Strategic Approach for the Management of COVID-19
Preparedness for Autumn/Winter 2022/2023
Contents

Introduction ....................................................................................................................... 3
Executive Summary ........................................................................................................... 5
Background ....................................................................................................................... 6
1. Lessons Learned from COVID-19 .............................................................................. 7
2. Testing, Tracing and Surveillance .............................................................................. 10
3. COVID-19 Vaccination ............................................................................................... 13
4. COVID-19 Therapeutics and Treatments ................................................................. 17
5. Non-Pharmaceutical Interventions .......................................................................... 20
6. Research and Innovation, and Horizon Scanning .................................................... 25
7. Communications and Community Engagement ...................................................... 27
8. Enhanced Response .................................................................................................... 29
APPENDIX I - Acronyms, Abbreviations and Initialisms ............................................. 35
Introduction

The COVID-19 pandemic has presented unprecedented challenges to people and governments around the world. The disease itself has had a significant impact on population health, in particular disadvantaged and vulnerable communities, tragically resulting in severe illness and loss of life. COVID-19 has also heavily impacted health and social care services globally, while the necessary public health measures taken over the past two and half years have socioeconomically and psychologically impacted individuals, families, and communities.

Throughout the pandemic, Ireland’s approach to the management of COVID-19 has been underpinned by our core national priorities of protecting the most vulnerable in society from the severe impacts of the disease, minimising the burden on the healthcare system, continuing to keep schools and childcare facilities open.

Our approach has been guided by core ethical principles: a duty to provide care, equity, solidarity, fairness, minimising harm, proportionality, reciprocity, and privacy.¹

The cornerstone of our approach, and a key element of its success, has been the principle of solidarity. Examples include: the resilience displayed by our frontline health and social care workers; the development of a multitude of cross-society initiatives, such as the Community Call initiative; and the high levels of support of the general public overall for public health advice/measures and vaccination/boosters.

Through the containment phase of the pandemic and as new threats emerged, Government, guided by the advice of the NPHET for COVID-19, acted quickly to introduce public health measures to protect our stated core priorities. The response then shifted to the mitigation phase, where the focus transitioned from regulation and population-wide restrictions to public health advice, personal judgement, and personal protective behaviours. As a society, we are learning to live with COVID-19.

However, it is important to remember that the pandemic is not over and there continues to be uncertainty regarding the future trajectory of the disease. Notwithstanding Ireland’s high level of vaccine-induced and naturally acquired population immunity, SARS-CoV-2 is likely to present a significant public health challenge for the foreseeable future.

The importance of ongoing vigilance in the context of the COVID-19 pandemic, and specifically in relation to the autumn/winter 2022/2023 period, has been signalled through international guidance and communications². Variants of SARS-CoV-2 (the virus that causes COVID-19) will

continue to emerge, and there remains a risk that some novel variants will possess properties that confer increased transmissibility, reduced susceptibility to available vaccines, resistance to therapeutics, or altered disease severity. As such, continued vigilance as to the potential impacts of COVID-19 will remain a core priority.

The autumn/winter period is traditionally a challenging time for our health and social services. Services typically operate under increased pressure due to the co-circulation of respiratory viruses such as influenza and respiratory syncytial virus (RSV). It is anticipated that COVID-19 will place a significant additional burden over the coming autumn/winter 2022/2023 period on these services. As such, it will be important that the HSE’s winter planning activities have due regard for COVID-19 within the context of the expected seasonal impacts from other respiratory viruses. It is also important that our health system is adequately prepared for any future challenges. This can be ensured by continuing to strengthen our public health, primary care, community, hospital, laboratory, and General Practitioner (GP) services.

In April 2022, the Minister for Health established the COVID-19 Advisory Group (CAG), to consider and advise on how best to maximise Ireland’s medium to long-term preparedness for future challenges posed by COVID-19. The recommendations of this group, with relevant World Health Organization (WHO), European Centre for Disease Prevention and Control (ECDC), and European Commission guidance, have informed this report, which sets out the Department of Health’s (DOH) strategic approach to the management of COVID-19 for autumn/winter 2022/2023.

The Office of the Chief Medical Officer will continue to closely monitor the epidemiological profile of the disease and remains available to provide any further advice and recommendations that may be of assistance to the Minister for Health and Government in relation to ongoing decision-making processes in respect of the pandemic.

Professor Breda Smyth
Interim Chief Medical Officer
Department of Health

26th September 2022
Executive Summary

This report sets out the Department of Health’s (DOH) strategic approach to the management of COVID-19 for the autumn/winter 2022/2023 period, with particular emphasis placed on preparedness and contingency planning.

The report has been informed by ongoing monitoring of the epidemiological situation, international guidance, ongoing engagement across the various functions of DOH and HSE, and also by the important work of the COVID-19 Advisory Group and the Public Health Report Expert Advisory Group.

The DOH’s strategic objectives for autumn/winter are presented thematically in the report as follows: lessons learned from COVID-19; testing, tracing, and surveillance; COVID-19 vaccination; therapeutics; non-pharmaceutical interventions; research and innovation and horizon scanning; and communications and community engagement.

The report also sets out an emergency response plan for autumn/winter 2022/2023 detailing contingency plans in place to ensure Ireland can appropriately escalate its COVID-19 response in the event of a new variant of concern that is a risk to population health with potential for high morbidity and mortality arising from infection. The emergency response plan covers key public health response domains, namely: surveillance, testing and contact tracing; vaccination; non-pharmaceutical interventions (NPIs); public health restrictive measures; communications; and cross-government strategic response structures.

The report has been drafted on the basis that we must continue to ensure our response is agile and flexible, with an ability to pivot rapidly and respond to any emerging threat.
Background

The National Public Health Emergency Team for COVID-19 (hereafter referred to as the ‘NPHET’) was established in the Department of Health (DOH) on 27th January 2020 with the Chief Medical Officer (CMO) as chair. The NPHET, which in the early phase of the pandemic was supported by eleven subgroups, met in plenary session over one hundred times and brought together approximately 40 experts from a range of sectors and disciplines across the health and social care services.

The NPHET performed a critical role in closely and continuously monitoring the evolving impact of COVID-19 on Ireland’s population, as well as the health service’s capacity, performance, and ability to respond. It provided national direction and expert public health advice to the Minister for Health and Government on the development and implementation of a cross-government response to COVID-19 in Ireland. The NPHET’s advice was informed by the epidemiological status of the disease in Ireland and internationally, modelling projections, international advice and guidance, evolving evidence and practice both nationally and internationally, and the overarching priority of limiting the impact on public health. Particular focus was placed on protecting the following three core priorities: the protection of the most vulnerable; the continued resumption of non-COVID health and social care services; and the need to protect the ongoing delivery of education and childcare.

In early 2022, Ireland underwent a planned transition from the containment phase of the pandemic to a phase focused on mitigation. In February 2022, the NPHET members proposed to stand the forum down. The Minister for Health accepted this proposal and in April 2022 established the COVID-19 Advisory Group to consider and advise on how best to maximise Ireland’s medium to long-term preparedness for future challenges posed by COVID-19.

In the course of its work, the COVID-19 Advisory Group has given due consideration to national and international evidence and the evolving epidemiological profile of COVID-19. The Group has also considered reports and information in the areas of surveillance, vaccination, therapeutics, national and international lessons learned, and non-pharmaceutical interventions including the use of face masks and ventilation.

