

WEEKLY BULLETIN

Communicable Disease Threats Report

Week 25, 18 - 24 June 2023

Today's disease topics

1. Human cases of swine influenza A(H1N1) virus variant - Multi-country - 2022
2. COVID-19 associated with SARS-CoV-2 – Multi-country (EU/EEA) – 2019 - 2023
3. West Nile virus One Health seasonal surveillance - 2023
4. Mass gatherings - Hajj - Saudi Arabia - 2023
5. Increases in gonorrhoea notification in heterosexual populations in EU/EEA countries

Executive Summary

Human cases of swine influenza A(H1N1) virus variant - Multi-country - 2022

Summary:

- One fatal case of swine influenza A(H1N1) variant virus (A(H1N1)v) has been reported in Brazil.
- The case lived near a pig farm and had two close contacts working in the farm.
- A(H1N1)v virus was confirmed by sequencing analysis and had high identity (99%) with the the haemagglutinin (HA) of other Influenza A(H1N1)v viruses previously detected in the municipality of Toledo state of Paraná in 2022, as well as 96% identity with the HA of viruses collected from pigs in Brazil in 2015.
- To date, no human-to-human transmission has been reported for this virus.
- The risk for the general population is considered low.

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

- Since the last update on 15 June 2023, and as of 21 June 2023, **no changes** have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring, or de-escalated variants.

West Nile virus One Health seasonal surveillance - 2023

- No human cases have been reported during the 2023 WNV monitoring season to date.
- One outbreak in birds has been reported in Italy.

Mass gatherings - Hajj - Saudi Arabia - 2023

- ECDC is monitoring the Hajj pilgrimage through its epidemic intelligence activities from 19 June to 7 July 2023, reporting on a weekly basis.
- No events of public importance were detected in relation to Hajj between 19 and 22 June 2023.

Increases in gonorrhoea notification in heterosexual populations in EU/EEA countries

- During March–April 2023, several EU/EEA countries reported increases in gonorrhoea notifications which started during 2022.
- No changes in antimicrobial resistance patterns for *Neisseria gonorrhoea* have been associated with these increases.
- ECDC, with its network of experts in sexually transmitted infections (STI) in Member States, will further investigate this event to identify risk factors and assess the overall impact on other STIs.
- Member States should follow the recommendations issued by ECDC in its [*Response Plan to control and manage the threat of multi-/extensively drug-resistant gonorrhoea in Europe*](#).

1. Human cases of swine influenza A(H1N1) virus variant - Multi-country - 2022

Overview:

On 16 June 2023, [WHO](#) reported one new fatal human case with Eurasian avian-like A(H1N1) swine influenza virus infection in the inner state of Paraná, Brazil. The case was a 42-year-old woman with underlying medical conditions. On 1 May, she developed symptoms (fever, headache, sore throat, and abdominal pain). On 3 May, she was hospitalised with a severe acute respiratory infection, admitted to ICU on 4 May, and died on 5 May.

The woman reportedly did not have direct contact with pigs, but lived near a swine farm in which two of her close contacts work. These contacts did not develop respiratory symptoms and tested negative for influenza.

To date no human-to-human transmission has been identified.

Nasopharyngeal sample from the case was tested during her hospitalisation for SARS-CoV-2 (regular respiratory virus surveillance). A sample was subtyped as an influenza A/H1 virus by Real-time Polymerase Chain Reaction (RT-PCR) and also tested positive for a swine influenza A virus marker by RT-PCR at the State of Paraná Central Public Health Laboratory.

The specimen was further analysed at the National Influenza Centre Oswaldo Cruz Foundation in Rio de Janeiro, confirming influenza A(H1N1)v by sequencing on 30 May. The recovered genome has a high identity (99%) with the haemagglutinin (HA) of other Influenza A(H1N1)v viruses previously detected in the municipality of Toledo state of Paraná in 2022. In addition, it has 96% identity with the HA of viruses collected from pigs in Brazil in 2015.

Samples are sent to the WHO Collaborating Centre at US CDC for further characterisation.

This is the first human infection by an influenza A(H1N1)v virus reported in 2023 in Brazil, and the third reported in Paraná state (other two cases were reported in 2021 and 2022).

Authorities in Brazil implemented a range of measures:

- Conducting further epidemiological investigations, and follow-up of contacts in the family, community, and healthcare facilities;
- Monitoring the surveillance of influenza-like illness (ILI) and severe acute respiratory infections (SARI) in the surrounding municipalities (within the same health region), particularly influenza virus, seeking to analyse the behaviour and trends of respiratory viruses in the region;
- Reinforcing the vaccination campaign for seasonal influenza in at-risk groups.

