritius, São Tomé and Príncipe, Senegal and Sudan.

Disclaimer

The data presented in this report originates from both official public health authorities and non-official sources, such as news media. Data completeness depends on the availability of reports from surveillance systems and their accuracy, which varies between countries. All data should be interpreted with caution and comparisons, particularly across countries, avoided, due to under-reporting, variations in surveillance system structure, varying case definitions between countries and over time, and use of syndromic definitions.

ECDC assessment:

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

The likelihood of onward transmission of dengue and chikungunya virus in mainland EU/EEA is linked to importation of the virus by viraemic travellers into receptive areas with established and active competent vectors (e.g. *Aedes albopictus* and *Aedes aegypti*). *Aedes albopictus* is established in a large part of Europe. *Aedes aegypti* is established notably in Cyprus, around the Black sea and in the outermost region of Madeira.

The current likelihood of the occurrence of local transmission events of chikungunya and dengue viruses in areas where the vectors are present in mainland EU/EEA is high, as the environmental conditions are favourable for vector activity and virus replication in vectors. In 2023, locally-acquired dengue cases been reported in France and in Italy.

All autochthonous outbreaks of CHIVD and dengue in mainland EU/EEA have so far occurred between June and November.

More information is available on autochthonous transmission of chikungunya and dengue virus in the EU/EEA on ECDC's webpages, and in ECDC's factsheets on dengue and CHIKVD.

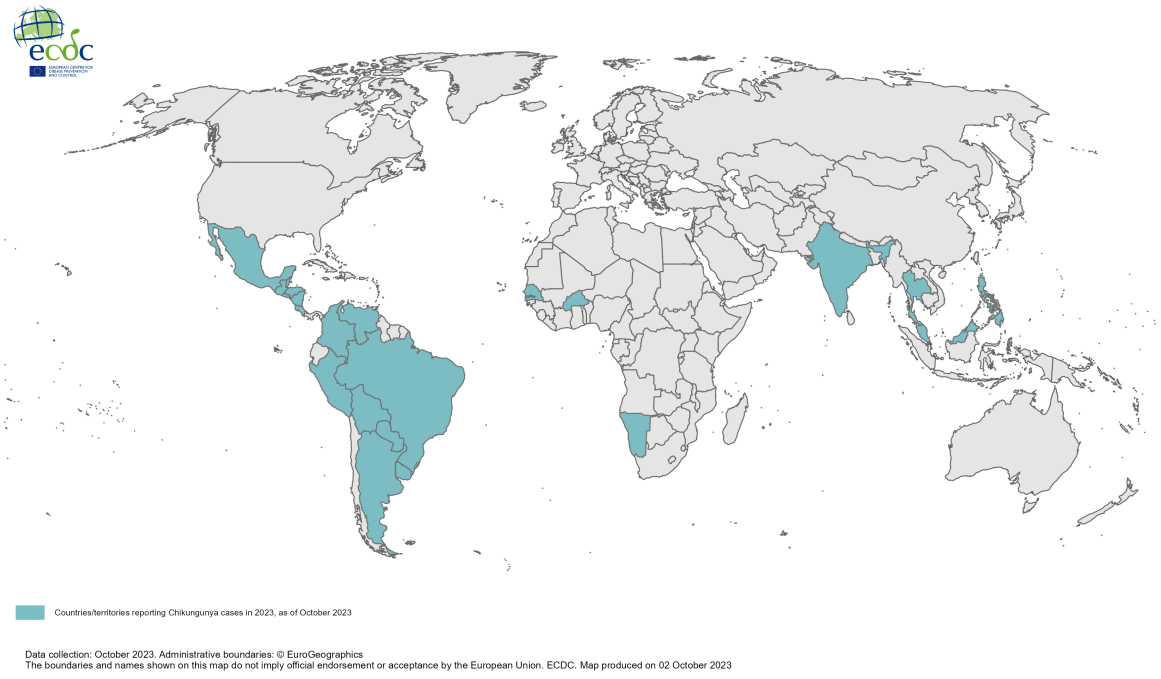
Actions:

ECDC monitors these threats through its epidemic intelligence activities, and reports on a monthly basis. A summary of the worldwide overview of **dengue** and **CHIKVD** is available on ECDC's website.