The work and recommendations of the COVID-19 Advisory Group, relevant WHO and ECDC guidance, and the ongoing engagement across the various functions of the Department of Health and the Health Service Executive (HSE) have all informed this report, which outlines the Department of Health’s Strategic Approach to the management of COVID-19 for autumn/winter 2022/2023.
1. Lessons Learned from COVID-19

**Strategic objectives:**

- Continue to capture and apply lessons learned from the national and international COVID-19 response
- Ensure innovations implemented and gains achieved across the health and social care sectors during the ongoing response are identified, embedded, and replicated across the system where appropriate
- Strengthen international representation, participation and engagement with the European Health Union, WHO and other international fora to strengthen the response to future pandemics and other public health threats

The COVID-19 pandemic is ongoing, and much can be learned from the experience of the response to date, both nationally and internationally, to inform the ongoing response. The NPHET took an adaptive approach to COVID-19, aiming to review and learn from the experience of the response throughout. The Department of Health is continuing this adaptive approach in its leadership of the ongoing COVID-19 response.

More broadly, the pandemic has acted as a catalyst for transformative change in health systems globally. There is an opportunity to capture, systematise and embed lessons learned to improve the ongoing COVID-19 response as well as health systems’ resilience and to enhance the ability of states to respond effectively to future health crises.

We know that Ireland has performed comparatively well in response to COVID-19 on specific indicators, to date. For example, surges in hospitalisations were lower and of a shorter duration than those experienced by many European countries, and excess mortality was amongst the lowest in Europe\(^3\) and globally.\(^4\) Many elements of Ireland’s public health-led, whole-of-society response worked well. For example: digital innovations in healthcare including the use of Apps and telehealth; intersectoral collaboration between public health and other sectors including academia, government departments and voluntary organisations; clear and trusted communications; rapid legislation and regulation activity; and strong public engagement.

While acknowledging Ireland’s successes in responding to COVID-19, the importance of retaining and building on the positive elements of the response and learning from challenges is recognised. A particular emphasis is being placed on embedding learnings from the following key areas:

- System preparedness and emergency planning inclusive of surge capacities across the health system;
- Leadership and response management at both regional and national level;

---


• Health inequity;
• Workforce (skill mix, resilience & capacity);
• Data, information and communications technology (ICT), and analytics;
• Research, innovation & use of technology; and
• Communication.

A Public Health Reform Expert Advisory Group (PHREAG), commenced its work in January 2022 and was tasked by the Minister for Health and Government with: identifying learnings from the public health components of the response to the COVID-19 pandemic in Ireland and internationally with a view towards strengthening public health including health protection generally and future public health threat and pandemic preparedness specifically; identifying lessons from international best practice regarding reform and strengthening of other core public health functions, including the promotion of health and wellbeing, health intelligence and health service improvement; and examining and making recommendations regarding the public health delivery model. It is expected that the PHREAG will submit its report to the Minister for Health for consideration shortly. This completion of this work is important as the investments and institutions established nationally and internationally in response to COVID-19 will inform how future health crises are experienced and dealt with.  

There are a range of policies and health reforms that are already undergoing implementation to address some of the health system challenges identified during or exacerbated by the COVID-19 pandemic and response. These include the implementation of public health policy and strategy, including Healthy Ireland, the ongoing implementation of the recommendations of the Crowe Horwath Report including the reform underway to strengthen health protection and preparedness for health threats. Also, of relevance are other wider areas of policy and strategy currently being implemented, for example, the ongoing work with respect to a Health Systems Performance Assessment Framework and the Health Information Bill. The restructuring of acute and community services into six regional health areas (RHAs) under the HSE as part of Sláintecare is also envisaged to strengthen service delivery, in particular primary care and public health services.

Ireland’s response to COVID-19 has been supported by a strong cross-government COVID-19 oversight structure to ensure a public health-led, whole-of-society response. This whole-of-government approach involved expert public health advice informing cohesive decision-making, a partnership approach, and clarity of communications. Communications and behavioural science have been a core tenet informing and engaging the nation and were essential in securing support and adherence with public health measures.

Ireland’s response continues to be part of, and engaged with, the international response to COVID-19. Internationally, there are a range of initiatives underway to learn from and apply the lessons of COVID-19. At EU level, a package of measures is being implemented to strengthen the ‘European Health Union’. This includes council regulations being finalised to strengthen the

---

Figueras J et al. Strengthening health system resilience in the COVID-19 era. Eurohealth 2022. Available at: [https://apps.who.int/iris/handle/10665/351076](https://apps.who.int/iris/handle/10665/351076)
mandates of EMA (European Medicines Agency) and ECDC and a regulation on Serious Cross-Border Threats to Health. There is a newly established Directorate-General in the European Commission, the Health Emergency Preparedness and Response Authority (HERA), which aims to improve the EU’s ability to ensure the availability of medical countermeasures in the event of a crisis through investment in research, development, procurement, stockpiling and distribution of medical countermeasures. HERA is establishing a range of mechanisms and initiatives to engage member states, including the HERA Board on which the CMO is Ireland’s representative. At WHO level, the consideration of amendments to the International Health Regulations and an International Pandemics Treaty are underway.

The Department of Health will seek to fully engage with the EU and international agencies, including WHO, Organisation for Economic Co-operation and Development (OECD), and European bodies including HERA, EMA and ECDC, to ensure access to international expertise, practical mechanisms and supports for dealing with cross-border health threats and learning opportunities.
2. Testing, Tracing and Surveillance

**Strategic objectives:**
- Implement a sustainable model of SARS-CoV-2 testing and tracing
- Enhance integrated respiratory disease surveillance
- Integrate, expand, and enhance biostatistics and modelling capabilities within the health system

**CURRENT PUBLIC HEALTH ADVICE RELATING TO THE MANAGEMENT OF COVID-19**

The Interim Chief Medical Officer, officials from the Department of Health, the HSE, the Health Protection Surveillance Centre (HPSC), and the National Virus Reference Laboratory (NVRL) keep under review the public health advice for COVID-19 testing and tracing, having regard to the evolving epidemiological situation, the impact of the disease on healthcare utilisation and outcomes, the vaccination status of the population, ECDC guidance and other international evidence and guidance.

The public health rationale for testing, case finding and tracing of infection to reduce COVID-19 transmission is now focused on mitigation of the severe impacts of COVID-19 for those most vulnerable to the disease and those with risk factors who may benefit from specific interventions.

**SUSTAINABLE MODEL FOR TESTING AND TRACING**

The HSE is in the process of implementing changes approved by Government to move the testing programme towards a longer-term, sustainable model in which COVID-19 can be managed for public health and clinical purposes. COVID-19 will be managed in a similar manner to other endemic respiratory infectious diseases, mainly at primary care level, but underpinned by a robust surveillance system.

Based on the revised public health advice, COVID-19 testing will no longer be recommended for the general population who are well or with mild illness. Testing will occur based on a clinical assessment where a clinician requires the result to contribute to the diagnosis and management of an individual patient, or when deemed necessary by Public Health in relation to the management of an outbreak or specific public health risk. Contact tracing is being used to trace and intervene in pathways of transmission in individuals and settings where there is a risk of progression to serious disease.

The HSE is working towards moving to a primary care led swabbing service. This phased approach is key to the transition ensuring a level of resilience in the testing and tracing programme, including robust and enhanced surveillance. A key consideration in this process is the evolving disease profile.

The HSE has also developed emergency response plans, otherwise referred to as ‘enhanced response’, given the uncertainty about the future trajectory of the virus. In an emergency scenario, the HSE will roll out temporary testing centres across the country and an appropriately targeted contact tracing model will be stood up. The plan envisages scaling
capacity of up to 150,000 Polymerase Chain Reaction (PCR) tests per week by week 8 if required, with rapid deployment of large volumes of antigen tests during the activation phase to deliver high throughput testing. This is further detailed later in the document.

