An Roinn Sláinte
Department of Health
Office of the Chief Medical Officer

Epidemiological update
28th October 2022

- A total of 1,990 confirmed PCR cases have been reported in the 7 days to 25th October 2022 (cases notified to midnight 24th October 2022), which is a 7% decrease from last week when 2,132 PCR positive cases were reported in the 7 days to 18th October.
- There were 3,971 positive antigen test results reported in the 7 days to 25th October 2022 (results uploaded to HSE portal in the week to 24th October), which is a 2% decrease from last week when 4,068 positive antigen test results were reported in the 7 days to 18th October 2022.
- As of 25th October 2022, the 14-day incidence rate (PCR) per 100,000 population is 87 which is 6.5% lower than a week previously (93). Incidence rates are likely to be underestimates.
- Nationally, the 7-day incidence (PCR) per 100,000 population as a proportion of 14-day incidence (PCR) per 100,000 population is 48%, demonstrating that there were fewer confirmed cases identified through PCR testing in laboratories in the 7 days to 25th October, compared with the preceding 7 days.
- The 5-day rolling average of daily reported cases (PCR) is 251 as of 25th October, which is 9% lower than that reported on 18th October (275).
- Regarding national SARS-CoV-2 wastewater surveillance, in week 41 (to 15th October), of the 65 catchment areas for which a change from the previous week could be calculated, the viral load remained stable (within +/- 10%) in 46 of them, while 17 experienced decreases of 10% or more, and 2 saw increases of at least 10%. When data across catchments areas was pooled and normalised for the population, the weekly distribution of SARS-CoV-2 viral load showed a decreasing trend.
- There were 420 confirmed COVID-19 cases in hospital this morning (28th October 2022), compared with 442 last week on 21st October. There have been 55 newly confirmed cases in hospital in the 24 hours preceding this morning. On average, there have been 56 new COVID-19 hospitalisations per day observed in the seven days to 28th October.
- As of 25th October, 34% (N=230) of hospitalised cases were categorised as hospitalised for COVID-19, with the remaining 66% (N=440) categorised as asymptomatic COVID-19 cases and potentially infectious.
- The age breakdown of cases hospitalised for COVID-19 (N=230) as of 25th October: 169 (73.5%) aged 65 years and older, 34 (14.8%) aged 50-64, 17 (7.4%) aged 15-49 and 10 (4.3%) aged 0-14 years old.
- The vaccination profile of cases aged 15 years and older hospitalised for COVID-19 (N=220) was:
    - Of those aged 65 years and older (N=169): 34% had received a second booster; 34% had received a first booster; 5% had completed primary vaccination; and 31% had not completed their primary vaccination course.
    - Of those aged 50-64 (N=34): 9% had received a second booster; 35% had received a first booster; 6% had completed primary vaccination; and 29% had not completed their primary vaccination course.
    - Of those aged 15-49 (N=17): 29% had received a first booster; 18% had completed primary vaccination; and 53% had not completed their primary vaccination course.
- There were 20 confirmed cases in critical care as of this morning (28th October 2022), compared with 16 a week ago (21st October). There were 4 new admissions to critical care in the 24 hours preceding this morning. On average, there has been approximately 4 new COVID-19 admissions

Bloc 1, Plaza Míseach, 50 - 58 Sráid Bhagóid Íochtarach, Baile Átha Cliath 2, D02 XW14
Block 1, Miesian Plaza, 50 - 58 Lower Baggot Street, Dublin 2, D02 XW14
T +353 1 635 4251 | info@health.gov.ie
www.health.gov.ie

per day observed in the seven days to 28th October. Of the 20 cases in critical care this morning, 5 were invasively ventilated.