Last time this event was included in the CDTR: 05 October 2023

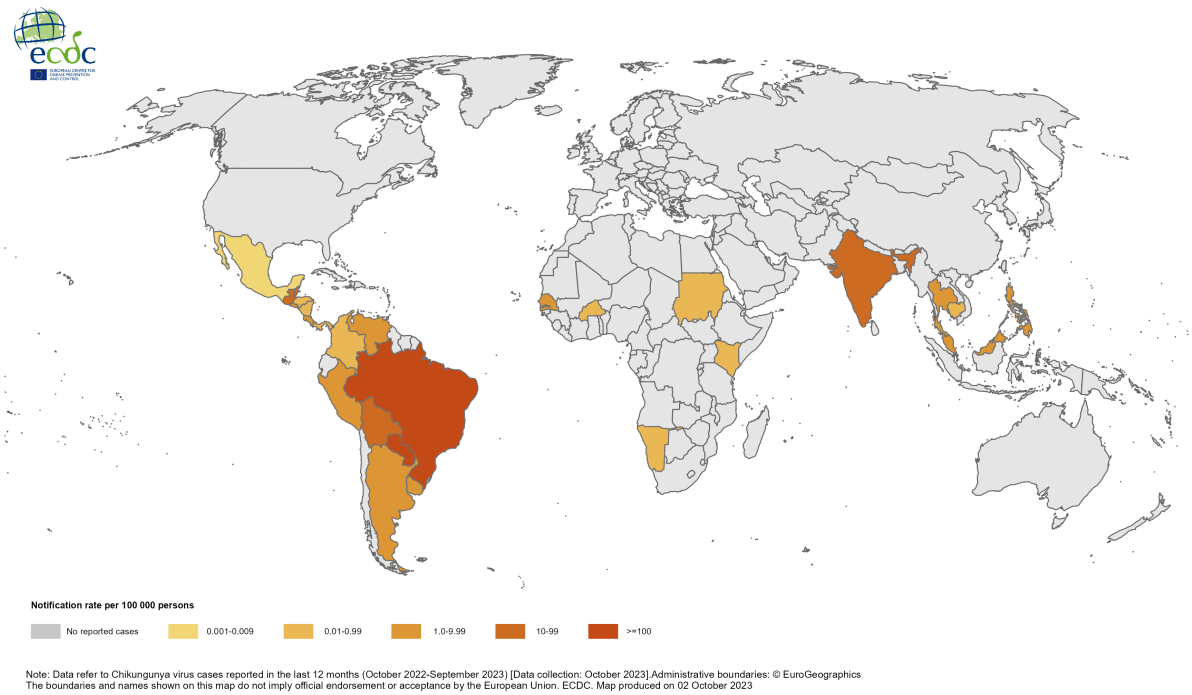
Maps and graphs

Figure 1. Countries/territories reporting Chikungunya cases since the beginning of 2023 and as of September 2023.