Overall, there have been two cases reported with date of onset in 2023 in China (1) and Brazil (1). In 2022, four cases of A(H1N1)v were reported in Germany (1), China (2), and Brazil (1).

Source: [WHO DON](#)

ECDC assessment:

Sporadic human cases infected with an influenza virus of swine origin have been reported from several countries, including in the EU/EEA. Swine influenza viruses circulate widely in the pig population and human exposure to pigs represents the most common risk factor for infection. Cases have also occurred among otherwise healthy people and sporadic infections cannot be excluded. Nevertheless, the risk for the general population is assessed as low. When a case is detected, it is necessary to perform contact tracing to exclude instances of human-to-human transmission, and to implement control measures. Influenza viruses isolated from patients experiencing a particularly severe illness should be further characterised, as well as shared with the national influenza reference laboratories and WHO Collaborating Centres.

ECDC published a [Threat Assessment Brief on Eurasian avian-like A\(H1N1\) swine influenza viruses](#) in July 2020.

Actions:

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

Last time this event was included in the CDTR: 19 June 2023

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

Overview:**Weekly update on SARS-CoV-2 variants:**

Since the last update on 15 June 2023, and as of 21 June 2023, **no changes** have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring, or de-escalated variants.

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, WHO's Director-General 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 in this period. The emergence of new variants of concern or population immunity waning over time may impact 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 actions described in the latest [COVID-19 risk assessments](#), on 5 April 2023, ECDC published guidance entitled [Interim public health considerations for COVID-19 vaccination roll-out during 2023](#) to support countries with vaccination strategy decision-making. This guidance aims to offer advice on the optimal timing and targeting of vaccination campaigns in order to limit the continued burden of disease experienced by the elderly and those with comorbidities. It complements the 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: 19 June 2023

3. West Nile virus One Health seasonal surveillance - 2023

Overview:

This is the fourth weekly update of the 2023 WNV monitoring season.

Since the beginning of the 2023 transmission season, and as of 21 June 2023, EU/EEA countries have not reported any human cases of WNV infection. Similarly, EU-neighbouring countries have not reported any human cases of WNV infection.

Since the beginning of the 2023 transmission season, one outbreak among birds has been reported by Italy (on 12 May 2023, in Varese).

Please refer to the [West Nile virus infection webpage](#) for maps and a dashboard.

Sources: TESSy, Animal Disease Information System

ECDC assessment:

In accordance with [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 transmission seasons, ECDC publishes a dashboard and an epidemiological summary every Friday. Exceptionally, we are reporting this week on Thursday as Friday is a public holiday.

Further information:

Data on human cases are collected via The European Surveillance System (TESSy) managed by ECDC. Imported cases are not included in this report. The following EU-neighbouring countries report 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: 19 June 2023

4. Mass gatherings - Hajj - Saudi Arabia - 2023

Overview:

This year, the annual Islamic Hajj pilgrimage will take place in Saudi Arabia between 26 June and 1 July. Pilgrims aged 12 years and above will be allowed to attend. Over two million pilgrims attend Hajj from all over the world, including from 24 EU/EEA countries.

The **Ministry of Health of Saudi Arabia** has issued a list of requirements and recommendations for this event, including recommendations on personal and food hygiene, urging the avoidance of contact with sick people, avoiding visits and contact with camels in farms, markets, or barns, and avoiding drinking unpasteurised milk or eating raw meat or animal products that have not been thoroughly cooked, as well as applying measures to avoid insect bites during the day and night.

Due to the presence of MERS-CoV disease in Saudi Arabia, people returning from the Hajj should be made aware of the need to seek immediate medical advice if they have a fever (38°C and over), cough or difficulties breathing within 14 days of their return. Returning travellers should immediately seek medical attention if they experience symptoms suggestive of any type of infection, e.g. gastrointestinal or respiratory symptoms. They should also mention their travel history to their healthcare provider.

Weekly monitoring update

MERS-CoV: outbreaks were last reported from the Arabian Peninsula in 2022. To date, no new cases have been reported with disease onset in 2023 in Saudi Arabia or globally.

No other events of public health importance were detected during the monitoring week.

