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



Mr. Stephen Donnelly TD, Minister for Health, Department of Health, Miesian Plaza, 50-58 Lower Baggot Street, Dublin 2

6th January 2022

Dear Minister,

I write further to today's meeting of the COVID-19 National Public Health Emergency Team (NPHET). The NPHET reviewed the latest epidemiological data, and the following key points were noted:

Epidemiological update

- Due to anticipated large volumes of case numbers over the current period, from 22 December 2021, the daily case number reported has been based on positive SARS-CoV-2 results uploaded to the HSE COVID Care Tracker the preceding day. These data are provisional and do not represent notified cases.
- A total of 136,960 confirmed cases have been reported in the 7 days to 5th January 2022 (cases notified to midnight 4th January 2022), which is an 83% increase from last week when 74,931 cases were reported in the 7 days to 29th December 2021, and a 363% increase compared to the last NPHET meeting on 16th December 2021 when there were 29,595 cases reported.
- As of 5th January 2022, the 14-day incidence rate per 100,000 population is 4,450 (its highest value to date); this compares with 2,342 a week ago, and 1,315 at the last NPHET meeting on 16th December 2021. The 14-day incidence rate, at 4,450 per 100,000, is 2.9 times higher than the highest level observed in January 2021 (1,531 in January 2021).
- Given the 7-day cumulative incidence of 2,876 per 100,000, allowing for constraints on testing and undetected infections, the likely population prevalence of active SARS-CoV-2 infection is 5.7%-9.6%; between 1 in 10 and 1 in 20 of the population are likely to be infected.
- Nationally, the 7-day incidence per 100,000 population as a proportion of 14-day incidence per 100,000 population is 65%, demonstrating that there have been considerably more cases in the last 7 days compared with the preceding 7 days.
- The 5-day rolling average of daily cases is 19,259 as of today, a 349% increase from that reported at the last NPHET meeting on 16th December (4,294).
- Of the 124,682 cases notified in the 14 days to midnight 4th January 2021, 79% have occurred in people under 45 years of age; and 4% were aged 65 years and older. Incidence is high across all age groups, and while lower and rising more slowly in older age groups, incidence exceeds that seen in December 2020, and in most age groups is higher than at any time in the pandemic.
- The positivity rate in public health laboratories is markedly elevated (60%). The positivity rate in hospital laboratories (19%) is also exceptionally high, higher than at any point since April 2020 when it was 20-25%.
- From 29th December 2021 04th January 2022, there have been approximately 272,308 laboratory tests reported in community, private, and acute laboratories. The 7-day test positivity rate in the community has significantly increased from 17.4% at the last NPHET meeting to 60.5%.