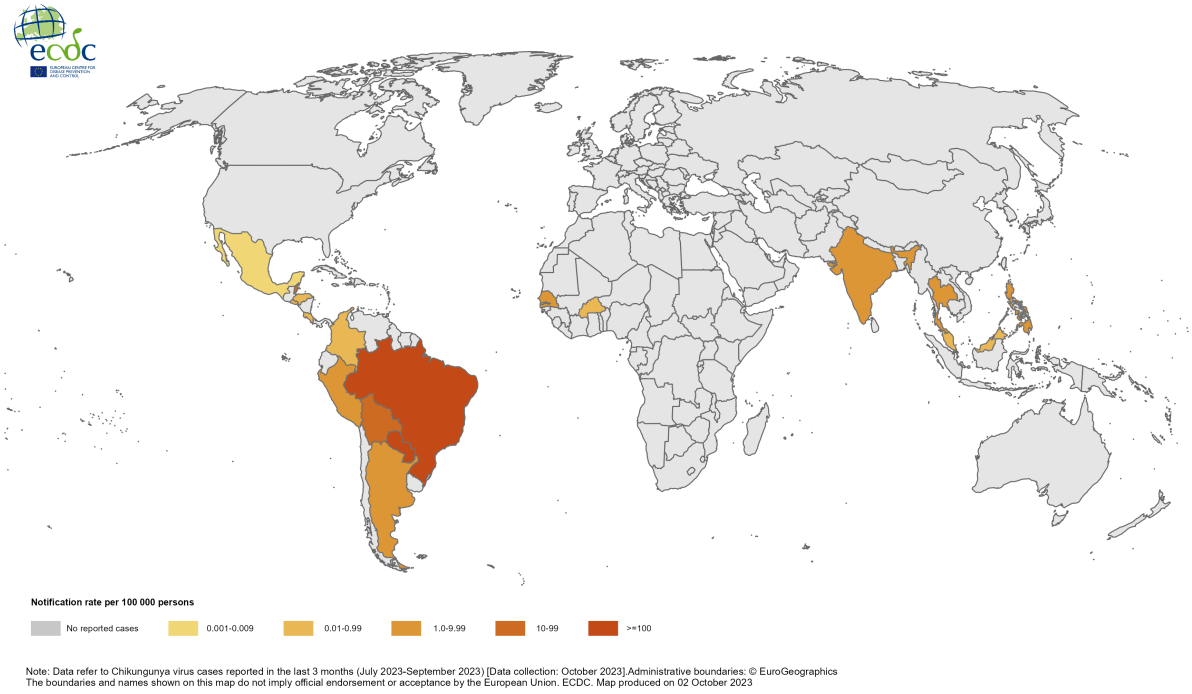
Source: ECDC

Figure 2. 12-month Chikungunya virus disease case notification rate per 100 000 population, October 2022 - September 2023



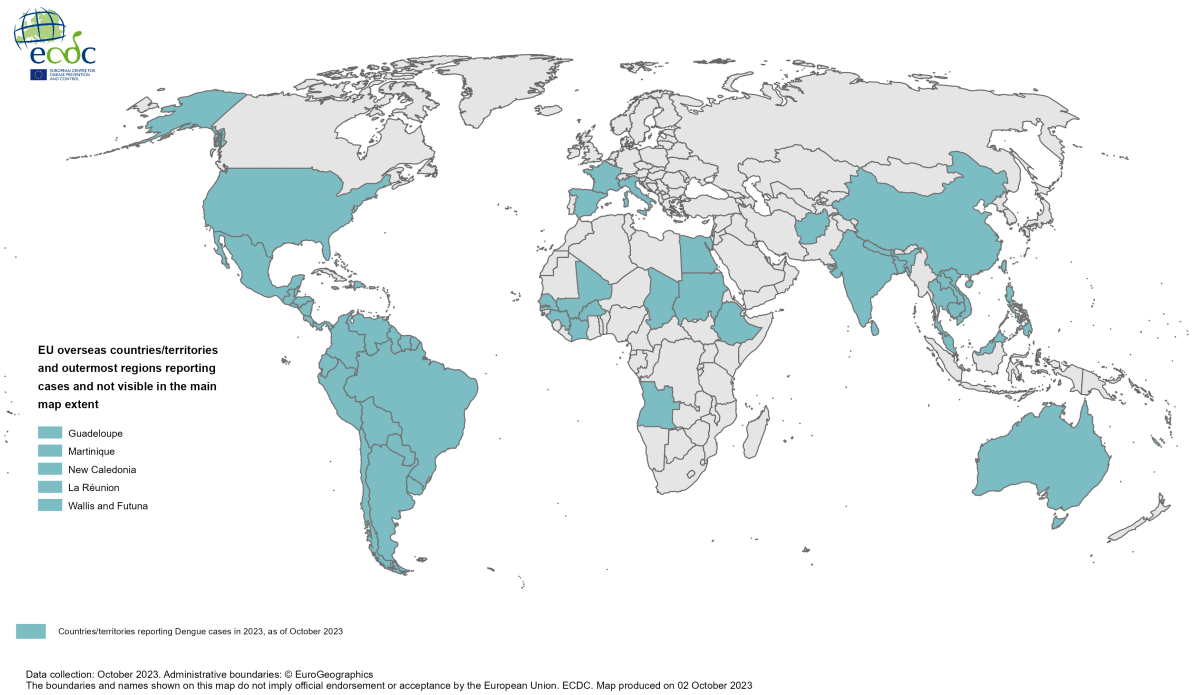
Source: ECDC

Figure 3. Three-month Chikungunya virus disease case notification rate per 100 000 population, July-September 2023