- The number of COVID-19 cases in ICU whose primary reason for admission to ICU was COVID-19 was 11 on 25th October, up from 7 a week previously on 18th October. The proportion of COVID-19 cases in ICU for whom the primary reason for admission to ICU was COVID-19 increased from 44% on 18th October to 61% on 25th October.
- According to National Office of Clinical Audit (NOCA) data, as of 25th October 2022, where vaccination status was known (N=16), 2 (12.5%) COVID-19 cases in ICU were unvaccinated. Of those COVID-19 cases in ICU who had completed their primary course of vaccination (N=14), 93% were recorded as having received a booster/additional dose.
- As of 25th October, 168 patients were in receipt of non-invasive ventilation/Continuous Positive Airway Pressure (CPAP) or High-Flow Oxygen in non-critical care settings, of whom 26 patients were COVID-19 cases.
- There continues to be a significant number of cases of hospital acquired infections (note this is based on data to the week ending 16th October 2022). There were 164 hospital acquired COVID-19 infections reported in the week ending 16th October, compared to 155 in the week ending 9th October, and 152 in the week ending 2nd October.
- As of 25th October 2022, there have been 8,043 COVID-19 related deaths reported in Ireland since the outset of the pandemic. As of midnight 24th October 2022, there have been 42 COVID-19 related deaths notified which occurred in October 2022, 54 which occurred in September 2022, and 107 which occurred in August 2022.
- In total, as of week 41 2022 (to 15th October), approximately 9% of TaqPath assay samples were S-gene target positive (indicating BA.2 lineage infection), suggesting approximately 91% of infections were BA.4/BA.5 lineages. As of 19th October 2022, the Health Protection Surveillance Centre (HPSC) has reported that 87 cases of BQ.1 and its sub-lineages have been detected in Ireland through whole genome sequencing. The proportion of cases sequenced in Ireland that are BQ.1 variant (including its sub-lineages) has increased in recent weeks. In addition, as of 19th October, one case of Omicron recombinant XBB, 154 cases of BF.7, and 92 cases of BA.2.75 (or BA.2.75 sub-lineages) have been identified in Ireland.
- As of 25th October 2022, 71% of children aged 12-15 years have received their primary course of vaccination. Of those aged 5-11 years, 26% have received one dose of their primary course of vaccination.
- As of 25th October, approximately 25% of the population aged 50-64 years have received a second booster dose, while 75% of the population aged 65 years and older have received a second booster dose.
- Some indicators of influenza activity increased in Ireland during week 42 2022 (week ending 23rd October 2022), however overall activity remained at low levels. Sporadic detections of influenza A(H3), A(H1)pdm09 and B have been detected this season to date. Respiratory syncytial virus (RSV) notifications of cases and hospitalised cases increased and are at high levels in Ireland. In total, 102 laboratory confirmed influenza cases were notified during week 42 2022– five A(H3), five A(H1)pdm09, 88 influenza A (not subtyped), one influenza A & B co-infection and three influenza B. This is an increase compared to 59 influenza notifications during week 41 2022. There were 28 confirmed influenza hospitalised cases notified during week 42 2022. Two laboratory confirmed critical care influenza A (not subtyped) cases were notified to HPSC during week 42 2022. There were 325 RSV cases notified during week 42 2022, an increase compared to 177 cases notified

during week 41 2022. During week 42 2022, 68% of notified RSV cases were in the 0-4-year age group. During week 42 2022, 155 RSV cases out of 325 (48%) were reported as hospital inpatients.

Outbreaks for week 42 (16th to 22nd October) are based on those reported up to midnight on 22nd October 2022.

There was a total of 47 COVID-19 outbreaks notified in week 42. Regional departments of public health are currently prioritising the reporting of outbreak investigations in settings that would benefit most from public health and clinical intervention.

Healthcare setting outbreaks:

- There were 19 new nursing home and 7 new community hospital/long-stay unit outbreaks reported in week 42. The case range of these outbreaks was 2-16 cases.
- There were 14 new acute hospital outbreaks reported in week 42, with a range of 0-7 cases.
- There were 4 new outbreaks reported in a residential institution setting (3 in centres for disabilities, and 1 in children's/TUSLA residential centres) in week 42, with 2-6 cases.
- There was 1 new outbreak reported in an 'other healthcare settings' (in services for people with disabilities) in week 42, with 1 case.

