COMMUNICABLE DISEASE THREATS REPORT

This weekly bulletin provides updates on threats monitored by ECDC.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

NEWS

Influenza vaccine composition, northern hemisphere influenza season 2022–2023

On 25 February 2022, WHO announced the recommendations for the influenza vaccine composition for the 2022–2023 northern hemisphere influenza season. The recommendations issued are used by the national vaccine regulatory agencies and pharmaceutical companies to develop, produce, and license influenza vaccines for the following influenza season. The periodic update of influenza viruses to be targeted by influenza vaccines is necessary for the vaccines to be effective due to the constant evolving nature of influenza viruses, including those circulating and infecting humans.
In summary, the following updates to the vaccine have been recommended:
- A(H3N2): replacement of the component with 3C.2a1b.2a.2 A/Darwin/9/2021-like and A/Darwin/6/2021-like viruses for egg- and cell-based production, respectively.
- B/Victoria-lineage: replacement with a V1A.3a.2 B/Austria/1359417/2021-like virus.
- For the A(H1N1)pdm09 component the recommendation will continue to be a 6B.1A.5a.2 virus – although in EU/EEA countries currently 6B.1A.5a.1 is also circulating.

The WHO recommends that quadrivalent vaccines for use in the 2022-2023 northern hemisphere influenza season contain the following:
Egg-based Vaccines
an A/Victoria/2570/2019 (H1N1)pdm09-like virus;
an A/Darwin/9/2021 (H3N2)-like virus;
a B/Austria/1359417/2021(B/Victoria lineage)-like virus; and
a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

Cell- or Recombinant-based Vaccines
an A/Wisconsin/588/2019 (H1N1)pdm09-like virus;
an A/Darwin/6/2021 (H3N2)-like virus;
a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

For trivalent influenza vaccines to be used in the 2022-2023 northern hemisphere influenza season, WHO recommends the use of A(H1N1)pdm09, A(H3N2) and B/Victoria lineage viruses as listed above for use in quadrivalent vaccines.

Assessment: Significant numbers of viruses that circulated in all of the WHO European Region reporting countries were antigenically distinct from their respective northern hemisphere 2020/21 vaccine components, namely 3C.2a1b.2a.2 A(H3), 6B.1A.5a.1 A(H1)pdm09 and V1A.3a.2 B/Victoria viruses and this will likely have implications on the vaccine effectiveness. While vaccination remains the best way to protect against severe disease, antiviral drugs can also be used for the high risk and older individuals. In the remaining 2021/22 season and in the next 2022/23 season, efforts are needed to maintain virological influenza surveillance, during the transition period out of the COVID-19 pandemic and whilst integrating SARS-CoV-2 with influenza and other respiratory virus surveillance. Influenza B virus surveillance needs to be enhanced to ensure sufficient data for future decisions on the quadrivalent vaccines. Although the test positivity for influenza dropped to <10% in week 2/2022, influenza continues to circulate in the EU/EEA. Further outbreaks cannot be excluded in the coming weeks following the lifting of public health measures in place for responding to the COVID-19 pandemic.

I. Executive summary

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

EU Threats

COVID-19 associated with SARS-CoV-2 – Multi-country (World) – 2019 - 2022

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

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.

➔Update of the week

Since week 2022-7 and as of week 2022-8, 10 731 663 new cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) and 59 126 new deaths have been reported.

Since 31 December 2019 and as of week 2022-8, 435 882 971 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 5 973 364 deaths.

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 March 2022, the following changes have been made to the ECDC categorisation of SARS-CoV-2 variants:

A recombinant variant between Pango lineages AY.4.2.2 (Delta) and BA.1.1 (Omicron) has been added to the list of variants under monitoring. There have been several reports of recombinants between Delta and Omicron with different genomic breakpoints from several countries; these likely emerged during the period of co-circulation between Omicron and Delta in late 2021 and early 2022. This particular recombinant reported by the UK has the largest spread of these recombinants, but has so far only been detected in small numbers in the UK. It has not been detected outside of the UK, and there is no increasing trend in detections. The variant contains a Delta NSP3 in an otherwise Omicron-like genome, and there is no suspicion that it is associated with any changes in transmissibility, immunity, or severity. ECDC is monitoring this variant in order to keep track of its spread and detect any introductions of the variant to the EU/EEA.