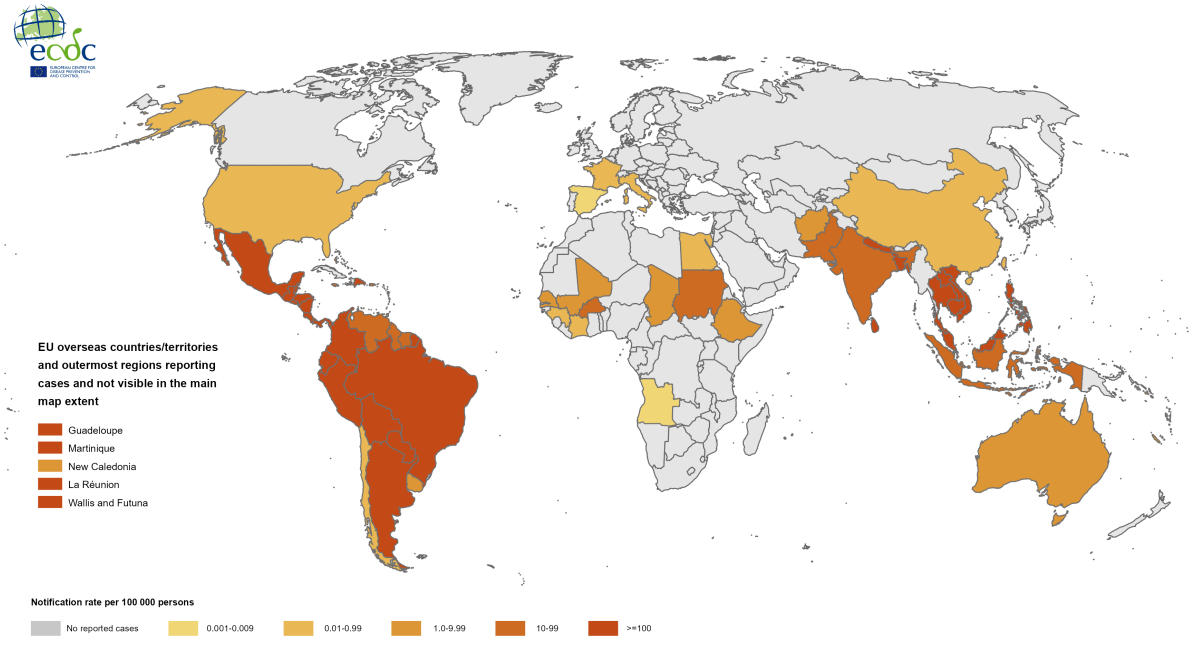
Source: ECDC

Figure 4. Countries/territories reporting dengue cases since the beginning of 2023 and as of October 2023.



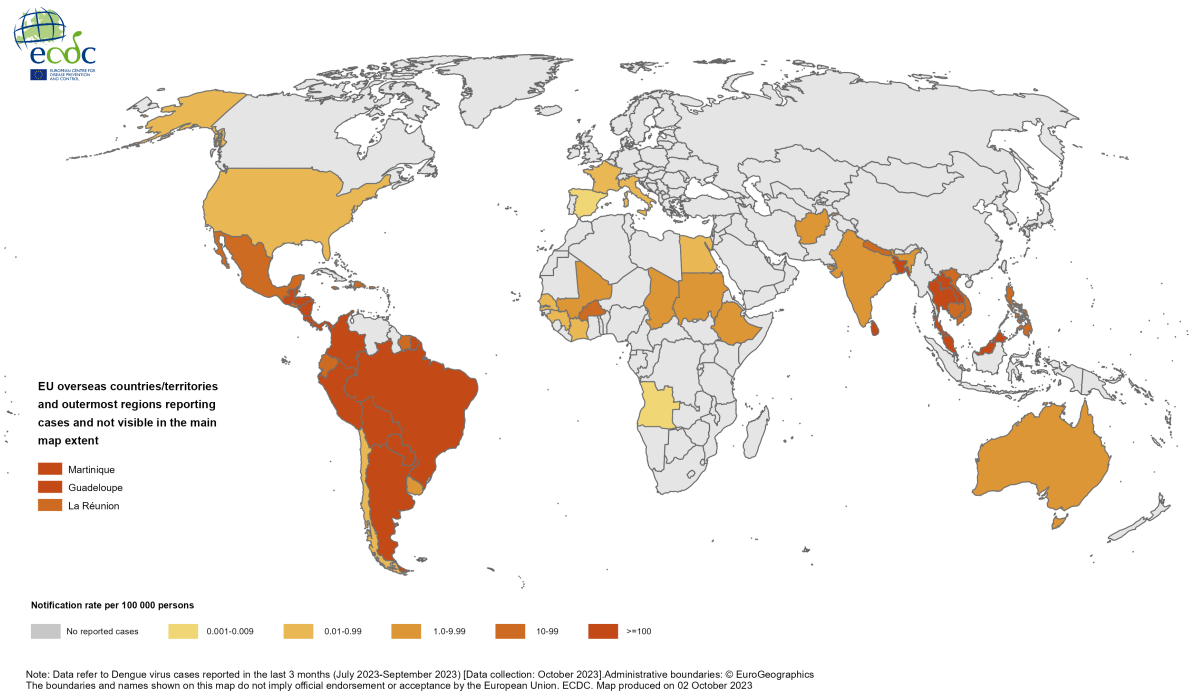
Source: ECDC

Figure 5. 12-month dengue virus disease case notification rate per 100 000 population, November 2022 - October2023



