I. Executive summary

EU Threats

**New! Swine influenza virus in humans - Denmark - 2021**

On 29 January 2022, Denmark's Statens Serum Institute (SSI) published information on a human case of swine influenza virus infection.

**Update of the week**

On 29 January 2022, Denmark's Serum Institute (SSI) published information on a human case of swine influenza virus infection. According to SSI, the patient was admitted to hospital with acute illness in late November 2021 and tested positive for influenza virus previously detected in pigs. The likely place of infection is a pig slaughterhouse in which the patient was working. The investigation did not reveal any additional cases, and according to SSI there is no risk for human-to-human transmission.

**Influenza – Multi-country – Monitoring 2021/2022 season**

Reported influenza activity in Europe decreased compared to previous weeks, but different levels of activity are observed between the countries and areas in the Region. A detailed report on the ongoing situation is available in the weekly threats report.

**Update of the week**

**Week 4, 2022**

- Estonia, Kazakhstan, Norway, the Republic of Moldova, Serbia, and Slovakia reported widespread influenza activity and/or medium influenza intensity.
- 5% of all sentinel primary care specimens from patients presenting with ILI or ARI symptoms tested positive for an influenza virus.
- Seven countries reported seasonal influenza activity at or above 10% positivity in sentinel primary care: Bulgaria (27%), Israel (25%), Armenia (20%), France (17%), Moldova (14%), Poland (12%), and Serbia (10%).
- Hospitalised cases with confirmed influenza virus infection were reported from intensive care units (four type A viruses), other wards (seven type A viruses) and SARI surveillance (47 type A viruses)
- Both influenza type A and type B viruses were detected, with A(H3) viruses being dominant across all monitoring systems.
On 31 December 2019, the Wuhan Municipal Health and Health Commission reported a cluster of pneumonia cases of unknown aetiology with a common source of exposure at Wuhan's South China Seafood City market. Further investigations identified a novel coronavirus as the causative agent of respiratory symptoms for these cases. The outbreak rapidly evolved, affecting other parts of China and other countries worldwide. On 30 January 2020, WHO declared that the outbreak of coronavirus disease (COVID-19) constituted a Public Health Emergency of International Concern (PHEIC), accepting the Committee's advice and issuing temporary recommendations under the International Health Regulations (IHR). On 11 March 2020, the Director-General of WHO declared the COVID-19 outbreak a pandemic. The third, fourth, fifth, sixth, seventh, eighth, ninth and tenth 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 and 13 January 2022, respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

Opening date: 7 January 2020  Latest update: 4 February 2022

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Update of the week
Since week 2022-3 and as of week 2022-4, 23 888 259 new cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) and 74 574 527 new deaths have been reported.

Since 31 December 2019 and as of week 2022-4, 376 229 546 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 5 681 828 deaths.

As of week 2022-4, 86 815 617 cases and 957 542 deaths have been reported in the EU/EEA.

The figures reported worldwide and in the EU/EEA are probably an underestimate of the true number of cases and deaths, due to various degrees of under-ascertainment and under-reporting.

The latest daily situation update for the EU/EEA is available here.

As of 3 February 2022, no changes have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring and De-escalated variants.

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

Non EU Threats

Mass Gathering Monitoring - Winter Olympic Games in Beijing - 2022
Opening date: 28 January 2022  Latest update: 4 February 2022

The Olympic Winter Games are taking place between 4 and 20 February 2022 in Beijing, China. Indoor and outdoor venues, as well as the Beijing National Stadium (which will hold opening and closing ceremonies) will be used. There will be 2 900 athletes from 90 countries participating in the Games this year, as well as 19 000 volunteers. On 17 January 2022, it was announced that ticket sales to the general public will be cancelled and a limited number of spectators will be admitted, by invitation only.

Update of the week
On 3 February 2022, 14 Olympic-related arrivals tested positive for SARS-CoV-2 at Beijing International Airport. An additional seven cases were detected within the closed-loop system. Overall, since 23 January 2022 and as of 3 February 2022, there have been 308 Olympic-related cases, of which 111 have been among athletes and team officials and 197 among other stakeholders.