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

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

Influenza – Multi-country – Monitoring 2021/2022 season

Opening date: 15 October 2021 Latest update: 4 March 2022

The current circulation of influenza viruses across the WHO European Region is slightly higher than in the season 2020/21, but substantially lower than prior to the COVID-19 pandemic.

➔Update of the week

Week 8 2022:

Armenia, Estonia, Georgia, Hungary, Ireland, Kazakhstan, Republic of Moldova, Slovakia, and Slovenia reported widespread influenza activity and/or medium influenza intensity.

Of all sentinel primary care specimens from patients presenting with ILI or ARI symptoms, 9.7% tested positive for an influenza virus.

Seven countries reported seasonal influenza activity above 10% positivity in sentinel primary care: Slovenia (52%), Hungary (47%), Italy (35%), France (32%), Luxembourg (23%), Ireland (15%), and the United Kingdom (Scotland) (11%).

Both influenza type A and type B viruses were detected, with A(H3) viruses being dominant across all monitoring systems.

Hospitalised cases with confirmed influenza virus infection were reported from intensive care units (nine type A viruses), other wards (16 type A viruses) and SARI surveillance (four type A viruses).

Influx of people displaced from Ukraine to the EU following Russia's aggression in Ukraine - Multistate – 2022

Opening date: 24 February 2022 Latest update: 4 March 2022

On 24 February 2022, Ukraine declared martial law following Russia's military aggression. As the situation escalates, large numbers of displaced people are seeking shelter in nearby countries.

➔Update of the week

With the escalation of aggression in Ukraine and, as of 2 March 2022, some of the major cities affected include Kyiv, Kharkiv, Mariupol, Donetsk, and Kherson. According to the United Nations, between 24 February and 3 March 2022, the number of people fleeing Ukraine has surpassed 1 000 000. In total, 649 903 have crossed the Polish border; 144 738 crossed the border to Hungary; 90 329 entered Slovakia; 57 192 entered Romania and 110 876 have reached other European countries. Outside of the EU/EAA, 103 254 people have sought safety in the Republic of Moldova. On 4 March 2022, the International Atomic Energy Agency published a statement, following information from Ukraine, that the site of the Zaporizhzhia Nuclear Power Plant (NPP) had been shelled overnight. Thus far, no change in radiation levels at the plant were reported. The NPP is said to be under the control of the Russian Federation.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

II. Detailed reports

COVID-19 associated with SARS-CoV-2 – Multi-country (World) – 2019 - 2022

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

Epidemiological summary

Since 31 December 2019 and as of week 2022-8, 435 882 971 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 5 973 364 deaths.

Cases have been reported from:
Africa: 11 234 309 cases; the five countries reporting most cases are South Africa (3 673 257), Morocco (1 160 892), Tunisia (997 754), Libya (493 548) and Egypt (482 248).
Asia: 99 860 984 cases; the five countries reporting most cases are India (42 924 130), Iran (7 040 467), Indonesia (5 564 448), Japan (4 939 220) and Philippines (3 661 997).
America: 147 732 382 cases; the five countries reporting most cases are United States (79 045 043), Brazil (28 787 620), Argentina (8 900 546), Colombia (6 064 583) and Mexico (5 508 629).
Europe: 173 815 146 cases; the five countries reporting most cases are France (22 690 070), United Kingdom (18 886 701), Russia (16 398 036), Germany (14 740 144) and Turkey (13 974 498).
Oceania: 3 239 445 cases; the five countries reporting most cases are Australia (2 845 822), New Zealand (100 821), French Polynesia (65 583), Fiji (63 930) and New Caledonia (54 177).
Other: 705 cases have been reported from an international conveyance in Japan.