**ENHANCEMENTS TO INTEGRATED RESPIRATORY DISEASE SURVEILLANCE**

The Health Protection Surveillance Centre (HPSC) is Ireland’s national specialist centre for surveillance of some of the major infectious diseases and works with a wide range of surveillance partners to fulfil this function. The HPSC also collaborates with partners in Europe, including ECDC on many funded multi-country surveillance and operational research projects, and in partnership with national health protection bodies across Europe to strengthen and develop disease surveillance and early warning systems. The HPSC is also the WHO International Health Regulations (IHR) National Focal Point and the European Early Warning and Response System (EWRS) National Contact Point for communications on emerging infectious disease issues of public health concern.

Ongoing systematic collection, analysis, interpretation, and dissemination of SARS-CoV-2 epidemiological data continues to be essential for monitoring, planning, implementation, and evaluation of the response to SARS-CoV-2.

The same is true for influenza and other respiratory viruses (ORVs) which commonly result in seasonal epidemics and cause significant morbidity and mortality, particularly in at-risk groups each year. While the typical seasonal epidemics of influenza and ORVs were disrupted during the SARS-CoV-2, it is expected that typical seasonal transmission will resume.

The Government has approved a number of developments that will enhance public health surveillance systems to ensure effective monitoring and signalling of virus recurrence or new variants, including variants of concern. This includes enhancements to HPSC-led programmes including increasing GP sentinel surveillance volume and sites, surveillance of outbreaks, increasing the number of sites for severe acute respiratory infection (SARI) surveillance, intensive care unit (ICU) admission and deaths, increasing the volume of whole genome sequencing to ensure a sufficient sequencing volume to monitor circulating viruses and detect new viruses promptly, population surveillance (seroepidemiology and wastewater surveillance) as well as surveillance of vaccine uptake, impact and effectiveness.

**MODELLING CAPACITIES**

Since the establishment of the Irish Epidemiological Modelling Advisory Group (IEMAG) at the start of the pandemic, statistical and mathematical modelling support and advice has been provided to the CMO and the National Public Health Emergency Team (NPHET) for COVID-19 and informed the wider decision-making processes.

A permanent biostatistics and modelling unit within the HSPC was highlighted as a requirement during the pandemic

This biostatistical and modelling expertise must now be embedded within the public health system. To this end, a new Biostatistics and Modelling Unit (BMU) is now being established within the HPSC. This will integrate, expand, and enhance IEMAG’s work into a core HPSC
function in order to ensure that resilient modelling functions exist to inform Ireland's ongoing infectious disease and pandemic responses. Members from the IEMAG will work closely with the office of the CMO on the establishment of a small Scientific Advisory Group, which will support the transfer of the tools and technologies developed by IEMAG to the HPSC, and act as a standing advisory group to support the development of the new unit.
3. COVID-19 Vaccination

**Strategic objectives:**

- Continue to ensure awareness and encourage increased vaccine and booster uptake, particularly in vulnerable and hard to reach cohorts, through bespoke culturally appropriate communications
- Ensure the timely and efficient implementation of NIAC recommendations
- Ensure continued vaccine supply through international engagement and joint procurement agreements, as appropriate
- Implement a sustainable, equitable, and accessible model of vaccine delivery

The COVID-19 vaccination programme is the largest immunisation programme in the history of the State and has been a key enabler in the substantial resumption of economic and social life. More than 11.7m vaccine doses have been administered since the programme commenced in December 2020 (to 21st September 2022). Ireland’s COVID-19 vaccination programme has achieved one of the highest levels of uptake in Europe to date, with more than 96.9% of adults having received a primary vaccination regimen (or 84.43% of the eligible population over 5 years old) and 79.9% of adults having been administered a booster vaccine.

Figure 1. Total Population Vaccinated, aged over 5yrs old, as of 21st September 2022

---

* [Vaccinations | Ireland's COVID19 Data Hub (arcgis.com)](arcgis.com)
Recent NIAC Recommendations

The COVID-19 vaccination programme continues to be predicated upon independent, expert clinical advice provided by the National Immunisation Advisory Committee (NIAC), and the future sustainability of this high-quality advice must be ensured. In April and again in July 2022, the NIAC recommended additional boosters for certain at-risk groups, older persons, those with underlying conditions and for healthcare workers (HCWs). Despite this, uptake has still been slower for the most recent cohorts (when compared to the winter 2021 booster programme), reflecting a combination of COVID-19/vaccination fatigue, the summer holiday period, and a reduction in the public’s perceived risk of COVID-19 infection.

<table>
<thead>
<tr>
<th>Vaccination start date</th>
<th>2nd Booster Administered</th>
<th>% Eligible Population with 2nd Booster¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>85+</td>
<td>22 April</td>
<td>58.3k</td>
</tr>
<tr>
<td>80 - 84 yrs</td>
<td>22 April</td>
<td>67.1k</td>
</tr>
<tr>
<td>75 - 79 yrs</td>
<td>22 April</td>
<td>106.1k</td>
</tr>
<tr>
<td>70-74 yrs</td>
<td>22 April</td>
<td>128.1k</td>
</tr>
<tr>
<td>65 - 69 yrs</td>
<td>22 April</td>
<td>133.5k</td>
</tr>
<tr>
<td>60 - 64 yrs</td>
<td>15 Aug</td>
<td>58.4k</td>
</tr>
<tr>
<td>55 - 59 yrs</td>
<td>18 Aug</td>
<td>37.4k</td>
</tr>
<tr>
<td>50 - 54 yrs</td>
<td>25 Aug</td>
<td>26.4k</td>
</tr>
<tr>
<td>12-49 yrs medically vulnerable</td>
<td>01 Sep</td>
<td>5.5k</td>
</tr>
<tr>
<td>HCWs</td>
<td>01 Sep</td>
<td>17.9k</td>
</tr>
<tr>
<td>12 - 49 yrs resident in LTCF</td>
<td>01 Sep</td>
<td>342</td>
</tr>
<tr>
<td>Immunocompromised</td>
<td>01 Sep</td>
<td>18k</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>7.3k</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>664.7k</td>
</tr>
</tbody>
</table>

¹ % Eligible population with a second booster is calculated using the population of the cohort who received their first booster minus those who are ineligible due to the interval since their last Covid-19 infection or first booster. Therefore, population figures may increase as more come forward for first boosters and/or become eligible following the lapse of the interval from infection.
From October, anyone who is eligible for both a flu vaccine and a COVID-19 booster vaccine can receive them at the same time from participating GPs and pharmacies, so long as they are at least four months since their last COVID-19 vaccine or infection. Many over 65s and other immunocompromised cohorts who got their second booster in early summer, will become eligible for their 3rd booster again from October onwards, enabling them to align their winter flu and COVID vaccinations.

Adapted bivalent vaccines based upon the original Wuhan and Omicron strains of the disease have recently been the subject of positive recommendations by the European Medicines Agency and the NIAC. These bivalent vaccines will form the backbone of Ireland’s autumn to winter booster vaccination campaigns, with bivalent booster vaccines being deployed from early October.

**EU Vaccine Procurement Strategy**

Ireland’s COVID-19 vaccine procurement success is due, in large part, to its participation in the EU’s Vaccine Strategy which has served to support the development and production of vaccines across a range of technological platforms. In particular, this has allowed Ireland to secure access to Messenger Ribonucleic Acid (mRNA) vaccines, providing for a greater degree of flexibility with regard to the adaptation of vaccine booster doses to the emergence of new strains of COVID-19.