Source: ECDC

Figure 6. Three-month dengue virus disease case notification rate per 100 000 population, August - October 2023



Source: ECDC

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

Overview:

Update: Since the previous update on 4 September 2023, no new MERS-CoV cases have been reported by WHO or national health authorities.

Summary: Since the beginning of 2023, and as of 2 October 2023, two MERS-CoV cases have been reported with the date of onset in 2023 by United Arab Emirates (1) and Saudi Arabia (1).

Since April 2012, and as of 2 October 2023, a total of 2 617 cases of MERS-CoV, including 947 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 | WHO DON UAE | 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 European Union (EU), as stated in the Rapid Risk Assessment published by ECDC 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 is still 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.

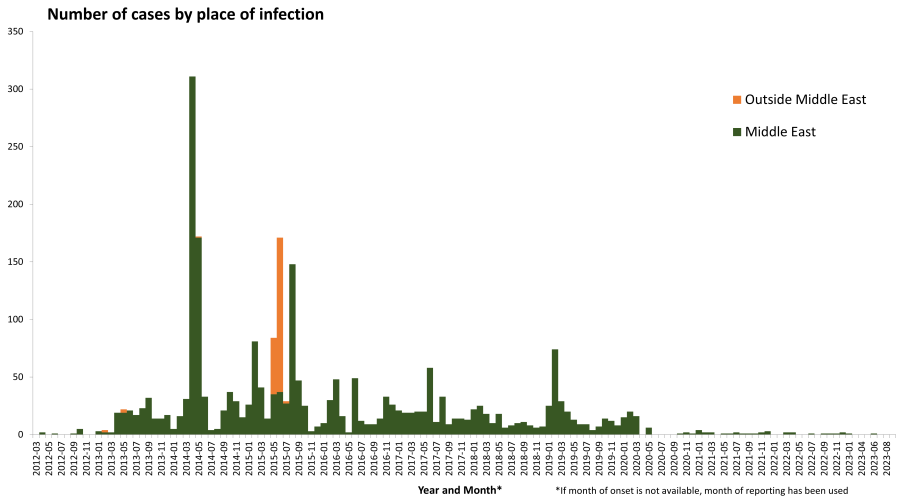
Actions:

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

Last time this event was included in the CDTR: 03 October 2023

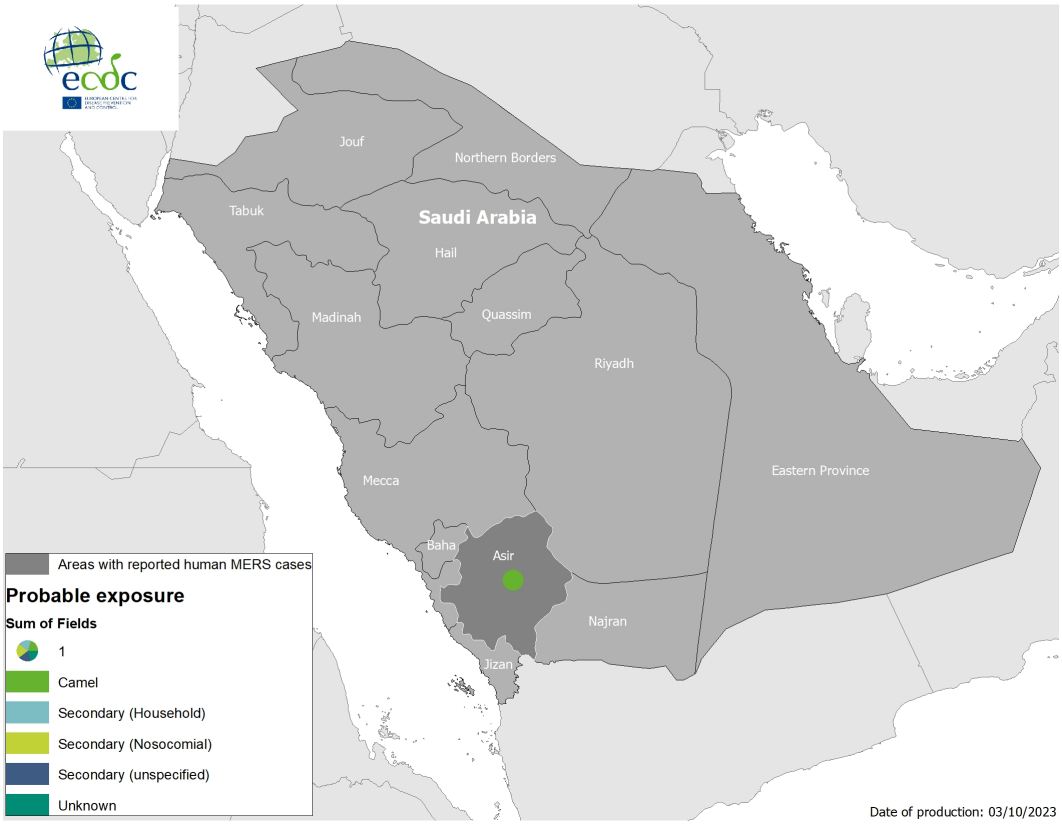
Maps and graphs

Figure 1. Distribution of confirmed cases of MERS-CoV by place of infection and month of onset, March 2012– 2 October 2023



Source: ECDC

Figure 2. Geographical distribution of confirmed cases of MERS-CoV in Saudi Arabia by probable region of infection and exposure, with dates of onset from 1 January to 2 October 2023



Source: ECDC

8. Mpox Multi-country 2022 - 2023

Overview:

Update:
Since the last update on 7 September 2023, and as of 5 October 2023, 56 mpox cases have been reported to TESSy from nine EU/EEA countries: Spain (21), Portugal (14), Norway (5), Netherlands (4), France (3), Italy (3), Austria (2), Ireland (2) and Sweden (2).

Summary:
Globally, since 1 January 2022 and as of 27 September 2023, according to the World Health Organization (WHO) update, 90 618 confirmed cases of mpox, including 157 deaths have been reported from 115 countries globally.

EU/EEA
Since the start of the mpox outbreak and as of 5 October 2023, 21 475 confirmed cases of mpox (MPX) have been reported from 29 EU/EEA countries: Spain (7 611), France (4 158), Germany (3 689), Netherlands (1 274), Portugal (1 071), Italy (963), Belgium (795), Austria (330), Sweden (264), Ireland (239), Poland (217), Denmark (198), Norway (101), Greece (88), Hungary (80), Czechia (71), Luxembourg (59), Romania (47), Slovenia (47), Finland (42), Malta (34), Croatia (33), Iceland (17), Slovakia (14), Estonia (11), Bulgaria (6), Latvia (6), Cyprus (5) and Lithuania (5).

Deaths have been reported from: Spain (3), Belgium (2), Czechia (1), and Portugal (1).

Western Balkans and Türkiye:
Since the start of the mpox outbreak and as of 5 October 2023, the following Western Balkan countries have reported confirmed cases of mpox: Serbia (40), Bosnia and Herzegovina (9), and Montenegro (2). In addition, 12 cases have been reported from Türkiye.

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.

Public Health Emergency of International Concern (PHEIC): On 23 July 2022, the The Director-General of the World Health Organization (WHO) declared the global mpox outbreak a Public Health Emergency of International Concern (PHEIC). The emergency status was maintained until 11 May 2023.

ECDC assessment:

The weekly number of cases of mpox 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 that 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.

Considering the low number of new infections in the WHO European Region, the overall risk of mpox infection is assessed as low for men who have sex with men (MSM) and very low for the broader population in the EU/EEA. Since the start of the summer, Portugal is observing an upsurge in number of mpox cases among MSM. Consequently the risk of mpox infection for MSM in Portugal is considered to be moderate.

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 and transgender people, and 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 through indicator- and event-based surveillance.

A rapid risk assessment, 'Mpox multi-country outbreak', was published on 23 May 2022. The first update to the rapid risk assessment was published on 8 July 2022, and a second update was published on 18 October 2022. ECDC published a report on public health considerations for mpox in EU/EEA countries on 14 April 2023.

A resource toolkit for event organisers and social media materials on mpox related to events are also available. Member States can use these materials to work with event organisers ahead of pride events to ensure that attendees have access to the right information.

Member States can also consider providing those who travel to pride events abroad with updated information on how to protect themselves and others from mpox.

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 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. ECDC also provided guidance to countries hosting events during the summer months.

Last time this event was included in the CDTR: 08 September 2023