Source: [Ministry of Health of Saudi Arabia](#), [ECDC weekly CDTR w24](#)

ECDC assessment:

The risk to EU/EEA citizens of infection with communicable diseases during the 2023 Hajj is considered to be low, due to the vaccination requirements for travelling to Mecca and the Saudi Arabian preparedness plans that address the management of health hazards before, during, and after Hajj. The risk of infection is considered to be moderate for people with underlying conditions, the elderly, and pregnant women, with a moderate probability of infection and moderate impact. As with other mass gathering events, the risk of communicable disease outbreaks is highest for respiratory, food- and waterborne diseases, and vector-borne diseases.

The risk of vaccine-preventable and vector-borne diseases is considered low if preventive measures are applied. A risk of infection and importation of cases to Europe after the Hajj remains. ECDC published a rapid [risk assessment on Hajj on 2 July 2019](#); the risks and advice to pilgrims attending the Hajj remain valid for this year.

Actions:

ECDC monitors this event through its epidemic intelligence for mass gatherings activities between 19 June and 7 July 2023 in collaboration with WHO/EMRO, and includes weekly updates in the Communicable Disease Threats Report (CDTR).

Last time this event was included in the CDTR: 19 June 2023

5. Increases in gonorrhoea notification in heterosexual populations in EU/EEA countries

Overview:

In March–April 2023, several EU/EEA countries reported increases in gonorrhoea notifications among heterosexual people, predominantly of a young age, starting in 2022 and continuing in 2023.

In **the Netherlands**, according to a [report](#) published in April 2023, there was a 33% increase in gonorrhoea cases in 2022 compared to 2021. The increase was higher among women (831 cases in 2021 versus 1 458 cases in 2022) and it was mostly observed towards the end of 2022. For women, the positivity rate increased from 1.5% in 2021 to 2.3 in 2022 (3.1% in end of 2022) while for heterosexual men it increased from 1.8% to 2.4% (2.9% in end of 2022). In the second half of 2022, a higher proportion of people were <25 years of age, of Dutch origin, and had a high education level compared to people diagnosed in the first half of 2022. Molecular analysis indicates a national geographical spread with no clusters and/or outbreaks detected. There were no isolates with resistance to ceftriaxone, the first line therapy for gonorrhoea in the Netherlands. The increase appears to continue in 2023.

In **Denmark**, a substantial increase of gonorrhoea notifications was [observed](#) in 2022, with 3 928 reported cases compared to 2 807 in 2021. According to a news item [published](#) by the Statens Serum Institut (Denmark), the increase of gonorrhoea notifications may be linked to the lifting of COVID-19 restrictions, but may also be due to less condom use and an increase in sexual partners, possibly due to increased use of digital contact fora (mobile apps). The [increase](#) among heterosexuals was almost 44%, and 26% among homosexuals. No change in antimicrobial resistance patterns were observed in 2022 compared to 2021 (tests performed for 50% of total gonorrhoea cases in 2022).

In **Norway**, according to the [Annual Surveillance Report 2022 for Sexual Transmitted Infections](#), a sharp increase of gonorrhoea notifications was observed in 2022 (1 857 cases versus 555 in 2021 and versus 1 045 in 2019), with a particularly large increase among young women. Among cases reported in [2022](#) in Norway, 48% were from Oslo; 74% of male cases were men who have sex with men (MSM), and among MSM cases 40% were foreign-born. Norway highlighted the substantial potential for widespread transmission as gonorrhoea began to spread in younger heterosexuals where frequent partner changes and low condom use are common. In 2023, it was reported that the situation is unchanged by the first quarter of 2023.

Ireland also [reported](#) a total increase in gonorrhoea notifications of 45% in 2022 compared to 2019. Gonorrhoea rates in 20–24-year-old females increased by 75% (from 143 to 251 per 100,000 population) and by 56% in males (from 330 to 517 per 100 000 population). In 2022, the highest rate among females was in the 20–24 years age group and the highest rate among males was in the 25–29 years age group. Most (83%) cases were among males, with 17% among females. Of cases with known mode of transmission (50%): 71% were gay, bisexual, MSM, 24% heterosexuals, and 5% were other. Increases in some other STIs were also reported, and the introduction of a [national free home testing service](#) has increased access to testing, accounting for some, though not all of the [increase seen](#).

In **Finland**, according to the [Annual report of prevalence of gonorrhoea](#), in 2022 there were 966 reported cases of gonorrhoea (17.4 per 100,000), a 90% increase compared to 2021. Majority (71%) of infections were in men with 70% of male cases with information on transmission reported as MSM. Most (73%) gonorrhoea cases were people born in Finland. People aged under 35 years represented 65% of cases, with the highest incidence in the age groups 20–24 years (59.9/100,000) and 25–29 (60.1/100,000) years. Most of the gonorrhoea infections, 79%, were contracted in Finland. No clinically resistant strains of ceftriaxone have been reported in Finland.

