



Epidemiological update
29th July 2022

- A total of 4,870 confirmed PCR cases have been reported in the 7 days to 27th July 2022 (cases notified to midnight 26th July 2022), which is a 55% decrease from last week when 10,781 PCR positive cases were reported in the 7 days to 20th July.
- There were 6,095 positive antigen test results reported in the 7 days to 27th July 2022 (results uploaded to HSE portal in the week to 26th July 2022), which is a 39% decrease from last week when 10,036 positive antigen test results were reported in the 7 days to 20th July.
- As of 27th July 2022, the 14-day incidence rate (PCR) per 100,000 population is 329; a decrease of 37% from a week previously (524). 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 31%, demonstrating that there were fewer confirmed cases identified through PCR testing in laboratories in the 7 days to 27th July, compared with the preceding 7 days.
- The 5-day rolling average of daily reported cases (PCR) is 575 as of 27th July, which is 52% lower than that reported on 20th July (1,200).
- Regarding national SARS-CoV-2 wastewater surveillance, in week 29 (to 23rd July), of the 65 catchment areas for which a change from the previous week could be calculated, the viral load remained stable (within +/- 10%) in 26 of them, while 0 experienced decreases of 10% or more, and 39 saw increases of at least 10%. Of these, 38 had an increase from 10 to 50%, and 1 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 471 confirmed COVID-19 cases in hospital this morning (29th July), compared with 704 last week on 22nd July. There have been 44 newly confirmed cases in hospital in the 24 hours preceding this morning. On average, there have been 66 new COVID-19 hospitalisations per day observed in the seven days to 29th July.
- As of 26th 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 26th July 2022, the age breakdown of cases hospitalised for COVID-19 (N=416): 138 (33%) aged 80 and older, 155 (37%) aged 65-79, 58 (14%) aged 50-64, 48 (12%) aged 15-49 and 17 (4%) aged 0-14 years old.
- According to the latest HSE data on cases hospitalised for COVID-19 (N=416), as of 26th July 2022, 39% had received at least one booster vaccination, 20% had completed their primary vaccination course and 41% had not completed their primary vaccination course.
- As of 26th July, according to the latest HSE data on cases hospitalised for COVID-19, of the 138 persons aged 80 and older, 22% had received their second booster. Of the 155 cases aged 65-79 years, 15% had received their second booster.
- There were 30 confirmed cases in critical care as of this morning (29th July), compared with 38 a week ago (22nd July). There were 4 new admissions to critical care in the 24 hours preceding this morning. On average, there have been approximately 4 new COVID-19 admissions per day

observed in the seven days to 29th July. Of the 30 cases in critical care this morning, 15 were invasively ventilated.

- The number of COVID-19 cases in ICU whose primary reason for admission to ICU was COVID-19 has decreased from 23 on 21st July to 16 on 28th July. The proportion of COVID-19 cases in ICU for whom the primary reason for admission to ICU was COVID-19 increased from 55% on 21st July to 48% on 28th July.
- According to National Office of Clinical Audit (NOCA) data as of 26th July 2022, where vaccination status was known (N=33), 21% of COVID-19 cases in ICU were unvaccinated, and 79% were fully vaccinated. Of those COVID-19 cases in ICU who were fully vaccinated, 88% were recorded as having received one booster/additional dose and none were recorded as having received multiple boosters.
- As of 26th July, 159 patients were in receipt of non-invasive ventilation/Continuous Positive Airway Pressure (CPAP) or High-Flow Oxygen in non-critical care settings, of whom 37 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 17th July 2022). There were 229 hospital acquired COVID-19 infections reported in the week ending 17th July, compared to 312 in the week ending 10th July and 230 in the week ending 3rd July.
- As of 27th July 2022, there have been 7,675 COVID-19 related deaths reported in Ireland since the outset of the pandemic. As of midnight 26th July 2022, there have been 84 COVID-19 related deaths notified which occurred in July 2022, 99 which occurred in June, 122 in May and 347 in April.
- In total, approximately 98% of TaqPath assay samples were S-gene target negative (indicating BA.4 and/or BA.5 infection) as of week 29 2022 (week ending 23rd July), suggesting approximately 2% of infections were BA.2 (or sub-lineages of same). As of 18th July 2022, 546 BA.4 cases, 823 BA.5 cases, and 862 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 26th 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 26th 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 26th July, approximately 60% of the population aged 85 years and older, 66% of those aged 75-84 years and 56% of those aged 65-74 years have received a second booster dose.
- Outbreaks for week 29 (17th July – 23rd July) are based on those reported up to midnight on 23rd July 2022. There was a total of 61 COVID-19 outbreaks notified in week 29. 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 23 new nursing home and 4 new community hospital/long-stay unit outbreaks reported in week 29. The case range of these outbreaks was 1-21 cases.
 - There were 6 new acute hospital outbreaks reported in week 29, with a range of 2-8 cases.
 - There were 17 new outbreaks reported in a residential institution setting (14 in centres for disabilities, 3 in mental health facilities, 0 in facilities for asylum seekers / refugees and 0 in other residential settings) in week 29, with 0-14 cases.

- There were 4 new outbreaks in 'other healthcare services' (4 in services for people with disabilities) in week 29, with a range of 0-7 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 continued to decrease. 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 a week ago (22nd July), and to 471 as of this morning. The daily average number of newly confirmed cases in hospital has also continued to reduce. Data for COVID-19 cases in hospital as of 26th 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 (30 as of 29th July) and the average number of ICU admissions remain broadly stable following a previous 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 51% as of 26th 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 decreased across a number of key 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 471 COVID-19 inpatients on 29th 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, and BA.2.12.1 show reducing trends, while BA.4 and BA.5 are stable. A comparison of sequences submitted to GISAID (genomic sequencing database) in epidemiological week 27 (3rd to 9th July 2022) and week 28 (10th to 16th July 2022) demonstrates a decrease in BA.2 sequences from 4% to 2%, a decrease in BA.2.12.1 sequences from 6% to 3% and a stable prevalence of BA.4 at 11% and BA.5 at 52%. The European Centre for Disease Prevention and Control (ECDC) reported low numbers of BA.2.75 variant cases within the EU/EEA, with no increasing trend of significance noted.

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 29 (23rd July) suggesting that 98% 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 18th July 2022, 546 BA.4 cases, 823 BA.5 cases, and 862 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 continued to fall 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 stable 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.