**Vaccination Programme: Sustainability and Operating model**

Given the continued uncertainties (regarding timing of future waves, significant variant mutations, and waning immunity), the vaccination programme must continue to retain the flexibility and agility to rapidly respond to changes in clinical advice. It has also been necessary for the programme to transition to a more sustainable model that can operate with society fully open, without displacing other healthcare, and also deal with new challenges (such as a reduction in risk perception). In 2022, the programme is transitioning to a proximity-based model with a view to maximising uptake by ensuring that vaccination is available locally for service users. General Practice surgeries and community pharmacies will replace Vaccination Centres (VCs) as the primary vaccination channels, with more than 50% of doses to be administered through these channels going forward. VCs are now operating on a scaled back basis, with fifteen fixed vaccination centres operating across the country. These fifteen fixed vaccination centres are focused on large population areas and will be supported by temporary or pop-up type facilities to provide more localised access to the service. Seven mobile VCs will also be used to target low-uptake areas and difficult to reach communities. The core vaccination programme team will also be put on a sustainable footing, ensuring resilience by retaining/recruiting key skills, capabilities across operations, the National Immunisation Office, ICT, logistics, and Primary Care. The vaccination programme model has been designed to operate in harmony with the provision of non-COVID-19 healthcare while society remains fully open.

Investments are also being made in the ICT capabilities to facilitate an aligned flu and COVID-19 vaccination programme and reduce the administrative overhead in GPs/Pharmacy. The
programme will also continue to maintain a hedged COVID-19 vaccine portfolio, to ensure we can respond to new variants and technologies (e.g. intranasal) as quickly as possible. Through Ireland’s participation at EU Vaccine Steering Board, the programme has secured access to adapted vaccines which will support the effectiveness of our response.

In the event that further vaccination is advised by the NIAC, the vaccination programme is positioned to respond, and the revised operating model is capable of vaccinating/boosting (up to) the entire eligible population (4.1 million) if deemed clinically required, and assuming continued security of effective vaccine supply.

**Promoting Vaccine Uptake**

A revised communications strategy to support the autumn/winter 2022/2023 vaccination programme is required. This revised vaccine communications strategy, having considered recent behavioural analysis, will emphasise that the disease continues to present an ongoing risk, that infection acquired immunity alone does not offer optimal protection, and that immunity may wane over time.

- There will be a need to ensure renewed public awareness of the clear evidence that vaccination is key to reducing disease severity.
- Enhanced communications encouraging those eligible for primary and booster doses (first, second, and third) to avail of vaccination in order to confer optimal protection against the risk of infection and long-term consequences of infection.
- A particular focus is required for cohorts with low uptake including older persons and vulnerable groups who are at higher risk of severe disease.
- Communications strategies must seek to reduce vaccine hesitancy and to maintain confidence in all vaccines currently available.
- Ongoing evaluation of the recommended vaccination programme for autumn/winter 2022/23 is required to enable a review of the uptake and the societal and HCW response to the introduction to the integrated COVID-19/influenza vaccination programme.
4. COVID-19 Therapeutics and Treatments

**Strategic objectives:**
- Promote and support the use of COVID-19 therapeutics through enhanced communications and educational supports
- Continued review of antiviral therapies with a view to optimising their use in protecting those most at risk of severe outcomes
- Support medical leaders in championing the timely use of therapeutics

The focus of the current pandemic response remains the mitigation of the severe impacts of COVID-19 for those most vulnerable to the disease and those with risk factors who may benefit from specific interventions. COVID-19 therapeutics are an additional tool now available for the treatment of eligible COVID-19 patients, and it is essential that their use is appropriately promoted and that treatments are widely and readily accessible in order to reduce progression to severe illness and hospitalisation, thereby protecting patients and staff, and preserving service delivery capacity.

The National Therapeutics Advisory Group (TAG), established within the HSE in December 2021, recommended the procurement of Paxlovid (nirmatrelvir-ritonavir), Lagevrio (molnupiravir) and Xevudy (sotrovimab) for treatment of COVID-19 in Ireland, and also developed the care and administration pathways to support their use.

As the necessary pathways for the supply and administration of these novel treatments have now been implemented, it is timely to move the project to a business-as-usual footing, and as such the HSE has transferred oversight and management of COVID-19 therapeutics to the Medicines Management Programme (MMP).

**It is essential that there is ongoing monitoring and evaluation of emerging therapeutic treatments, and that the effectiveness of existing treatments are kept under continuous review, including with respect to potential antiviral resistance.** The MMP will continue to proactively monitor and review data as it emerges and, including advice from the HSE Infectious Disease Programme, will take the necessary steps to provide the best possible advice and protection to those at high risk from COVID-19.

**Education and communication are an important part of promoting the use of COVID-19 therapeutics by health professionals (particularly in general practice) and to raise awareness amongst the general public, focusing on eligible sub-groups of the population who are at risk of severe health outcomes from COVID-19 and who would be most likely to benefit from timely administration of such therapeutics.**

It is important that Ireland continues to participate in EU joint procurement frameworks to continue to enable access to emerging antivirals, and antiviral monoclonal antibodies, strengthening purchasing power allowing for better contractual terms and economies of scale.
Paxlovid (nirmatrelvir – ritonavir) and Xevudy (sotrovimab) have both been available for use in the Irish health care system since early April 2022 and are approved for the treatment of patients with mild to moderate COVID-19 who are at risk of progression to severe disease and hospitalisation.

**Paxlovid (Nirmatrelvir – Ritonavir)**
Paxlovid (nirmatrelvir – ritonavir) is presently considered effective against all known extant COVID-19 variants and WHO published a strong recommendation for its use, expressing the view that the benefits of treating those patients most at risk outweighs the harm. The strong recommendation in favour does not apply to pregnant women, children, or those with possible serious drug interactions. There is also emerging evidence supporting its use in at risk individuals.

As of close of business on 13th September 2022, a total of 1,239 Paxlovid prescriptions had been notified to the HSE-Primary Care Reimbursement Service (PCRS) based on the current available data. Approximately 82% of these prescriptions were generated in the community setting, while 18% were generated in the hospital setting for dispensing in the community. Use of Paxlovid in Ireland has been much lower than would be expected to date relative to recent and current epidemiological experience and it has not been aligned with the proactive usage seen in other countries. As we approach the autumn/winter season it is essential that measures are now taken to promote further use to prevent progression to severe illness and hospitalisation.

- It is also important that the HSE review existing supply and care pathways to ensure accessibility and delivery of treatment is as efficient as possible.
- Ongoing engagement with GPs, hospitals, and Long-term Residential Care Facilities (LTRCFs) will be essential to promote further use in Ireland and to ensure they have the required knowledge, access, and confidence to prescribe treatment where appropriate.
- Appropriate mechanism should also be introduced to closely monitor uptake, effectiveness of communication, and to review and address any potential barriers impeding uptake.