Daily COVID-19 updates can be found on the official Beijing 2022 Winter Olympics website.

From 26 January 2022 to 3 February 2022, no other events of public health significance were detected in the context of the Beijing 2022 Winter Olympic Games.
Since the disease was first identified in Saudi Arabia in April 2012, over 2,500 cases of Middle East respiratory syndrome coronavirus (MERS-CoV) have been detected in 27 countries. In Europe, eight countries have reported confirmed cases, all with direct or indirect connections to the Middle East. The majority of MERS-CoV cases continue to be reported from the Middle East. The source of the virus remains unknown, but the pattern of transmission and virological studies point towards dromedary camels in the Middle East as a reservoir from which humans sporadically become infected through zoonotic transmission. Human-to-human transmission is amplified among household contacts and in healthcare settings.

Since the previous update published on 4 January 2022, and as of 31 January 2022, no new MERS-CoV cases have been reported by Saudi Arabian health authorities or by WHO worldwide.
II. Detailed reports

New! Swine influenza virus in humans - Denmark - 2021
Opening date: 1 February 2022 Latest update: 4 February 2022

Epidemiological summary
Influenza of swine origin has previously been detected in humans in Denmark. In January 2021, a Eurasian avian-like H1 swine influenza virus was detected in Zealand in a female patient.

ECDC assessment
Sporadic human cases infected with an influenza virus of swine origin have been reported from several countries in the EU/EEA and are not unexpected. Exposure to pigs or pig products have been reported in the past and represent the most common risk factor. Transmission events have also been observed in healthy people without underlying conditions. Viruses from patients with severe conditions and influenza positive test should be further characterised as well as shared with the national influenza reference laboratories and WHO Collaborating Centres. Such cases need to be followed-up to identify human-to-human transmission and implement control measures.

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

Actions
ECDC monitors zoonotic influenza events through its epidemic intelligence activities in order to identify significant changes in the epidemiology of the virus. Cases should be reported immediately to EWRS and IHR. Reporting of case-based data of zoonotic influenza cases is available in TESSy (INFLZOO). ECDC has contacted colleagues in Denmark to organise a joint meeting with WHO/Europe colleagues to review the case and actions in detail.

Influenza – Multi-country – Monitoring 2021/2022 season
Opening date: 15 October 2021 Latest update: 4 February 2022

Epidemiological summary
2021/2022 season overview
For the Region as a whole, influenza activity started to increase in week 49/2021, with different levels of activity observed between the countries and areas of the Region, and a general dominance of A(H3) viruses, although some countries reported both A(H3) and A(H1)pdm09 viruses, e.g. France.

Source: Flu News Europe

ECDC assessment
Reported influenza activity in Europe decreased compared to previous weeks, but different levels of activity are observed between the countries and areas in the Region.

Vaccination remains the best protective measure for the prevention of influenza. With dominant A(H3) circulation, clinicians should consider early antiviral treatment of at-risk groups with influenza infection according to local guidance to prevent severe outcomes.

Actions
ECDC and WHO monitor influenza activity in the WHO European Region. Data will be updated on a weekly basis and are available on the Flu News Europe website.
Opening date: 7 January 2020 Latest update: 4 February 2022

Epidemiological summary

Since 31 December 2019 and as of week 2022-4, 376 229 546 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 5 681 828 deaths.

