



Epidemiological update

13th May 2022

- A total of 4,718 confirmed PCR cases have been reported in the 7 days to 12th May 2022 (cases notified to midnight 11th May 2022), which is a 12.8% decrease from last week when 5,412 PCR positive cases were reported in the 7 days to 5th May.
- Data on the number of positive antigen test results uploaded to the HSE portal the previous day are reported daily. There were 5,589 positive antigen test results reported in the 7 days to 12th May 2022 (results uploaded to HSE portal in the week to 11th May 2022), which is an 8% decrease from last week when 6,091 positive antigen test results were reported in the 7 days to 5th May.
- As of 12th May 2022, the 14-day incidence rate (PCR) per 100,000 population is 213; this compares with 278 a week previously, a 24% decrease. 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 47%, demonstrating that there have been fewer confirmed cases identified through PCR testing in laboratories in the 7 days to 12th May, compared with the preceding 7 days.
- The 5-day rolling average of daily reported cases (PCR) is 610 as of 12th May, a 16% decrease from that reported on 5th May (729).
- There were 235 confirmed COVID-19 cases in hospital this morning (13th May), compared with 310 last week on 6th May. There have been 56 newly confirmed cases in hospital in the 24 hours preceding this morning. On average, there have been 41 new COVID-19 hospitalisations per day observed in the seven days to 13th May.
- As of 10th May, 52% of hospitalised cases were categorised as hospitalised for COVID-19, with the remaining 48% categorised as asymptomatic COVID-19 cases and potentially infectious. Of hospitalised cases aged 0-14 years old (N=11), 64% were categorised as hospitalised for COVID-19, with the remaining 36% categorised as asymptomatic COVID-19 cases and potentially infectious.
- As of 10th May 2022, age breakdown of cases hospitalised for COVID-19: 80 (38%) aged 80 and older, 68 (32%) aged 65-79, 32 (15%) aged 50-64, 23 (11%) aged 15-49, and 7 (3%) aged 0-14 years old.
- According to the latest HSE data on cases hospitalised for COVID-19 (N=210), as of 10th May 2022, 32% had received booster vaccination, 30% had completed their primary vaccination course and 38% had not completed their primary vaccination course.
- There were 28 confirmed cases in critical care as of this morning (13th May), compared with 35 a week ago (6th May 2022). There was 1 new admission to critical care in the 24 hours preceding this morning. Of the 28 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 20 on 3rd May to 16 on 10th May. The proportion of COVID-19 cases in ICU for whom the primary reason for admission to ICU was COVID-19 has decreased from 51% on 3rd May to 50% on 10th May.
- According to HSE data as of 10th May 2022, where vaccination status was known, 19% of COVID-19 cases in ICU were unvaccinated, 9% were partially vaccinated, and 72% were fully vaccinated.

Of those COVID-19 cases in ICU who were fully vaccinated, 91% were recorded as having received a booster/additional dose.

- As of 10th May, 164 patients were in receipt of non-invasive ventilation/Continuous Positive Airway Pressure (CPAP) or High-Flow Oxygen in non-critical care settings, of whom 34 patients were COVID-19 cases.
- There continues to be a significant number of cases of hospital acquired infection, although there has been a reduction (note this is based on data to the week ending 3rd May 2022). There were 56 hospital acquired COVID-19 infections reported in the week ending 1st May, compared to 80 in the week ending 24th April, and 159 in the week ending 17th April.
- As of 12th May 2022, there have been 7,176 COVID-19 related deaths reported in Ireland since the outset of the pandemic. As of midnight 11th May 2022, there have been 18 COVID-19 related deaths notified in May 2022, 216 in April, and 279 in March.
- In total, approximately 4% of TaqPath assay samples were S-gene target negative as of week 18 2022 (week ending 7th May), suggesting approximately 96% of infections were BA.2.
- Most indicators of influenza activity continued to decline in Ireland during week 18 2022. Influenza A(H3) viruses are the predominant influenza viruses circulating in Ireland during the 2021/2022 season. There were 51 laboratory confirmed influenza cases notified in week 18 2022, an increase from 48 in the previous week. There were 14 laboratory confirmed hospitalized influenza cases notified in week 18, compared with 19 in the previous week.
- As of 12th May 2022, approximately 65% of the population aged 35-44 years, 57% of those aged 25-34 years, and 48% of those aged 16-24 years have received a booster/additional vaccine dose.
- As of 12th May 2022, 72% of children aged 12-15 have received their primary course of vaccination. Of those aged 5-11, 25% have received one dose of their primary course of vaccination.