Noting that national SARS-CoV-2 testing guidance may influence trends, the number of infections detected and reported daily (based on PCR and self-reported antigen tests) has reduced over the last week. PCR testing volumes have been stable, while PCR test positivity has slightly reduced. A significant proportion of detected infections continues to be identified in older age groups.

The COVID-19 burden on acute hospital care remains significant. Following a previous rise, the trend in terms of the total number of hospitalised COVID-19 cases has been stable over recent weeks but continues to be monitored (420 as of 28th October). The trend in daily average number of newly confirmed cases in hospital has also been stable (56 per day observed in the seven days to 28th October). Data for COVID-19 cases in hospital as of 25th October show that 34% were hospitalised for COVID-19 disease, with the remainder categorised as asymptomatic infectious cases.

The total number of confirmed cases in critical care (20 as of 28th October) has slightly increased. The number of ICU COVID-19 cases requiring mechanical ventilation has been stable. The proportion of cases whose primary reason for admission to ICU was COVID-19 was 61% as of 25th October. The number of COVID-19 patients in receipt of advanced respiratory support in hospital settings outside of ICU has recently increased.

Following a recent increase, the number of notified outbreaks has been broadly stable across a number of key vulnerable settings. COVID-19 mortality has remained broadly stable, although it is noted that there can be a lag in reporting of deaths.

You will be aware from colleagues in the Department that the acute hospital system remains under considerable pressure, with COVID-19 continuing to impact on acute capacity (420 COVID-19 inpatients on 28th October).

We continue to closely monitor emerging SARS-CoV-2 variants and assess any potential threat to population health. The World Health Organization (WHO) has reported (26th October 2022) that genetic diversification of SARS-CoV-2 continues and has given rise to 390 Omicron descendent lineages, as well as 48 identified recombinants. All these variants are being monitored and assessed by WHO. Based on sequences submitted to GISAID (genomic sequencing database), BA.5 descendent lineages remain predominant globally with a prevalence of 77% as of epidemiological week 40 (3rd to 9th October 2022), followed by BA.4 descendent lineages with a prevalence of 5%. BA.2 descendent lineages have increased in prevalence, accounting for 4% of sequences within the same reporting period. As of 25th October 2022, XBB and XBB.1 have been reported by 35 countries with 1,453 sequences. BQ.1 and its descendent lineages were reported from 65 countries with 8,077 sequences.

The European Centre for Disease Prevention and Control (ECDC) has published an epidemiological update (21st October 2022) on the spread of the SARS-CoV-2 Omicron variant sub-lineage BQ.1 in the European Union (EU)/European Economic Area (EEA). As of 20th October 2022, ECDC designated BQ.1, including its sub-lineages, as a Variant of Interest. ECDC has reported that, according to data from GISAID (genomic sequencing database), BQ.1 and BQ.1.1 are present at significant levels in the EU/EEA. Based on modelling estimates, ECDC has reported that it is expected that by mid-November to beginning of December 2022, more than 50% of SARS-CoV-2 infections in the EU/EEA will be due to BQ.1/BQ.1.1. By the beginning of 2023, more than 80% of SARS-CoV-2 cases are expected to be due to BQ.1/BQ.1.1. ECDC has indicated that the observed increase in the growth rate of BQ.1 is probably driven mainly by immune escape. ECDC has assessed that this variant and its sub-lineages will probably contribute to a further increase in cases of COVID-19 in the EU/EEA in the coming weeks and months. The extent of the increase in COVID-19 cases will depend on various factors, including immune protection against infection influenced by the timing and coverage of COVID-19 vaccination regimes, and the extent, timing and variant landscape of previous SARS-CoV-2 waves. Based on limited available data, ECDC has further indicated that there is no evidence of BQ.1 being associated with a greater infection severity than the circulating variants BA.4/BA.5.