- Test positivity is increasing across all age groups, with test positivity rates greater than 50% in those aged 5-54 years. Test positivity has also increased in those aged 65 years and older in recent weeks.
- The Test and Trace system is now operating at surge capacity and is under severe pressure. The
 demand for testing has been particularly high amongst those aged 19-44 years. Clinical
 prioritisation is in place to ensure that those most in need receive access first. The HSE has
 increased testing capacity to 650,000 tests per week. PCR testing capacity is at 300,000 per week
 and antigen testing capacity has increased to 350,000 per week.
- The online system for reporting antigen self-test results is available for any antigen user to report their results, whether part of an HSE programme or other members of the general public. All information gathered through this system is self-reported and not subject to validation. To date, 328,026 results have been entered with an average of 8,408 per day for the last 7 days. Currently, 80.5% of reported positive antigen results are confirmed cases on PCR testing, with an average of 6,161 cases per day for the last 7 days.
- According to the Contact Management Programme (CMP), from 27th December 2021 2nd January 2022, the total number of close contacts was 229,113, an increase of 123% on 102,754 in the previous week. The average number of cases managed per day increased from 9,200 to 18,367, an increase of 99% over the same time period.
- For close contacts created the week ending 19th December 2021, PCR Test 1 results were available at the time for 12,281 close contacts; 2,426 (19.8%) of these had a positive result. PCR Test 2 results were available for 2,274 close contacts, 407 (17.9%) of these had a positive result.
- The mean number of close contacts per case (including cases with zero close contacts) for the week ending 2nd January was 2.6, an increase from 2.4 the previous week (week ending 26th December). The mean number of close contacts per case (excluding cases with zero close contacts) for the week ending 2nd January was 3.3, an increase from 3.1 the previous week.
- There were 941 confirmed COVID-19 cases in hospital this morning, compared with 619 last week on 30th December, and 443 at the last NPHET meeting on 16th December.
- There have been 153 newly confirmed cases in hospital in the 24 hours preceding this morning.
 There has been an average of 139 newly confirmed cases in hospital per day over the last 7 days.
 According to the latest HSE data on hospitalisations and vaccinations, as of 29th December, only 49% of hospitalised COVID-19 cases were fully vaccinated.
- There are currently 90 confirmed cases in critical care as of this morning, compared with 88 last week on 30th December 2021. There were 6 new admissions to critical care in the 24 hours preceding this morning. According to HSE data as of 28th December 2021, only 40% of COVID-19 cases in ICU were fully vaccinated.
- As of 4th January, 219 patients were in receipt of non-invasive ventilation/Continuous Positive Airway Pressure (CPAP) or High-Flow Oxygen in non-critical care settings, of whom 100 patients were COVID-19 cases.
- The number of cases of hospital acquired infection continues to be of concern. There were 36 hospital acquired COVID-19 infections in the week ending 26th December 2021, compared to 45 in the week ending 19th December, and 17 in the week ending 12th December.
- There has been a significant increase in laboratory confirmed COVID-19 cases amongst hospital staff. There were 704 laboratory confirmed COVID-19 infections in hospital staff in the week ending 26th December 2021, compared to 269 in the week ending 19th December, and 179 in the week ending 12th December. As of 4th January 2022, there were over 6300 staff across acute hospitals and the National Ambulance Service absent due to COVID-19 (e.g. positive tests/symptoms, close contacts).
- As of 5th January 2022, there have been a total of 5,952 COVID-19 related deaths notified in Ireland. This is an increase of 40 notified deaths since the previous weekly update on 29th December 2021. To 5th January, 157 deaths had been notified which occurred in December 2021,

- 230 in November, 217 deaths in October and 179 in September. The number of deaths per day appears stable; notification of deaths may be delayed over the holiday period.
- Over the period 27th June to 4th December 2021, 253 out of 690 (36.7%) notified COVID-19 related deaths were in people who were not fully vaccinated (including those who had an epidemiological date less than 14 days after receiving all recommended doses of vaccine).
- As of 4th January 2022, S gene target failure (SGTF) data (a proxy for Omicron) indicate that approximately 96% of new cases in Ireland are due to the Omicron variant (based on laboratory specimen date of 2nd January); this compares with 27% at our last NPHET meeting on the 16th December 2021. As of 25th December 2021, 718 cases of Omicron have been confirmed through whole genome sequencing (WGS) in Ireland.
- Fourteen laboratory confirmed influenza cases, 12 influenza A (1 AH3 and 11 A not subtyped) and 2 influenza B, were notified to HPSC during week 51 2021. No laboratory confirmed influenza cases were notified during week 52 2021. Thirty-seven laboratory confirmed influenza cases have been notified during the 2021/2022 season (weeks 40-52 2021): 31 influenza A (25 influenza A-not subtyped and 6 influenza A(H3)) and 6 influenza B. There were 55 RSV notifications in week 52 2021, compared to 207 RSV notifications in week 51 2021. Influenza and RSV notifications data for weeks 51 and 52 should be interpreted with caution as reporting and testing levels are impacted over the Christmas and New Year holiday period. It is possible RSV notifications may increase in the following weeks.
- A range of mobility data suggest that mobility across a number of settings decreased significantly over the Christmas and New Year period.
- As of 5th January 2022, approximately 78% of those aged 60-64 years, 68% of those aged 50-54 years, and 49% of those aged 40-44 years have received an additional booster dose.

Outbreaks for week 52 (26^{th} December $2021 - 1^{st}$ January 2022) are based on those reported up to midnight on 1^{st} January 2022.

In week 52 there were a total of 44 COVID-19 outbreaks notified. Due to the extended Christmas weekend in week 52, and the surge in case numbers, there may be a delay in reporting of outbreaks to the national surveillance system (CIDR). Therefore, the number of outbreaks reported for week 52 may be an underestimate. In addition, due to a technical issue and reduced processing over the extended weekend, the processing time of case notifications on CIDR has increased.