Deaths have been reported from:
Africa: 248 415 deaths; the five countries reporting most deaths are South Africa (99 229), Tunisia (27 773), Egypt (24 040), Morocco (15 978) and Ethiopia (7 460).
Asia: 1 230 525 deaths; the five countries reporting most deaths are India (513 843), Indonesia (148 335), Iran (136 631), Philippines (56 451) and Vietnam (40 252).
America: 2 638 537 deaths; the five countries reporting most deaths are United States (950 490), Brazil (649 333), Mexico (318 149), Peru (210 672) and Colombia (138 767).
Europe: 1 847 774 deaths; the five countries reporting most deaths are Russia (351 660), United Kingdom (161 361), Italy (154 560), France (151 786) and Germany (123 209).
Oceania: 8 107 deaths; the five countries reporting most deaths are Australia (5 171), Fiji (834), French Polynesia (638), Papua New Guinea (638) and Guam (328).
Other: 6 deaths have been reported from an international conveyance in Japan.

EU/EEA:
As of week 2022-8, 109 212 236 cases have been reported in the EU/EEA: France (22 690 070), Germany (14 740 144), Italy (12 602 813), Spain (10 998 312), Netherlands (6 332 715), Poland (5 673 280), Czechia (3 575 168), Belgium (3 537 496), Portugal (3 262 492), Austria (2 690 941), Romania (2 671 815), Denmark (2 660 806), Sweden (2 446 952), Greece (2 411 595), Slovakia (1 902 105), Hungary (1 787 625), Ireland (1 298 144), Lithuania (1 224 155), Norway (1 171 108), Bulgaria (1 087 796), Croatia (1 054 589), Slovenia (892 620), Finland (657 874), Latvia (649 502), Estonia (479 398), Cyprus (319 472), Luxembourg (190 442), Iceland (122 439), Malta (68 479) and Liechtenstein (11 889).

As of week 2022-8, 1 020 896 deaths have been reported in the EU/EEA: Italy (154 560), France (151 786), Germany (123 209), Poland (111 690), Spain (99 287), Romania (60 264), Hungary (42 808), Czechia (38 640), Bulgaria (35 458), Belgium (29 692), Greece (25 841), Netherlands (21 568), Portugal (21 059), Slovakia (18 485), Sweden (17 203), Croatia (15 030), Austria (14 155), Lithuania (8 799), Ireland (6 475), Slovenia (6 292), Latvia (5 684), Denmark (4 093), Finland (2 381), Estonia (2 125), Norway (1 598), Luxembourg (1 019), Cyprus (952), Malta (604), Liechtenstein (77) and Iceland (62).

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

In week 2022-08, in the EU/EEA overall, the reported weekly cases decreased by 23.1% compared to the previous week. Weekly increases in descending order were observed in Luxembourg, Ireland and Liechtenstein. The countries with the highest 14-day notification rates per 100 000 population are: Iceland (8 428), Denmark (7 228), Latvia (6 861) and Estonia (5 339). Overall, 27 of the 30 EU/EEA countries (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden) reported a decrease in the weekly cases.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

ECDC's assessment of each country's epidemiological situation is based on a composite score for the absolute value and trend of five weekly COVID-19 epidemiological indicators. As shown below, for week 8, one country (Latvia) was categorised as of very high concern, 11 countries (Croatia, Czechia, Denmark, Estonia, Iceland, Ireland, Liechtenstein, Lithuania, Norway, Slovakia, and Slovenia) as of high concern, 17 countries (Austria, Belgium, Bulgaria, Cyprus, Finland, France, Germany, Greece, Hungary, Italy, Luxembourg, the Netherlands, Poland, Portugal, Romania, Spain, and Sweden) as of moderate concern and one country (Malta) as of low concern. Compared with the previous week, 14 countries (Austria, Belgium, Bulgaria, Cyprus, Denmark, Estonia, Finland, France, Hungary, Iceland, Malta, the Netherlands, Poland and Romania) moved to a lower category and 16 countries stayed in the same category.