Cases have been reported from:
Africa: 10 844 345 cases; the five countries reporting most cases are South Africa (3 603 856), Morocco (1 131 395), Tunisia (909 813), Ethiopia (464 930) and Libya (429 666).
Asia: 85 983 502 cases; the five countries reporting most cases are India (41 302 440), Iran (6 344 179), Indonesia (4 330 763), Philippines (3 545 680) and Malaysia (2 865 984).
America: 136 753 571 cases; the five countries reporting most cases are United States (74 938 767), Brazil (25 426 744), Argentina (8 378 656), Colombia (5 887 261) and Mexico (4 942 590).
Europe: 140 263 613 cases; the five countries reporting most cases are France (18 883 693), United Kingdom (17 375 077), Russia (11 861 077), Turkey (11 437 585) and Italy (10 346 237).
Oceania: 2 383 810 cases; the five countries reporting most cases are Australia (2 159 490), Fiji (62 855), French Polynesia (48 044), Papua New Guinea (36 866) and Guam (32 331).
Other: 705 cases have been reported from an international conveyance in Japan.

Deaths have been reported from:
Africa: 238 502 deaths; the five countries reporting most deaths are South Africa (95 022), Tunisia (26 288), Egypt (22 604), Morocco (15 132) and Ethiopia (7 331).
Asia: 1 182 376 deaths; the five countries reporting most deaths are India (495 050), Indonesia (144 285), Iran (132 424), Philippines (53 891) and Malaysia (38 407).
America: 2 514 872 deaths; the five countries reporting most deaths are United States (886 668), Brazil (627 138), Mexico (306 091), Peru (205 834) and Colombia (134 300).
Europe: 1 739 661 deaths; the five countries reporting most deaths are Russia (331 349), United Kingdom (156 844), Italy (146 149), France (134 823) and Germany (117 964).
Oceania: 6 411 deaths; the five countries reporting most deaths are Australia (3 716), Fiji (801), French Polynesia (636), Papua New Guinea (597) and Guam (290).
Other: 6 deaths have been reported from an international conveyance in Japan.

EU/EUA:
As of week 2022-4, 86 815 617 cases have been reported in the EU/EEA: France (18 883 693), Italy (10 346 237), Spain (9 956 070), Germany (9 874 611), Poland (4 857 893), Netherlands (4 320 177), Belgium (3 148 958), Czechia (3 012 428), Portugal (2 639 710), Romania (2 184 867), Sweden (2 159 104), Greece (1 931 044), Austria (1 858 292), Denmark (1 627 732), Hungary (1 553 486), Slovakia (1 413 771), Ireland (1 179 135), Bulgaria (939 212), Croatia (935 715), Norway (776 326), Lithuania (744 035), Slovenia (710 821), Finland (492 390), Latvia (388 987), Estonia (322 469), Cyprus (252 460), Luxembourg (164 315), Iceland (67 484), Malta (65 265) and Liechtenstein (8 930).

As of week 2022-4, 957 542 deaths have been reported in the EU/EUA: Italy (146 149), France (134 823), Germany (117 964), Poland (105 552), Spain (93 126), Romania (57 917), Hungary (40 233), Czechia (37 232), Bulgaria (33 121), Belgium (28 638), Greece (23 477), Netherlands (21 290), Portugal (19 907), Slovakia (17 830), Sweden (15 929), Croatia (13 777), Austria (13 559), Lithuania (8 364), Slovenia (6 342), Ireland (6 136), Latvia (5 225), Denmark (3 247), Finland (2 040), Estonia (1 930), Norway (1 439), Luxembourg (995), Cyprus (853), Malta (329), Liechtenstein (72) and Iceland (46).

The latest daily situation update for the EU/EUA is available here.

In week 2022-4, in the EU/EUA overall, the reported weekly cases increased by 0.7% compared to the previous week. The highest weekly increases in descending order were observed in Slovakia, Lithuania, Latvia, Romania and Poland. The countries with the highest 14-day notification rates per 100 000 population are: Denmark (9 426), Slovenia (8 227), France (7 222), Portugal (7 117) and Belgium (5 749). Eleven of the 30 EU/EAA countries (Italy, Spain, Finland, Ireland, Belgium, Malta, Iceland, Greece, France, Luxembourg and Croatia) reported a decrease in the weekly cases.