Outbreaks for week 18 (1st – 7th May) are based on those reported up to midnight on 7th May 2022.

There was a total of 31 COVID-19 outbreaks notified in week 18. 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 7 new nursing home and 2 new community hospital/long-stay unit outbreaks reported in week 18. The case range of these outbreaks was 0-16 cases.
- There were 7 new acute hospital outbreaks reported in week 18, with a range of 2-12 cases.
- There were 11 new outbreaks reported in residential institution settings (5 in centres for disabilities, 2 in mental health facilities, 1 in centre for older people and 2 in other settings) in week 18, with a range of 0-8 cases.
- There were 2 new outbreaks in 'other healthcare services' in week 18, with <=5 cases.

Outbreaks among vulnerable groups:

- There was 1 new outbreak among the asylum seekers/refugees population notified in week 18, with a range of <5 cases.

Noting that national SARS-CoV-2 testing guidance may influence trends, the number of infections detected and reported per day (based on PCR and self-reported antigen tests) remains high but has

continued to decrease. PCR testing volumes remain stable while PCR test positivity has 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 substantially reduced from a recent peak of over 1,600 cases in hospital in late March, to 235 as of 13th May, while the daily average number of newly confirmed cases in hospital has also markedly decreased. Data for COVID-19 cases in hospital on 10th May show that slightly over half were hospitalised for COVID-19 disease (52%), with the remainder categorised as asymptomatic infectious cases.

As of 10th May, 72% of hospitalised cases were aged 65 and older. According to HSE data on vaccination status of cases hospitalised for COVID-19 as of 10th May, 32% had received a booster vaccination, 30% had completed primary vaccination and 38% had not completed primary vaccination.

The total number of confirmed cases in critical care (28 as of 12th May), the average number of COVID-19 ICU admissions and the number requiring mechanical ventilation remain stable. The proportion of cases whose primary reason for admission to ICU was COVID-19 was 50% as of 10th May. As of 10th May, 19% of COVID-19 cases in ICU were unvaccinated and 72% were fully vaccinated, of whom 91% were recorded as having received a booster/additional dose. The number of COVID-19 patients in receipt of advanced respiratory support in hospital settings outside of ICU remains stable.

While there continues to be a significant number of outbreaks reported in vulnerable populations, there has been a recent reduction in notified outbreaks in key settings. COVID-19 mortality has remained relatively stable.

You will be aware from colleagues in the Department that, although the COVID-19 burden has recently reduced, with 235 COVID-19 patients in hospital on 13th May, the acute hospital system remains under considerable pressure, with few available beds and with COVID-19 continuing to impact on acute capacity and operational effectiveness in some locations.

A risk assessment (as of 28th April) of variants BA.4 and BA.5 (Omicron sub-lineages) published by the UK Health Security Agency (UK HSA) highlighted that available data from South Africa, where there has been a recent increase in incidence, indicates that BA.4 and BA.5 are increasing in prevalence and may already be predominant there. The data suggest that BA.4 and BA.5 are demonstrating a growth advantage over BA.2 in South Africa, although the epidemiological conditions favouring growth of these variants in South Africa may not be replicated in other countries. As of 28th April, the UK HSA assessed that there was evidence of international spread of BA.4 and BA.5 including small numbers of cases in the UK and Europe.

As of 12th May 2022, ECDC has reclassified BA.4 and BA.5 from variants of interest to variants of concern. ECDC reports that BA.4 and BA.5 were first detected in South Africa in January and February 2022, respectively, and since then they have become the dominant variants there. Preliminary studies suggest a significant change in antigenic properties of BA.4 and BA.5 compared to BA.1 and BA.2, especially compared to BA.1. Additionally, ECDC reports an increasing trend in variant proportion of BA.4 and BA.5 has been observed in Austria and Portugal, respectively, in recent weeks. In Portugal there has also been an increase in overall case numbers and test positivity.

ECDC has indicated that the currently observed growth advantage for BA.4 and BA.5 is likely due to their ability to evade immune protection induced by prior infection and/or vaccination, particularly if this has waned over time. There is currently no indication of any change in severity for BA.4/BA.5 compared to previous Omicron lineages. With the exception of Portugal and Austria, the proportion of BA.4 and BA.5 in EU/EEA countries is currently very low, although the ECDC has advised that, given the signals of increased growth rate, it is possible that one or both of these sub-lineages may cause increased SARS-CoV-2 transmission in the near future in EU/EEA countries.