Healthcare setting outbreaks:

- There were 7 new nursing home and 1 new community hospital/long-stay unit outbreak notified in week 52. The case range of these outbreaks was 1-17 cases. According to preliminary data for week 53 (week beginning 2nd January), there have been 19 nursing home outbreaks and 3 community hospital outbreaks notified to 5th January.
- There were 8 new acute hospital outbreaks notified in week 52, with a range of 2-5 cases.
 According to preliminary data, there have been 16 new hospital outbreaks notified in the epidemiological week beginning 2nd January.
- There were 22 new outbreaks reported in residential institution settings (12 in centres for disabilities, 2 in direct provision centres, 2 in mental health facilities, 2 in children's/TUSLA residential centres, 2 in homeless facilities and 3 in 'not specified' facilities) in week 52, with a range of 2-8 cases. According to the latest preliminary data for week 53 (week beginning 2nd January), there were 17 new residential institutions outbreaks notified to 5th January.
- There was 1 new outbreak in 'other healthcare services' in week 52.

Outbreaks associated with school children and childcare facilities:

- There was 1 outbreak newly reported in a childcare facility in week 52.
- There were 2 new outbreaks associated with schools notified in week 52 (1 in a primary school and 1 in a special education school), with a range of 0-4 cases.

The epidemiological profile of COVID-19 has continued to deteriorate since the NPHET last met on the 16th December 2021 and is giving ongoing cause for concern. The latest S-gene target failure data (a proxy for Omicron) indicate that approximately 96% of COVID-19 cases in Ireland are due to the Omicron variant. Disease incidence has continued to rapidly increase in Ireland, with recent daily case counts substantially exceeding the highest previously reported in the pandemic to date.

The average daily case count has increased five-fold since mid-December 2021. As of 5th January 2022, the national 14-day incidence was estimated at over 4,450 per 100,000 population, while the 5-day moving average was over 19,000 cases per day (these estimates are based on SARS-CoV-2 laboratory results uploaded to the HSE COVID Care Tracker). Given the 7-day cumulative incidence of 2,876 per 100,000 (2.9%), allowing for constraints on testing and undetected infections, the likely population prevalence of active SARS-CoV-2 infection is approximately 5.7%-9.6%; or between 1 in 10 and 1 in 20 of the population. Growth rate of cases is currently estimated at approximately +7% per day.

Disease incidence is significantly elevated across the country. Age-specific incidence trends should be considered indicative given current pressures on testing capacity and processing time on the Computerised Infectious Disease Reporting (CIDR) system. Incidence continues to increase across all age groups. Incidence in all age groups under 65 years of age is the highest recorded at any point in the pandemic, and for those aged 65 years and older incidence is approaching, and likely to exceed, the peak seen in January 2021. The test positivity rate in public health laboratories is markedly elevated at 60%, while it is also exceptionally high in hospital laboratories (19%), higher than at any point since April 2020 when it was 20-25%. The demand for testing is high amongst those aged 19-44 years. Test positivity is high and increasing across all age groups, including, of particular concern, those aged 65 years and older, the age group most vulnerable to severe health outcomes associated with COVID-19.

Both the total number of confirmed cases and the average number of newly confirmed cases per day in hospital are high and increasing (total cases in hospital at 941 as of 8am this morning, with the 7-day average of newly confirmed cases in hospital per day at 139). Growth rate of cases in hospital is at approximately 7% per day.

The number of confirmed cases in ICU is high but has remained relatively stable. The proportion of COVID-19 patients in ICU who are invasively ventilated has also remained relatively stable. Recent data indicate that just 49% and 40% of those in hospital and intensive care with COVID-19, respectively, had been fully vaccinated. It should also be noted that there continues to be substantial provision of advanced respiratory support to hospitalised patients outside the critical care setting. As of 4th January, 219 patients were in receipt of non-invasive ventilation/Continuous Positive Airway Pressure (CPAP) or High-Flow Oxygen in non-critical care settings, of whom 100 patients were COVID-19 cases.

The number of cases of hospital acquired infection remains a concern. Significant impact from COVID-19 on staffing levels is also being observed across all areas of the health and social care system. As of 4th January 2022, there were over 6,300 staff across acute hospitals and the National Ambulance Service absent due to COVID-19 (e.g. positive tests/symptoms, close contacts etc.).

COVID-19 mortality has remained relatively stable. It should be noted there has been a recent increase in outbreaks reported in settings with vulnerable populations and this is being closely monitored.