**Xevudy (Sotrovimab)**
Xevudy (sotrovimab), a neutralising monoclonal antibody, demonstrated strong results in treating COVID-19 prior to the emergence of the BA.2 variant, but unfortunately its effectiveness against emerging variants remains under review since showing reduced effectiveness against BA.2 and BA.5. It is too early to reach any conclusions regarding the efficacy of Xevudy against emerging and future variants. This remains under consideration, and a rapid review has been requested from the National Centre for Pharmaco-Economics (NCPE) by the HSE in this regard.
Post COVID/Long COVID
The HSE has developed an interim Model of Care for Post COVID/Long COVID. Informed by continued monitoring of demand, this service will continue to be developed and rolled out across health care settings to ensure provision of a national service for those suffering from Post Covid/Long COVID. As the clinical understanding of this condition continues to evolve, the review of expert guidance as it emerges will be required to update the interim Model of Care to reflect best practice and ensure an effective service, with a health workforce suitable upskilled in the recognition and management of the Post COVID/Long COVID conditions, in particular in primary care.
5. Non-Pharmaceutical Interventions

**Strategic objectives:**
- Ensure public health advice is proportionate to the risk posed and reflects the prevailing epidemiological profile of the disease
- Promote the continued basic preventative behaviours, including in relation to self-isolation when symptomatic, observing good respiratory and hand hygiene, physical distancing and mask wearing when appropriate
- Promote and encourage the increased wearing of face masks during winter months based on individual risk assessment and in the settings in which mask wearing is currently recommended
- Highlight the continued importance of ventilation and air filtration as a key element of the broader public health advice
- Reinforce and optimise the application of existing guidance and communications regarding mitigation measures as appropriate to each sector
- Ensure appropriate Infection Prevention and Control guidance is in place and its implementation supported across health and social care settings

While the advent of effective vaccination is a major advance in reducing the harm associated with COVID-19, the fundamental principles of good respiratory and hand hygiene, physical distancing and mask wearing are still important aspects of protecting ourselves from acquiring COVID-19 and ORVs. Embedding individual and collective personal behaviours to mitigate against COVID-19 and other respiratory infections remains an important element of our response, particularly during the approaching autumn and winter months when more activities will move indoors, facilitating increased opportunity for respiratory viruses such as SARS-CoV-2 and influenza to transmit.

**Individual Protective Measures**

As per current key public health advice as follows:
- Any individual who has symptoms of COVID-19 or other viral respiratory tract infection should self-isolate until 48 hours after symptoms have substantially or fully resolved.
- Any individual who has been diagnosed with COVID-19 should follow current guidance (that is self-isolate for 7 days from date of onset of symptoms, or if asymptomatic, from the date of their first positive test. Exit from this period after day 7 is on the basis that symptoms have substantially improved or fully resolved for the final two of those seven days). Additional protective measures for those who have exited isolation at home after day 7 (up to day 10) are advised. The HSE is currently undertaking an evidence review with respect to the advised period of isolation.
- 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.
- When meeting indoors, avoid poorly ventilated spaces and keep windows open.

However, it is important to note that the public health advice in place currently is based on the present epidemiological profile, the trajectory of COVID-19 and the current point of the transition
in the public health management of the disease in Ireland. All public health advice remains under ongoing review. While specific rigidly defined criteria and thresholds to reintroduce population-wide mandated NPIs, such as mask-wearing are not envisaged, any potential future reintroduction of population-wide mandated NPIs will include a point-in-time assessment and take account of all relevant factors and be proportionate to the risk at the time.

This will take a risk-based approach and be guided by advice from the Office of the CMO. Any future change in public health advice on the individual protective measures will continue to be clearly communicated to the general public.

**Face Masks & Coverings**

Mask wearing is currently 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. The use of FFP2 masks is also an option for vulnerable individuals, their healthcare provider will be best placed to discuss what might be most appropriate for their particular case.

If required, the introduction of mask mandates in certain settings (e.g. transport and healthcare) will involve a point-in-time assessment of a constellation of indicators with due consideration of the personal, ethical and public health perspectives. Any such mandate will be pursued in a proportionate manner, will be the least intrusive measure to achieve the identified legitimate public health goal(s) and will be of limited duration.

**Ventilation and Air Filtration**

Ventilation forms an important component of the overall layered response required to reduce the risk of transmission. The appreciation of the role of ventilation has evolved in the context of developing experience and evidence; guidance, and training.

Encouraging and supporting further uptake and proper implementation of guidance on ventilation and air filtration across sectors remains a key requirement to ensure the positive impact that ventilation and air filtration may have on reducing transmission of SARS-CoV-2 is fully realised. Enhanced communications, education and informational supports will be crucial in achieving this.

A general public information campaign explaining why ventilation is important linked to visualisations of how the virus transmits may be particularly useful. Public safety guidance and communications should also provide clarity on types of settings and activities where additional consideration should be given to ventilation and air filtration.

---

7 New campaign to 'Stop COVID-19 hanging around' - GOV.UK (www.gov.uk); New film shows importance of ventilation to reduce spread of COVID-19 - GOV.UK (www.gov.uk)
These include spaces where multiple people share the air in the same space (vehicles, gyms, crowded spaces, meeting rooms, classrooms and lecture halls etc.) or have many sequential occupants (such as public bathrooms) and buildings where exercise/sporting activities are taking place (gyms, sports halls etc). Behavioural science will be key in increasing understanding, compliance, and effective responses in this regard. Targeted communications highlighting the specific importance of ventilation and air filtration in multi-occupant settings and environments, with a specific focus on nursing homes and other care facilities and the practical steps that can be taken to improve ventilation and air filtration in these settings.

Additionally, government departments should consider how best to establish sector specific pathways to support the appropriate assessment of ventilation, what to do if deficiencies are identified and how to access technical support for improvements to ventilation. This is especially important for employers and others who have no access to specialist Health and Safety or Engineering expertise. The Department of Enterprise, Trade and Employment and the Health and Safety Authority (HSA) have developed sectoral guidance in this respect, as have the Department of Education.

**Sectoral protective measures (non-health)**

During the pandemic all sectors have developed, adapted, and implemented guidance aimed at reducing transmission of COVID-19 (e.g. staying away from work and events if symptomatic, promotion of appropriate hand and respiratory hygiene amongst staff and service users/clients, physical distancing and mask wearing where appropriate, and adequate ventilation etc.). As appropriate to each sector, implementation and communication of such mitigation measures should be reinforced and optimised.

**Infection Prevention and Control in Health and Social Care Settings**

Notwithstanding the advent of effective vaccination for COVID-19, the fundamental principles of basic infection prevention and control (IPC) are still a key part of the defences we have for protecting ourselves, patients and HCWs from acquiring this disease.

Implementation of the current guidance on infection prevention and control (IPC) in acute hospitals and residential care settings which has been developed and regularly updated by the HSE Antimicrobial Resistance and Infection Control Team (AMRIC) continues to be of critical importance in protecting patients and staff in such settings.

Ongoing review will be required to ensure that the IPC measures in place are optimal and in line with the evolving disease epidemiology. This should not only take account of the risk posed but also the impact such measures can have on the overall provision of care.

---

[https://www.hsa.ie/eng/topics/ventilation/](https://www.hsa.ie/eng/topics/ventilation/)

In this regard, the HSE are currently updating IPC guidance documents to reflect the current requirements in line with the prevailing epidemiological profile of the disease.

Experience in Other Jurisdictions

As of August 2022, based on a Health Information and Quality Authority (HIQA) assessment of 21 countries, 10 countries (Austria, Belgium, France, Germany, Italy, the Netherlands, Portugal, Spain, Australia and New Zealand) have implemented measures or recommendations around the use of face coverings. A number of these countries require face coverings to be worn on public transport, and or in medical practices and facilities (such as hospitals, pharmacies) and settings with vulnerable populations (such as nursing homes and retirement communities), however some countries have recently indicated their intention to allow mandates to expire or have already done so.

In a minority of other countries examined in the HIQA review (Denmark, Germany, Norway and Scotland) broad COVID-19 public health frameworks are in place that describe graded categories of national public health responses that can be implemented if necessary. These frameworks include the introduction of a face covering requirement for public indoor settings and on public transport, when necessary.