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

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, eight, 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 web page.

Actions

On 27 January 2022, ECDC published its 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'.

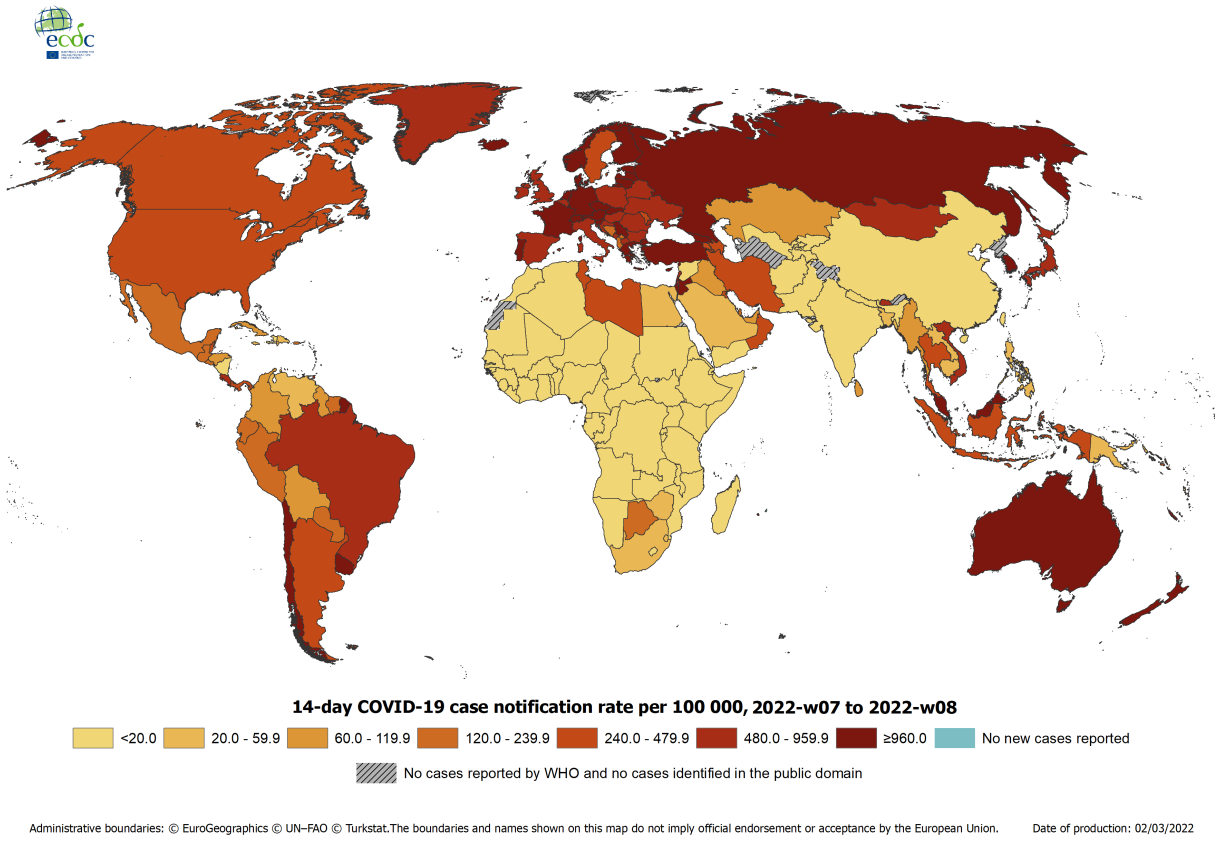
A dashboard with the latest updates is available on ECDC's website. For the latest update on SARS-CoV-2 variants of concern, please see ECDC's web page on variants.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

Geographic distribution of 14-day cumulative number of reported COVID-19 cases per 100 000 population, worldwide, 2022-w07 to 2022-w08

Source: ECDC



Influenza – Multi-country – Monitoring 2021/2022 season

Opening date: 15 October 2021 Latest update: 4 March 2022

Epidemiological summary

Week 8 2022:
Armenia, Estonia, Georgia, Hungary, Ireland, Kazakhstan, Republic of Moldova, Slovakia, and Slovenia reported widespread influenza activity and/or medium influenza intensity.