SARS-CoV-2 variants in Ireland continue to be closely monitored. As of 19th October 2022, the HPSC has reported that 87 cases of BQ.1 and its sub-lineages have been detected in Ireland through whole genome sequencing. The proportion of cases sequenced in Ireland that are BQ.1 variant (including its lineages) has increased in recent weeks. In addition, as of 19th October, one case of Omicron recombinant XBB, 154 cases of BF.7, and 92 cases infected with BA.2.75 (or BA.2.75 sub-lineages) have been identified in Ireland.

In regard to the epidemiological situation in the EU/EEA, at the end of week 42 2022 (week ending 23rd October), ECDC has reported small reducing trends in the EU/EEA case rate, the case rate among people aged 65 years and older, and death rates were observed. Pooled EU/EEA rates of hospital occupancy, ICU admission, and ICU occupancy have been stable, while trends in hospital admissions decreased in comparison to the previous week. Country-level variation of these indicators remains, as six of 26 countries reported an increasing trend in at least one of these indicators compared with the previous week. The pooled EU/EEA COVID-19 death rate remained low.

In summary, the overall epidemiological situation in Ireland indicates that the trend in the number of reported and detected infections has recently reduced, while the trend in hospitalised COVID-19 cases has been stable over recent weeks but remains under monitoring. The total number of confirmed cases in critical care and receiving advanced respiratory support in settings outside of ICU has

increased slightly over recent days. This was to be expected following the increase observed in relation to COVID-19 cases and general hospitalised cases that occurred in previous weeks. SARS-CoV-2 variants (including BQ.1) continue to be closely monitored. As in a number of other European countries, the proportion of BQ.1 variant identified amongst cases sequenced in Ireland has increased in recent weeks. The increase in circulation of BQ.1 in Ireland may contribute to an increase in COVID-19 cases and hospitalisations in the coming weeks and months.

It remains important to provide clear guidance and communication with the public on the evolving disease profile and a cultural shift towards embedding individual and collective personal behaviours to mitigate against COVID-19 and other respiratory infections. It is important that the existing key public health advice continues to be communicated to the general public so that individuals may optimally protect themselves from severe health outcomes associated with COVID-19. It is particularly important that eligible groups for primary and booster doses (first, second and third) continue to be encouraged to avail of vaccination in order to confer optimal protection against the risk of severe disease as well as against other potential long-term consequences of infection.

The current key public health advice is as follows:

- Anyone who has symptoms of COVID-19 should self-isolate until 48 hours after symptoms have substantially or fully resolved – please do not attend any social events, work, school or college if you have symptoms.

- Anyone diagnosed with COVID-19 should self-isolate for 7 days from date of onset of symptoms, or if asymptomatic, date of first positive test. Anyone exiting self-isolation at day seven should continue to adhere to other public health protective measures.

- Mask wearing is advised on public transport and in healthcare settings. Mask wearing is also advised based on individual risk assessment. Anyone who wishes to wear a mask should not be discouraged from doing so. Individuals who are vulnerable to COVID-19 are further advised to be aware of the risk associated with activities they may choose to engage in and to take measures to optimally protect themselves. Vulnerable individuals are advised to consider wearing masks in crowded indoor settings, such as may relate, for example, to social gatherings or other activities and events.

- Continue to practise good hand and respiratory hygiene by washing and sanitising hands regularly and coughing/sneezing into your elbow. Maintain a physical distance where possible.

- Meet up outdoors if possible. When meeting indoors, avoid poorly ventilated spaces and keep windows open if possible.

- Many people who were infected with COVID-19 in late 2021 and earlier in 2022 will now be eligible for a booster dose of COVID-19 vaccine. Book a first booster appointment on www.hse.ie if you are 12 years or older. People aged 50 years to 64 years, pregnant women

(from 16 weeks), healthcare workers, people aged 12 or older with a condition that puts them at high risk of serious illness from COVID-19 (for example, diabetes or heart disease) are now eligible to register for their second COVID-19 booster vaccine. People aged 65 years or older and people aged 12 or older who have a weak immune system are now eligible to register for their third booster dose. It is not too late to receive a primary course of COVID-19 vaccine. Vaccines remain the most effective way of protecting ourselves from the worst effects of COVID-19.