International guidance (ECDC & WHO)

WHO\textsuperscript{10} and ECDC\textsuperscript{11} have published guidance in relation to NPIs. Both WHO and ECDC have advised that countries need to assess the effectiveness, cost-effectiveness, and social acceptability of the range of NPIs implemented during the COVID-19 pandemic to inform future decision-making in response to enhanced viral circulation or outbreaks. WHO guidance in particular places a strong emphasis on the use of multi-source surveillance to assess the effectiveness of current NPI measures before strengthening or expanding existing NPIs or introducing new measures. In Ireland, public health advice in relation to NPIs, including mask wearing, continues to be informed by international guidance as well as the evolving epidemiological profile, and is more broadly premised upon a cultural shift towards embedding individual and collective personal behaviours to mitigate against COVID-19 and other respiratory infections.

COVID-19 and Travel

On 6\textsuperscript{th} March 2022, the remaining mandatory COVID-19 measures applying to international travellers to Ireland were lifted. Travellers to Ireland do not have to complete a passenger locator form, evidence their health status (proof of vaccination or recovery) or meet any testing or quarantine requirements. Public health guidance currently advises non-pharmaceutical


interventions for any traveller to Ireland who develops COVID-19 symptoms after arrival. Such individuals are advised to follow the HSE guidance in relation to isolation and testing.

The international epidemiological situation is kept under review by Irish authorities to inform any necessary public health guidance for travellers arriving from overseas. While the COVID-19 pandemic and its potential impacts continue to be monitored, there are presently no plans in Ireland to review the current approach to travel.

**DIGITAL COVID CERTIFICATES**
The Digital COVID Certificate (DCC) is a standardised record of a medical event. These certificates are issued for vaccination, recovery, and test results. EU regulations underpinning the DCC have been extended in duration until 30th June 2023. While Digital COVID Certificates are no longer required when travelling to Ireland, the certificates will continue to be issued as proof of a medical event in keeping with EU Regulation 2021/953.
6. Research and Innovation, and Horizon Scanning

**Strategic objectives:**
- Maximise opportunities from the EU’s Health Emergency Preparedness and Response Authority (HERA), and other international fora
- Support national research to further bolster the COVID-19 response, and pandemic and health threat preparedness
- Conduct Horizon Scanning, to ensure new technologies, practices and interventions are appropriately integrated into the public health response to COVID-19 and other health threats

Building on the lessons learned from COVID-19, it will be important for Ireland to continue to strengthen its international representation, participation and engagement. Ireland should continue to fully engage with the EU and international agencies including WHO, OECD, and European bodies including HERA, EMA and ECDC to ensure access to international expertise, learning opportunities, mechanisms and supports for dealing with cross-border health threats. This participation will enable supports for research, innovation and horizon scanning. Additionally, it is important that Ireland participates and maintains a presence in the EU multinational clinical trials for possible new COVID-19 therapeutics and vaccines and continues to learn from and contribute to cutting-edge international research.

Ireland is currently actively engaging with the EU’s Health Emergency Preparedness and Response Authority (HERA), a newly established Directorate-General in the European Commission. One of its aims is to improve the EU’s ability to ensure the availability of medical countermeasures in the event of a crisis through investment in research, development, procurement, stockpiling and distribution of medical countermeasures. Under HERA’s 2022 Work Plan, EUR €1.3bn of EU funds are identified for work aligned with HERA’s objectives. This budget is largely drawn from existing programmes, specifically Horizon Europe, EU4Health and rescEU. Some of this funding is allocated to the COVID-19 response and some is targeted towards addressing a wider range of public health threats. The Department of Health is leading Ireland’s participation in HERA and is communicating and facilitating opportunities for Irish stakeholders to participate in HERA’s governance structures, networks, committees, and activities—including ensuring access to funding, training and recruitment opportunities.

To date, Ireland has been an active contributor to COVID-19 research and secured significant EU funding across a number of research calls. Understanding population health and responses to interventions in a time of a public health emergency within the national context is imperative.

**A mechanism to ensure a co-ordinated approach across agencies to identify and fund research priorities during a significant national public health emergency is required.** Furthermore, it will be important that new technologies, practices and interventions are appropriately integrated into the Irish public health response should they emerge. To this end, the COVID-19 Advisory Group, in line with its terms of reference, will reorientate its focus
to continue to consider new technologies, practices and interventions that are under current and active development and consideration internationally.
7. Communications and Community Engagement

**Strategic objectives**

- Support a cultural shift towards embedding individual and collective personal behaviours around the public health advice to mitigate against COVID-19 and other respiratory viruses (ORV)
- Encourage the uptake of the COVID-19 vaccines and boosters through tailored risk communication materials and tools and ongoing community engagement to ensure maximal uptake among diverse population groups with a particular emphasis on marginalised groups
- Ensure the appropriate resources are in place to respond with communication tools to promote public health messages if local or national surges of disease re-occur
- Encourage people who are still very concerned about COVID-19 to safely resume their former lives at a pace that is comfortable to them

As guided by the WHO in managing a pandemic, effective risk communication and community engagement with the public health advice is essential to a nation’s emergency response. Two and a half years into the pandemic, the Irish public has acted on the public health advice, effectively suppressing multiple waves of the virus and wholeheartedly embracing vaccination.

A significant portion of the population have been infected, with data published by the HPSC based on Irish Blood Transfusion Service (IBTS) blood clinic samples indicating that approximately 82% have evidence of prior infection (sample period 28 August to 3 September 2022 – based on sampling from blood donors aged 18-79 years)\(^\text{12}\). As a result of this, the level of worry associated with COVID-19 has diminished. The July Social Activity Measure behavioural (SAM) study\(^\text{13}\) shows the level of worry at its lowest, with people now more worried about the economy than they are about catching COVID-19 themselves. Six in ten adults reported rarely or never engaging in mitigative behaviours.

We are beginning to see declining uptake in COVID-19 booster vaccines. Where 99% of those aged 65 years and older came forward for their first booster vaccine, to date less than 70% of this cohort have come forward for their second booster (noting that some will not yet be eligible due to recent infection or vaccination). Research has shown that as perceived risk from the virus drops, so too does the urgency to get vaccinated. People find it easy to forget that others are still at risk from COVID-19 and other viruses. Those who are still at risk feel left behind and that the cohesion and support they felt through the early days of the pandemic has waned.

In the coming weeks and months risk communication and community engagement will focus on:

- Providing clear guidance and communication with the public on the evolving disease profile and supporting a cultural shift towards embedding individual and

\(^{12}\) https://seroepi-hpscireland.hub.arcgis.com/

\(^{13}\) https://www.gov.ie/en/collection/a7ee4-see-the-results-of-the-social-activity-measure-behavioural-study/
collective personal behaviours to mitigate against COVID-19 and other respiratory infections.

- Reinforcing the importance of personal protective behaviours with a particular focus on staying at home when symptomatic, mask wearing and hand and respiratory hygiene.
- Re-enforcing the benefit of vaccination and renewing efforts to engage the unvaccinated to get their primary vaccination and booster dose.
- Encouraging people to come forward for their COVID-19 booster and flu vaccine once they become eligible for same. Given the decline in the level of worry associated with COVID-19, this campaign will explain why it is important that everyone comes forward for their vaccine booster when called and how to access it, while also addressing vaccine hesitancy, fatigue and misinformation.
- Utilising the voice of HCWs as a highly trusted source of information to the public, develop and implement an enhanced role for HCWs within communication chains to encourage vaccination uptake and other protective behaviours.
- Leveraging behavioural science with a view to improving adherence to public health advice and encouraging vaccine uptake.
### 8. Enhanced Response

**Strategic objectives**

- Ensure Ireland can respond appropriately and rapidly in the event of a new variant of concern that is a risk to population health with potential for high morbidity and mortality arising from infection, including engaging with the preparation of contingency legislation to support the implementation of public health measures, if required.
- Ensure the necessary enhanced and contingency plans are in place to support the rapid and appropriate escalation of COVID-19 management responses, should it be required.
- Enable coordinated rapid deployment of intensified risk communication and community engagement with the general public, government departments and other relevant sectors in the event of a public health emergency arising.