Of all sentinel primary care specimens from patients presenting with ILI or ARI symptoms, 9.7% tested positive for an influenza virus.

Seven countries reported seasonal influenza activity above 10% positivity in sentinel primary care: Slovenia (52%), Hungary (47%), Italy (35%), France (32%), Luxembourg (23%), Ireland (15%), and the United Kingdom (Scotland) (11%).

Both influenza type A and type B viruses were detected, with A(H3) viruses being dominant across all monitoring systems.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

Hospitalised cases with confirmed influenza virus infection were reported from intensive care units (nine type A viruses), other wards (16 type A viruses) and SARI surveillance (four type A viruses).

2021/22 season overview:
In Europe, influenza activity started to increase in week 49 2021, with a general dominance of A(H3) viruses, although some countries reported co-circulation of both A(H3) and A(H1)pdm09 viruses (e.g. France and Germany).

Source: Flu News Europe

ECDC assessment

The circulation of influenza viruses across the WHO European Region is slightly higher than in the 2020/21 season, but substantially lower than in seasons prior to the COVID-19 pandemic.

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 in accordance with local guidance in order 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.

Influx of people displaced from Ukraine to the EU following Russia's aggression in Ukraine - Multistate – 2022

Opening date: 24 February 2022 Latest update: 4 March 2022

Epidemiological summary

On 24 February 2022, Ukraine declared martial law following Russia's military aggression. Situations such as this have large impacts on vital infrastructure, the functioning of the society, and on individuals. Shortages of food and water supplies, sanitation, electric power, transportation and healthcare provision, and the overall lack of security, are resulting in large populations fleeing from Ukraine to other countries. As the situation escalates, large numbers of displaced people are seeking shelter in nearby countries. The majority of this population comprises children, women, and elderly people. This population will likely find temporary shelter in neighbouring countries either dispersing in the community or in dedicated settlings. However, as yet the majority of the population is reported to be dispersed in the arrival communities.

Sources: Relief Web | United Nations | WHO

ECDC assessment

The displacement of large populations into neighbouring countries, regardless of the type of accommodation, will result in difficulties for displaced people in accessing healthcare, so they may have an increased risk of complications due to acute or chronic conditions. Furthermore, situations of overcrowding could favour the emergence of outbreaks of infectious diseases, particularly of respiratory infections. This includes influenza, which is currently circulating in some of the reception countries, COVID-19 and TB. In addition, there is an increased risk of gastrointestinal diseases and vaccine-preventable diseases. Vaccination coverage in Ukraine is suboptimal for several vaccine-preventable diseases, including COVID-19. Vaccination against poliomyelitis and measles should be considered as a priority, especially among the paediatric population. In addition, COVID-19 vaccination among the elderly and other risk groups should be prioritised. Public health authorities should increase awareness among healthcare providers in order to detect priority infectious diseases that could present among displaced Ukrainian people.

Actions

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

ECDC is working closely with the countries that are receiving displaced persons from Ukraine, in collaboration with European Commission, other Member States, WHO, and other international partners. As the situation evolves ECDC is ready to provide specific support, including through staff deployments in the field. ECDC will continue to closely monitor the situation through epidemic intelligence activities. A publication entitled "*Operational public health considerations for the prevention and control of infectious diseases in the context of the Ukraine crisis*" will be published on Friday 4 March 2022.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
Link to ECDC CDTR web page – including related PowerPoint© slides