The current epidemiological assessment indicates that the recent increase in incidence and hospitalisation has not as yet translated into increased critical care admissions or mortality, with potential contributory factors including the age profile of recent cases, the protection conferred by immunity (both vaccine induced and natural) in preventing or delaying progression to severe disease, and lower intrinsic virulence of Omicron compared with previous variants.

In summary, the overall epidemiological situation in Ireland continues to give rise for concern, noting however, some initial positive indications in terms of markers of disease severity which will continue to be closely monitored over the coming days and weeks. This summary shows that the profile of the disease, over the past three weeks, is broadly in keeping with the modelling projections presented to the NPHET at its meeting of 16th December 2021. The NPHET agreed, therefore, with the exception of those outlined below, that the measures the Government has put in place until 30th January should be maintained until that date, and that no additional measures are indicated at this time.

On 2nd December 2021, the NPHET endorsed advice from HIQA which at that time concluded that the evidence did not support a population-level recommendation for the use of respirator masks by those who are at higher risk of severe infection from COVID-19 (while noting that that this did not preclude their use at an individual level).

Today, the NPHET further reviewed its advice on facemasks within the context of the Omicron variant. While emphasising that respirator and medical grade face masks must, in the first instance, be prioritised for use by healthcare workers and those in healthcare settings, and recognising that the HSE will need time to operationalise this advice, the NPHET recommends that:

- Guidance and messaging should clarify that:
 - all types of masks, including cloth masks, can significantly reduce community transmission if properly constructed, well fitted, and appropriately worn;
 - medical grade and respirator masks, if properly worn, offer greater protection than cloth masks;
 - o anyone who wishes to wear a medical grade or respirator mask instead of a cloth mask should do so, so long as whichever mask they choose is well-fitting and worn properly.
- The HSE should develop targeted communications in line with international models to provide appropriate information and clear messaging to communicate and promote adherence to the current public health guidance on facemasks.
- As an additional form of protection for the wearer, individuals in medically vulnerable cohorts and older age groups (those 60s years and over) are currently advised to wear a medical grade mask when in crowded outdoor spaces or confined indoor spaces, including on public transport and in retail and healthcare settings. Some of these people may prefer to wear a respirator mask. When properly fitted and worn, a respirator mask may provide a higher level of protection against inhaling virus that may be valuable for people at higher risk.
- Ideally a respirator mask or, alternatively, a medical grade mask (not a cloth mask) should be worn by anyone:
 - o who is a confirmed COVID-19 diagnosis during their infectious period, OR
 - o who has symptoms suggestive of COVID-19, OR
 - o who is a household contact of a confirmed COVID-19 case, OR
 - \circ visiting a healthcare setting or when visiting those who are vulnerable to COVID-19 in any setting.

The ECDC is expected to publish updated guidance on the public health management of cases and contacts in the coming days. This will be reviewed, and updated advice will be provided to you once we have had an opportunity to give it due consideration.

In addition, to further inform future decision making and allow for better interrogation and analysis of hospital admissions with COVID-19, a report will be prepared with input from the HSE and Department of Health in advance of the next NPHET meeting. This will allow for a better understanding of the severity of the Omicron variant, the impact of vaccination and boosters, and other important measures of the impact of COVID-19 on the health system.

COVID-19 vaccination has been a central pillar of the public health response to the pandemic and will remain a key component of the multi-layered approach in the management of the public health emergency response. While the current situation is dynamic and there are still a number of important uncertainties, we have the benefit of a year's data on COVID-19 vaccines, and it is timely to reassess our strategic priorities for COVID-19 immunisation in the near and medium term. In that context, it is my intention to write to the National Immunisation Advisory Committee (NIAC) in the coming days to seek their views on future likely requirements for COVID-19 vaccination.

The NPHET, of course, remains available to provide any further advice and recommendations that may be of assistance to you and Government in relation to ongoing decision-making processes in respect of the COVID-19 pandemic. In that regard, the NPHET intends to meet again on 20th January to give further consideration to, in addition to the usual agenda items, more detailed information on hospitalisation as referenced above and the approach to managing the pandemic in the weeks and months ahead on the assumption that the early indicators of Omicron transmission and impact are maintained.

As always, I would be happy to discuss further, should you wish.

Yours sincerely,

Dr Tony Holohan Chief Medical Officer

Chair of the COVID-19 National Public Health Emergency Team