Since WHO’s declaration of COVID-19 as a pandemic in March 2020, Ireland’s response to COVID-19 has been supported by a strong cross-Government COVID-19 oversight structure to ensure a public health-led, whole-of-society approach to the COVID-19 response. This whole-of-government approach involved expert public health advice informing cohesive decision-making, a partnership approach, and clarity of communications. The cross-government approach should be maintained, and necessary steps be taken to ensure the most appropriate pandemic response structures can be rapidly mobilised to coordinate the response in the event of a variant of concern that poses a significant public health threat. The whole-of-government response must also incorporate resource and capacity requirements outside the health sector and continued interdepartmental communication, co-ordination and support across multiple domains.

It is possible that Ireland may experience further substantial infection surges that present a significant challenge to population health and the wider health and social care system as a result of a new emergent variant of concern. Therefore, it is important to retain a focus on the ongoing strengthening of health system capacity across the spectrum of public health, primary care, community, hospital, laboratory, and GP services to ensure the system is adequately prepared for future surges in activity over the coming period. In addition, the following are recommended:

- Appropriate prioritisation and delivery of care in the instance of a new emergent threat whilst mitigating risk in health and social care settings should be considered.
- Additionally, it is recommended that a prioritisation plan is developed by the HSE for the appropriate allocation and prescription of COVID-19 therapeutics / vaccinations, in the event that rising case numbers result in a demand for treatment/vaccination that exceeds available supply.
- Finally, a continued focus on promoting workforce resilience, with particular emphasis on worker wellbeing, and training across a broad range of staff skillsets will be required.
To enable an appropriate response to a significant surge, variant of concern of COVID-19 or another viral pathogen that poses an increased risk of morbidity or mortality, the HSE has developed plans to respond to a surge in demand for testing and tracing with NAS being called on to provide community swabbing. In the event of it being necessary, the HSE has also developed Emergency Response Plans which can be triggered to deliver higher levels of mass testing if required, these are outlined below.
<table>
<thead>
<tr>
<th>PUBLIC HEALTH MEASURES</th>
<th>CURRENT LEVEL OF MANAGEMENT</th>
<th>ESCALATION OF MANAGEMENT*</th>
</tr>
</thead>
</table>
| SURVEILLANCE, TESTING & CONTACT TRACING | • Based on public health advice, PCR testing is currently recommended for a number of population groups.  
• During Autumn 2022, as part of the HSE transition plans, it is intended that COVID-19 testing will no longer be recommended for the general population and will be based on clinical assessment by GPs for the diagnosis and management of individual patients. | • Temporary testing centres will be stood up across the country with capacity to deliver up to 150,000 PCR tests per week, and an appropriately targeted contact tracing model will also be put in place, along with deployment of rapid antigen tests. |
| VACCINATION | • A proximity-based model is now in place (underpinned by GP and Pharmacy services and a scaled down vaccination centre infrastructure).  
• Current NIAC advice being implemented for Autumn/Winter, including boosters for certain at risk groups, older persons, those with underlying conditions, and for healthcare workers. | • In the event that further vaccination is advised by the NIAC, the vaccination programme is positioned to respond with a revised operating model and is capable of vaccinating (up to) the entire eligible population if deemed clinically required. |
| NONPHARMACEUTICAL INTERVENTIONS (NPIs) | • Face masks/coverings recommended on public transport and in healthcare settings.  
• A range of personal protective measures continue to be recommended (e.g. hand/respiratory hygiene and staying at home when symptomatic).  
• Mask wearing is also advised based on individual risk assessment.  
• Sectors continue to implement NPIs as appropriate to each sector.  
• Significant enhancement of communication on ventilation and air filtration, including necessary guidance and supports. | • Consideration to be given to the reintroduction of a facemask mandate for specified settings.  
Consideration to be given to introducing additional NPI measures, if required. |
| PUBLIC HEALTH RESTRICTIVE MEASURES | • None in place (all remaining public health restrictions were removed from 1st April 2022). | • Potential reintroduction of public health restrictive measures with due regard to the vaccination programme, the ethical decision-making framework, lessons learned to date, with contingency legislation, to support implementation if required. |
| COMMUNICATIONS | • Ongoing communications to the public on the status of the disease, and supporting the adoption of personal behaviours to mitigate against COVID-19 and other respiratory infections, including vaccination, staying home when symptomatic, hand sanitisation, ventilation etc… | • PR campaign communicating disease status and the updated public health advice led by public health experts, along with increased advertising deployed across traditional and social media encouraging adoption of all protective behaviours, with a particular emphasis on vaccination and staying home while symptomatic.  
• Rapid standup of Cross-Government emergency communication structures to amplify public health advice. |
| CROSS-GOVERNMENT STRATEGIC RESPONSE STRUCTURES | • Cross-Government strategic response structures currently stood down. | • Rapid standup of Cross-Government oversight structures to support a public health-led, whole-of-society approach to the COVID-19 response. |

* E.g. variant with significant immune escape that increases disease severity
**SURVEILLANCE**

The transition to a sustainable and enhanced disease surveillance model outlined above will allow for improved identification, monitoring and public health responses to viral pathogens as they occur.

In broad terms, the surveillance model comprises the following elements:
- Expansion and strengthening of the GP sentinel surveillance;
- Expansion and strengthening of Severe Acute Respiratory Infection (SARI) surveillance;
- Establishment of a Biostatistics and Modelling Unit (BMU) at HPSC; and
- Strengthening of other surveillance systems including wastewater and serosurveillance that support COVID-19 surveillance.

The GP-led testing model will be complemented by comprehensive surveillance systems led by HPSC. This will include the ongoing systematic collection, analysis, interpretation and dissemination of SARS-CoV-2 epidemiological data which remain essential for planning, implementation, and evaluation of the response to the virus.

**TEST AND TRACE**

Given the continuing uncertainty in relation to the virus, to enable an appropriate response to a variant of concern of COVID-19 or another viral pathogen that poses an increased risk of morbidity or mortality, a surge plan and an Emergency Response Plan have been developed to ensure the Test and Trace system can be re-activated to higher levels of testing and contact tracing beyond the GP and surveillance model, if required. It is recommended that plans are resilience tested and prepared for immediate implementation should the need arise.

**Emergency Response Plan**

The HSE’s Emergency Response Plan provides for a rollout of temporary testing centres across the country and establishment of an appropriately targeted contact tracing model. The plan envisages testing capacity of up to 100,000 PCR tests per week available by week 3 and up to 150,000 PCR tests per week by week 8 if required, across community and acute hospital testing.

If the need arises to reintroduce community testing, the National Ambulance Service (NAS) will be deployed to establish swabbing centres at locations around the country, in sites to be agreed. If additional capacity beyond that which can be provided by NAS is required, the HSE has developed plans to ensure NAS resources can be supplemented by HSE staff and private providers to reach capacity of up to 150,000 swabs per week in community and acute settings.

In relation to laboratory capacity, the NVRL will provide capacity to process approximately 28,000 tests per week in addition to the standing capacity of 35,000 tests per week provided in acute hospitals. The HSE has also put framework agreements in place to ensure additional laboratory capacity is available from private providers to accommodate increased testing demand in surge and emergency scenarios.