In the context of the international situation in relation to these variants as above, it should be noted that, as of week 18 2022 (May 7th), two cases of BA.4 and no cases of BA.5 have been identified in Ireland. We continue to closely monitor emerging SARS-CoV-2 variants and assess any potential threat to population health.

In summary, the overall epidemiological situation in Ireland currently provides a broadly positive outlook, albeit we will need to continue to monitor developments with emerging variants over the coming weeks. Although there continue to be high levels of infection and a significant number of cases receiving general hospital care, the numbers of detected infections and hospitalised cases have reduced considerably over recent weeks. In addition, the numbers of COVID-19 cases in ICU and in receipt of advanced respiratory support in hospital settings outside of ICU continue to be stable.

Further to the recent briefing provided to you in relation to excess mortality in the context of the COVID-19 pandemic, it should be noted that WHO has published (5th May 2022) a report estimating 'Global excess deaths associated with COVID-19, January 2020 - December 2021'. This report estimated excess mortality associated directly (due to the disease) or indirectly with the COVID-19 pandemic (e.g. due to the pandemic's impact on health systems and society) between 1 January 2020 and 31 December 2021.

The global estimate for excess mortality was 14.9 million (range 13.3 million to 16.6 million). The report highlights that the impact of the pandemic has been over several waves with each characterized by unique regional distributions, mortality levels and drivers. Twenty countries, representing approximately 50% of the global population, account for over 80% of the estimated global excess mortality for the January 2020 to December 2021 period. These countries are Brazil, Colombia, Egypt, Germany, India, Indonesia, the Islamic Republic of Iran, Italy, Mexico, Nigeria, Pakistan, Peru, the Philippines, Poland, the Russian Federation, South Africa, the United Kingdom of Great Britain and Northern Ireland, Turkey, Ukraine, and the United States of America (USA).

The methodology employed in the analysis combined reported deaths data for some countries (including Ireland) with estimates for countries which lack capacity for reliable mortality surveillance and therefore do not collect and generate the data needed to calculate excess mortality. The methodology and study periods utilised in this report may vary from those used in other reports on excess mortality.

The report estimates that Ireland had:

- an excess all-cause mortality rate of 9 (range -1 to 17) per 100,000 population in 2020 and 50 (range 40 to 60) per 100,000 population in 2021. The estimated average excess all-cause mortality rate for 2020-2021 is 29 (range 23 to 36) per 100,000 population.
- a total cumulative excess mortality from all causes from January 2020 to December 2021 of 2,922 (range 2,243 to 3,576). The highest excess deaths were recorded in April 2020 and January 2021.

Throughout the COVID-19 pandemic, different methodologies have been reported by various groups for monitoring excess mortality and differences in methodology, data sources and time periods used in each study lead to differences in excess mortality estimates reported.

A number of key studies published since 2020, including the recent WHO report, have all indicated that Ireland appears to have experienced both lower COVID-19 mortality and lower excess mortality during the COVID-19 pandemic than many other countries in Europe and globally. All key studies to date also indicate that excess mortality in Ireland over the period studied was lower than total reported COVID-19 deaths in Ireland in that period, indicating that surveillance of COVID-19 mortality in Ireland was comprehensive.

Evidence with regard to any waning of immunity against severe disease will continue to be assessed, including by the National Immunisation Advisory Committee (NIAC) as part of their ongoing examination of the evidence in respect of COVID-19 vaccination.

Following consultation with the Department, on 16th May 2022, HPSC will de-escalate its emergency response from level 2 (which it has been in since March 2020) to level 1. In emergency response level 1, although significant resources remain dedicated to COVID-19, priority work across non-COVID areas is being upscaled with some resources now being diverted to these areas from COVID-19.

The decision to de-escalate to level 1 is based on the changed epidemiological situation for COVID-19, with a decreasing burden of severe COVID-19 disease, and also emerging priorities across other disease areas. As part of this transition, there will be changes to the publication of COVID-19 reports, including that the HPSC Epidemiology of COVID-19 in Ireland Data Hub will be updated on a weekly basis.

Work is continuing between officials in the Department and the HSE and National Virus Reference Laboratory (NVRL) to further consider advice in relation to testing, isolation of positive cases and other aspects relevant to the public health management of COVID-19.

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.

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 while disease incidence is high. 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 over the Christmas period 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.