ECDC’s assessment of each country’s epidemiological situation is based on a composite score based on the absolute value and trend of five weekly COVID-19 epidemiological indicators. As shown below, for week 4, 13 countries (Belgium, Bulgaria, Croatia, Czechia, Denmark, Estonia, France, Hungary, Iceland, Latvia, Portugal, Romania and Slovenia) were categorised as of very high concern, 14 countries (Austria, Germany, Greece, Ireland, Italy, Liechtenstein, Lithuania, Luxembourg, Malta, the Netherlands,
Norway, Poland, Slovakia and Sweden) as of high concern and three countries (Cyprus, Finland and Spain) as of moderate concern. Compared with the previous week, five countries (Czechia, Denmark, Hungary, Iceland and Malta) moved to a higher category, five countries (Finland, Norway, Slovakia, Spain and Sweden) moved to a lower category and 20 countries stayed in the same category.

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

**Public Health Emergency of International Concern (PHEIC):**

On 30 January 2020, the World Health Organization 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 and tenth 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, 4 July 2021, 22 October 2021 and 13 January 2022, respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

**ECDC assessment**

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

**Actions**

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

A dashboard with the latest updates is available on ECDC’s website. For the latest update on SARS-CoV-2 variants of concern, please see ECDC’s webpage on variants.
Geographic distribution of 14-day cumulative number of reported COVID-19 cases per 100 000 population, worldwide, 2022-w03 to 2022-w04

Source: ECDC

Mass Gathering Monitoring - Winter Olympic Games in Beijing - 2022

Opening date: 28 January 2022  
Latest update: 4 February 2022

Epidemiological summary

COVID-19-related information:
As of 3 February 2022, there were 139 665 confirmed cases and 5 700 deaths in China. Full vaccination uptake in China is close to 90%.

Other diseases:
According to the Chinese Weekly Influenza Surveillance Report, influenza activity in China during week 3 of 2022 has decreased slightly than in previous weeks. A total of 10 influenza-like illness outbreaks were identified. A total of 2 945 cases of influenza were detected.

According to the WHO Western Pacific Region Avian Influenza Weekly Update (Number 829) published on 28 January 2022, there were two new cases of avian influenza A(H5N6) in China detected between 21 and 27 January 2022.
The Winter Olympics generally attract a smaller audience and fewer athletes than the Summer Olympics. Spectators at the 2022 Winter Olympics are further limited due to the spread of the Omicron variant and China’s strategy to control and prevent COVID-19. Significant public health measures have been put in place for the Beijing Olympic games, but considering the high transmissibility of Omicron and the context of a mass gathering event there is an increased risk of transmission of SARS-CoV-2. For the latest COVID-19 risk assessment, please visit ECDC’s dedicated webpage.

The risk of infection from other communicable diseases in China during the Winter Olympic Games 2022 is considered low if preventive measures are applied, e.g. being fully vaccinated according to the national immunisation schedule, following hand and food hygiene, respiratory etiquette, refraining from social activities if any symptoms occur, and seeking prompt testing and medical advice when needed.

Actions
ECDC will monitor this event daily through its epidemic intelligence activities until 25 February 2022, and weekly reports will be included in the Communicable Disease Threat Report.

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

**Opening date:** 24 September 2012  
**Latest update:** 4 February 2022

**Epidemiological summary**

Since the beginning of 2022, and as of 31 January 2022, no MERS-CoV cases have been reported by Saudi Arabian health authorities or by WHO.

Since April 2012, and as of 31 January 2022, 2,600 cases of MERS-CoV, including 943 deaths, have been reported by health authorities worldwide.

**Sources:** ECDC MERS-CoV page | WHO MERS-CoV | ECDC factsheet for professionals | Saudi Arabia Ministry of Health

**ECDC assessment**

Human cases of MERS-CoV continue to be reported in the Arabian Peninsula, particularly in Saudi Arabia. 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. 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.
Geographical distribution of confirmed MERS-CoV cases by probable region of infection and exposure, from 1 January to 31 January 2022

Source: ECDC

Geographical distribution of confirmed MERS-CoV cases by country of infection and year, from April 2012 to 31 January 2022

Source: ECDC
The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.