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



Epidemiological update 22nd July 2022

- A total of 10,781 confirmed PCR cases have been reported in the 7 days to 20th July 2022 (cases notified to midnight 19th July 2022), which is a 24% decrease from last week when 14,187 PCR positive cases were reported in the 7 days to 13th July.
- There were 10,036 positive antigen test results reported in the 7 days to 20th July 2022 (results uploaded to HSE portal in the week to 19th July 2022), which is a 39% decrease from last week when 16,531 positive antigen test results were reported in the 7 days to 13th July.
- As of 20th July 2022, the 14-day incidence rate (PCR) per 100,000 population is 524; a decrease of 13% from a week previously (600). 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 43%, demonstrating that there were fewer confirmed cases identified through PCR testing in laboratories in the 7 days to 20th July, compared with the preceding 7 days.
- The 5-day rolling average of daily reported cases (PCR) is 1,200 as of 20th July, which is 37% lower than that reported on 13th July (1,916).
- Regarding national SARS-CoV-2 wastewater surveillance, in week 26 (to 2nd July), of the 66 catchment areas for which a change from the previous week could be calculated, the viral load remained stable (within +/- 10%) in 37 of them, while none experienced decreases of 10% or more, and 29 saw increases of at least 10%. Of these, 27 had an increase from 10 to 50%, and 2 had an increase of more than 50%. When data across catchments areas is pooled and normalised for the population, the weekly distribution of SARS-CoV-2 viral load continued to show an increasing trend.
- There were 704 confirmed COVID-19 cases in hospital this morning (22nd July), compared with 943 last week on 15th July. There have been 144 newly confirmed cases in hospital in the 24 hours preceding this morning. On average, there have been 99 new COVID-19 hospitalisations per day observed in the seven days to 22nd July. As of 19th July, 44% of hospitalised cases were categorised as hospitalised for COVID-19, with the remaining 56% categorised as asymptomatic COVID-19 cases and potentially infectious.
- As of 19th July 2022, the age breakdown of cases hospitalised for COVID-19 (N=494): 177 (36%) aged 80 and older, 175 (35%) aged 65-79, 73 (15%) aged 50-64, 48 (10%) aged 15-49 and 21 (4%) aged 0-14 years old.
- According to the latest HSE data on cases hospitalised for COVID-19 (N=494), as of 19th July 2022, 42% had received at least one booster vaccination, 17% had completed their primary vaccination course and 40% had not completed their primary vaccination course.
- As of 19th July, according to the latest HSE data on cases hospitalised for COVID-19, of the 177 persons aged 80 and older, 22% had received their second booster. Of the 175 cases aged 65-79 years, 16% had received their second booster.
- There were 38 confirmed cases in critical care as of this morning (22nd July 2022), compared with 35 a week ago (15th July). There were 4 new admissions to critical care in the 24 hours preceding this morning. On average, there have been approximately 5 new COVID-19 admissions per day

- observed in the seven days to 22nd July. Of the 38 cases in critical care this morning, 16 were invasively ventilated.
- The number of COVID-19 cases in ICU whose primary reason for admission to ICU was COVID-19 has declined from 16 on 12th July to 15 on 19th July. The proportion of COVID-19 cases in ICU for whom the primary reason for admission to ICU was COVID-19 increased from 35% on 12th July to 43% on 19th July.
- According to National Office of Clinical Audit (NOCA) data as of 19th July 2022, where vaccination status was known (N=35), 11% of COVID-19 cases in ICU were unvaccinated and 89% were fully vaccinated. Of those COVID-19 cases in ICU who were fully vaccinated, 81% were recorded as having received a booster/additional dose and none were recorded as having received multiple boosters.
- As of 19th July, 146 patients were in receipt of non-invasive ventilation/Continuous Positive Airway
 Pressure (CPAP) or High-Flow Oxygen in non-critical care settings, of whom 33 patients were
 COVID-19 cases.
- There continues to be a significant number of cases of hospital acquired infection (note this is based on data to the week ending 10th July 2022). There were 289 hospital acquired COVID-19 infections reported in the week ending 10th July, compared to 230 in the week ending 3rd July and 199 in the week ending 26th June.
- As of 20th July 2022, there have been 7,620 COVID-19 related deaths reported in Ireland since the outset of the pandemic. As of midnight 19th July 2022, there have been 46 COVID-19 related deaths notified which occurred in July 2022, 86 which occurred in June, 121 in May and 347 in April.
- In total, approximately 97% of TaqPath assay samples were S-gene target negative (indicating BA.4 and/or BA.5 infection) as of week 28 2022 (week ending 16th July), suggesting approximately 3% of infections were BA.2 (or sub-lineages of same). As of 11th July 2022, 498 BA.4 cases, 814 BA.5 cases, and 738 BA.2.12.1 cases have been confirmed in Ireland through whole genome sequencing (WGS). Recent WGS results indicate BA.5 is the dominant Omicron sub-lineage.
- As of 19th July 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 19th July, approximately 65% of the population aged 35-44 years, 59% of those aged 25-34 years, and 51% of those aged 16-24 years have received a first booster vaccine dose.
- As of 19th July, approximately 58% of the population aged 85 years and older, 64% of those aged 75-84 years and 54% of those aged 65-74 years have received a second booster dose.
- Outbreaks for week 28 (10th July 16th July) are based on those reported up to midnight on 16th July 2022. There was a total of 94 COVID-19 outbreaks notified in week 28. 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 39 new nursing home and 3 new community hospital/long-stay unit outbreaks reported in week 28. The case range of these outbreaks was 0-20 cases.
 - There were 25 new acute hospital outbreaks reported in week 28, with a range of 0-17 cases.