The surge and emergency plans include the use of rapid deployment of antigen tests, at rates of up to 300,000 tests per week for six weeks, during the activation phase to deliver high throughput testing.
VA CC INAT I ON
Within the context of COVID-19 vaccination, an Emergency Scenario can be defined as the need to suddenly and rapidly deliver a vaccine (either an existing vaccine or a new vaccine which targets a variant of concern) to the whole population within a short timeframe. This emergency scenario could occur at any stage in the near or long term. This will require additional structures/resources to be put in place to scale-up rapidly and will also require a lead-in time for capacity to ramp up incrementally. Key elements of the change required from the sustainable model outlined above to an emergency model are:

- A cross-government group under the emergency framework is to be put in place immediately, to provide substantial assistance in terms of facilities and staff to the HSE in the rapid scaling of facilities and staffing to underpin the emergency plan.
- The emergency model is significantly different to the sustainable model, in that it will shift the reliance away from GPs/Pharmacies and towards large scale VCs to support the deployment, similar to the primary vaccination programme across a programme duration of 16 weeks.
- The model sees the proportion of the vaccinations administered by fixed and mobile VCs increase to 60% in the emergency model.
- The model will also see an increase to the workforce in VCs and more VCs operating at the one time in order to meet this surge in demand. As a result, the size of the workforce required will increase substantially.
- If an emergency event occurs in the short term, depending on the status of recruitment of the Core Vaccination Programme team (which is currently ongoing), there may be a requirement for short-term deployment of core expertise from other healthcare posts, particularly at the start of the emergency response.
- There will be a requirement to appoint a single accountable programme owner and emergency lead in each regional area.
- There will be a requirement for strategic engagement of DOH/HSE and Emergency Lead with pharma companies to secure vaccine supplies.

NON-PHARMACEUTICAL INTERVENTIONS
To date, the country has relied on layering of public health measures, including mask wearing, physical distancing, hand and respiratory hygiene, improved ventilation, self-isolation, infection
prevention and control, an emphasis on outdoors over indoors, testing and contact tracing, border controls and a range of domestic restrictive measures to suppress transmission and protect core priorities. The approach to date has been underpinned by a human rights-based approach. Due regard for individuals’ personal freedoms and the proportionality of restrictions imposed will continue to form the core tenet of the future response. In this regard, preliminary preparations for drafting of contingency legislation for the potential reintroduction of public health measures in certain circumstance are underway. This is a precautionary measure to ensure all elements of preparedness are in place. Due diligence and careful consideration of a constellation of indicators will be required before enaction.

While it is not possible to predict the specific nature of a future public health threat (i.e. the specific characteristics of a new variant of concern) or what specific measures will be required in response, a point-in-time assessment of a constellation of indicators will be required in determining the most proportionate and least restrictive course of action. These include but are not exclusive to:

1. The specific characteristics of emerging and circulating variants and the risks they pose to public health;
2. Overall immunity and vaccine protection within the population, in particular in vulnerable cohorts, vaccine escape, availability of updated/variant specific vaccines, and the need for large scale mass vaccination;
3. A point-in-time assessment of epidemiological profile of the disease which considers disease incidence, impact, and progression of infection to severe disease. Acknowledging that some of the above factors may be more important than others based on the characteristics of a given VOC;
4. Hospital and critical care occupancy related to COVID-19 and the impact thereof on the health service and the provision of non-COVID health and social care services, including in the community; and
5. Public health capacities, in relation to testing, contact tracing, outbreak management, surveillance, and sequencing for COVID-19, and their ability to rapidly identify, investigate, and manage local or regional outbreaks, outbreaks among vulnerable groups in the context of a VOC.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMRIC</td>
<td>HSE Antimicrobial Resistance and Infection Control Team</td>
</tr>
<tr>
<td>BMU</td>
<td>HPSC Biostatistics and Modelling Unit</td>
</tr>
<tr>
<td>CAG</td>
<td>COVID-19 Advisory Group</td>
</tr>
<tr>
<td>CMO</td>
<td>Chief Medical Officer</td>
</tr>
<tr>
<td>DOH</td>
<td>Department of Health</td>
</tr>
<tr>
<td>ECDC</td>
<td>European Centre for Disease Prevention and Control</td>
</tr>
<tr>
<td>EMA</td>
<td>European Medicines Agency</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EWRS</td>
<td>European Early Warning and Response System</td>
</tr>
<tr>
<td>GP</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>HCWs</td>
<td>Healthcare Workers</td>
</tr>
<tr>
<td>HERA</td>
<td>Health Emergency Preparedness and Response Authority (EU Commission)</td>
</tr>
<tr>
<td>HIQA</td>
<td>Health Information and Quality Authority</td>
</tr>
<tr>
<td>HPSC</td>
<td>Health Protection Surveillance Centre</td>
</tr>
<tr>
<td>HSA</td>
<td>Health and Safety Authority</td>
</tr>
<tr>
<td>HSE</td>
<td>Health Service Executive</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communications Technology</td>
</tr>
<tr>
<td>ICU</td>
<td>Intensive Care Unit</td>
</tr>
<tr>
<td>IEMAG</td>
<td>Irish Epidemiological Modelling Advisory Group</td>
</tr>
<tr>
<td>IHR</td>
<td>WHO International Health Regulations</td>
</tr>
<tr>
<td>IPC</td>
<td>Infection Prevention and Control</td>
</tr>
<tr>
<td>LTRCFs</td>
<td>Long-term Residential Care Facilities</td>
</tr>
<tr>
<td>MMP</td>
<td>HSE Medicines Management Programme</td>
</tr>
<tr>
<td>mRNA</td>
<td>Messenger Ribonucleic Acid</td>
</tr>
<tr>
<td>NAS</td>
<td>National Ambulance Service</td>
</tr>
<tr>
<td>NCPE</td>
<td>National Centre for Pharmaco-Economics</td>
</tr>
<tr>
<td>NIAC</td>
<td>National Immunisation Advisory Committee</td>
</tr>
<tr>
<td>NPHET</td>
<td>National Public Health Emergency Team for COVID-19</td>
</tr>
<tr>
<td>NPIs</td>
<td>Non-Pharmaceutical Interventions</td>
</tr>
<tr>
<td>NVRL</td>
<td>National Virus Reference Laboratory</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>ORVs</td>
<td>Other Respiratory Viruses</td>
</tr>
<tr>
<td>PCR Test</td>
<td>Polymerase Chain Reaction Test</td>
</tr>
<tr>
<td>PCRS</td>
<td>HSE Primary Care Reimbursement Service</td>
</tr>
<tr>
<td>PHREAG</td>
<td>Public Health Reform Expert Advisory Group</td>
</tr>
<tr>
<td>RHAs</td>
<td>Regional Health Areas</td>
</tr>
<tr>
<td>RSV</td>
<td>Respiratory Syncytial Virus</td>
</tr>
<tr>
<td>SAM</td>
<td>Social Activity Measure</td>
</tr>
<tr>
<td>SARI</td>
<td>Severe Acute Respiratory Infection</td>
</tr>
<tr>
<td>SARS-CoV-2</td>
<td>Severe Acute Respiratory Syndrome Coronavirus 2</td>
</tr>
<tr>
<td>TAG</td>
<td>National Therapeutics Advisory Group</td>
</tr>
<tr>
<td>VC</td>
<td>Vaccination Centre</td>
</tr>
<tr>
<td>VOC</td>
<td>Variant of Concern</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>