In addition, increases in gonorrhoea were observed in **Spain** between 2019 and 2021 ([Annual Epidemiological Report of Sexually Transmitted Infections in Spain, 2021 \(Spanish\)](#)). Comparing 2021 vs 2019 gonorrhoea rates increased by 18% to a rate of 32.41 per 100,000 population. In May 2023, Murcia, Spain, [reported](#) that there was an increase in gonorrhoea cases in males and females with the highest incidence [reported](#) in the age group 20–24-year-olds.

Several [public health actions](#) were indicated by the Member States: the Netherlands – intensified partner notification in youngsters diagnosed with gonorrhoea, network analyses to investigate if these trends are present in specific subgroups like students; Denmark – sexual health campaigns targeted at young people, molecular network analyses; Norway – condom campaigns, awareness-raising activities targeting municipal doctors, general

practitioners and youth health clinics; Ireland – an ongoing nationwide Sexual Wellbeing campaign for the 18-30 year age group, which promotes condom use, free home STI testing, and raises awareness of [Sexualwellbeing.ie](https://sexualwellbeing.ie) as a source of information is in place; Spain – sexual health campaigns targeted at young people and gay, bisexual, and MSM, and condom distribution campaigns.

Background

Gonorrhoea is a sexually transmitted infection caused by the *Neisseria gonorrhoeae* bacterium. Typical genital infections present as urethritis among men and as urethritis and cervicitis among women, but a broad spectrum of clinical presentations and complications can occur. Many infections, especially among women, are asymptomatic, resulting in delayed diagnosis, complications, and uninterrupted transmission (see [ECDC's factsheet for more information](#)). [European evidence-based clinical guidelines](#) for the diagnosis and treatment of gonorrhoea in adults are available.

According to data available in the [Surveillance Atlas of Infectious Diseases](#), in 2021, 46 728 confirmed gonorrhoea cases were reported in 28 EU/EEA Member States, with a male-to-female ratio of 4.8:1. Of the cases with available information on transmission, 62% were MSM, 20% heterosexual men and 17% women. The highest national rates of >30/100 000 population were observed in Luxembourg (65), Denmark (48), Malta (47), and Ireland (42) while rates lower than 1/100 000 were observed in Bulgaria, Croatia, Cyprus, Poland, and Romania. Among 23 countries reporting consistently between 2012 and 2021, reported rates of gonorrhoea increased continuously, with the exception of 2020 where rates dropped temporarily, only to increase again in 2021. The increase in 2021 was observed across all transmission groups (MSM, heterosexual men and women).

ECDC assessment:

Considering the information available, the increases in gonorrhoea notifications in EU/EEA reporting countries are indicative of intensified transmission rather than changes in testing policies. Increases among women are of concern due to the risk of reproductive tract complications from gonorrhoea. Strengthening of prevention activities aimed at promoting safe sex an increased testing uptake and testing frequency for those most at risk and provision of appropriate treatment are recommended. In most EU/EEA Member States, MSM bear a disproportional gonorrhoea burden, with the numbers of notified cases increasing sharply since 2015. The role of bridging populations such as bisexual men in current increases among heterosexuals is being investigated through molecular studies in Denmark and the Netherlands.

Thus far, there are no indications of increases in antimicrobial resistance of *Neisseria gonorrhoeae* isolates, but continuous surveillance of antimicrobial resistance and monitoring of treatment failures are needed.

Actions:

ECDC will continue monitoring this event through its epidemic intelligence activities and interaction with the STI network. The events will be discussed with the STI network in its upcoming meeting on 28 and 29 June. Member States are encouraged to be observant of similar trends or changes in sexual risk behaviours, AMR patterns, and to report these findings to EpiPulse. Sexual health campaigns advocating for condom use and encouraging of STI testing in case of symptoms, change in sexual partner, multiple concurrent partners, and having a partner diagnosed with STI are advised. [ECDC's Response Plan to control and manage the threat of multi-/extensively drug-resistant gonorrhoea in Europe](#) further indicates the implementation of appropriate gonorrhoea management, prevention, control and AMR policies/guidelines, including an enhanced focus on high-risk groups, as well as mandatory reporting of gonorrhoea.

Last time this event was included in the CDTR: 20 June 2023