- There were 18 new outbreaks reported in a residential institution setting (10 in centres for disabilities, 4 in mental health facilities, 2 in facilities for asylum seekers / refugees and 2 in other residential settings) in week 28, with 0-14 cases.
- There were 4 new outbreaks in 'other healthcare services' (4 in services for people with disabilities) in week 28, with a range of 2-7 cases.

Noting that national SARS-CoV-2 testing guidance may influence trends, the number of infections detected and reported daily have reduced in the last week compared to the previous week. PCR testing volumes and test positivity have also decreased. A significant proportion of detected infections continues to be identified in older age groups.

The COVID-19 burden on acute hospital care remains significant but has reduced from a recent peak of 1,055 on 11th July to 704 as of this morning. The daily average number of newly confirmed cases in hospital has also reduced. These trends will continue to be monitored. Data for COVID-19 cases in hospital on 19th July show that under half were hospitalised for COVID-19 disease (44%), with the remainder categorised as asymptomatic infectious cases.

The total number of confirmed cases in critical care (38 as of 22nd July) and the average number of ICU admissions remain broadly stable following a recent increase. The number of ICU COVID-19 cases requiring mechanical ventilation continues to be stable. The proportion of cases whose primary reason for admission to ICU was COVID-19 was 43% as of 19th July. The number of COVID-19 patients in receipt of advanced respiratory support in hospital settings outside of ICU remains stable following a recent increase.

The number of notified outbreaks are stable in most vulnerable settings, following a recent increase. COVID-19 mortality has remained relatively 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, with 704 COVID-19 inpatients on 22nd July, the acute hospital system remains under considerable pressure with COVID-19 continuing to impact on acute capacity.

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 that internationally, the Omicron lineages BA.2, BA.2.12.1 and BA.4 show reducing trends, while BA.5 is increasing. A comparison of sequences submitted to GISAID (genomic sequencing database) in epidemiological week 26 (27th June to 3rd July) and week 27 (4th to 10th July) demonstrates a decrease in BA.2 sequences from 4% to 3%, a decrease in BA.2.12.1 sequences from 11% to 5% and a decrease in BA.4 from 13% to 11%. For the same period, the proportion of reported sequences of BA.5 has increased from 52%% to 54%. BA.5 sequences have been reported from 100 countries, and continues to drive an increase in cases, hospitalisations and ICU admissions.

Several subvariants of Omicron have emerged and some of these are being monitored by WHO. BA.2.75 is an Omicron subvariant under monitoring, with earliest sequences reported from May 2022. BA.2.75 has nine additional mutations in the spike compared to BA.2. There is no evidence yet of the extent to which these mutations impact on transmissibility and disease severity compared to other

circulating lineages. As of 18 July, 250 sequences of BA.2.75 from 15 countries have been reported on GISAID.

We continue to keep relevant international guidance and communications under review in order to inform the pandemic response in Ireland. In this regard, it should be noted that the World Health Organization (WHO) Europe has published (19th July 2022) a document *Strategy consideration for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and other respiratory viruses in the WHO European Region during autumn and winter 2022/23,* and the European Centre for Disease Prevention and Control (ECDC) has published (18th July 2022) technical guidance *Preliminary public health considerations for COVID-19 vaccination strategies in the second half of 2022,* which will help inform the ongoing response to COVID-19.

In Ireland, the prevalence of S-gene target failure amongst samples tested using the TaqPath assay has been broadly stable over recent weeks, with data as of week 28 (11th July) suggesting that 97% of SARS-CoV-2 cases are likely to be BA.4 and/or BA.5 (variants which test negative for the S-gene target). As of 11th July 2022, 498 BA.4 cases, 814 BA.5 cases, and 738 BA.2.12.1 cases have been confirmed in Ireland through whole genome sequencing (WGS). Recent WGS results indicate BA.5 is the dominant Omicron sub-lineage.

In summary, the overall epidemiological situation indicates continuing high levels of infection and a significant number of cases receiving general hospital care, although this figure has fallen over recent days. In addition, the total numbers of confirmed cases in critical care and in receipt of advanced respiratory support in hospital settings outside of ICU remain broadly following a recent increase. The circulation of the BA.4 and BA.5 Omicron sub-lineages in Ireland is likely contributing significantly to the current epidemiological profile, with recent WGS results indicating BA.5 is the dominant sub-lineage.

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. In consideration of any implications for personal protective measures arising from the current epidemiological situation including as relates to emerging SARS-CoV-2 variants, there is no indication for any change in the current public health advice. However, the recently observed deterioration in the disease profile further emphasises the importance of communicating the existing key public health advice 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 (both first and second) 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. Current hospitalisation data indicates that most cases hospitalised for COVID-19 who are aged 65 years and older have not received a second booster vaccine. The uptake of second booster vaccine in this population, while increasing, is sub-optimal currently and it is strongly recommended that individuals in this age group avail of this dose if they have not yet done so.

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, particularly now as we experience a BA.4/BA.5 surge. 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.
- Many people who were infected with COVID-19 in late 2021 and early 2022 will now be eligible for a first booster dose of COVID-19 vaccine. Book a first booster appointment on www.hse.ie if you are 12 years or older. People aged 65 years and over are now eligible for their second COVID-19 booster vaccine. Those with a weak immune system aged 12 and over can also get their second booster, when it is due. It is not too late to receive a primary dose of COVID-19 vaccine. Vaccines remain the most effective way of protecting ourselves from the worst effects of COVID-19.