

Coronavirus  
**COVID-19**  
Public Health  
Advice

DRAFT

Public Health Framework Approach

# in providing advice to Government

in relation to reducing social distancing measures

introduced in response to COVID-19

National Public Health Emergency Team

*1<sup>st</sup> May 2020*

## **Purpose of this Document**

This document is the Public Health Framework Approach developed by the National Public Health Emergency Team (NPHE) to provide advice to the Minister for Health and to the Government regarding changes to public health social distancing and other measures in response to the progression of the COVID-19 disease in Ireland.

This is a living document and will be subject to regular review in the context of: the progression or suppression of COVID-19 in Ireland at different points in time; new guidance and evidence which emanate from the research, experience and findings of international bodies; and of other countries.

The purpose of this public health framework approach is to inform a slow, gradual, step-wise and incremental reduction of the current public health social distancing measures, in a risk-based, fair and proportionate way with a view to effectively suppressing the spread of COVID-19 disease while enabling the gradual return of social and economic activity.

This framework also acknowledges that there are other important considerations regarding the reduction of measures that Government will have, such as social and economic considerations, adherence, public sentiment, acceptability, feasibility, overall population health & wellbeing and others.

The lifting of measures carries uncertainty and risk, and the easing of social distancing restrictions must be accompanied by a high level of adherence to the fundamental individual and collective behaviours needed to guard against transmission of the virus, and to avoid the need to re-impose restriction measures.

## **Structure of this Document**

The document is divided into three sections:

1. Introduction Section
2. Diagrammatic representation of NPHE's public health framework approach to advising Government regarding the reduction of measures
3. Guide to the NPHE public health framework approach to reducing public health social distancing measures

Appendix 1 contains the public health framework approach to advising on reducing social distancing measures.

## 1. Section 1: Introduction

2020 has brought with it the most serious global pandemic in a century – something that was unimaginable a few short months ago. Since COVID-19 emerged first in China in December last, it has spread widely and rapidly around the globe, disregarding borders, time zones, and race. As of 29 April, it is reported that there have been over 3m cases worldwide, with 20,253 of these in Ireland.

As well as being more infectious than first thought, it is impossible to predict with certainty what its effects will be on any one person infected; some experience no symptoms at all, or are very mildly ill, and for others it is fatal. Nearly 208,000 COVID-19 related deaths have been reported worldwide. Since the first case in Ireland was notified on 29 February 2020, sadly over 1,190 lives have been lost to this disease in this country. The loss of our loved ones in such circumstances and the ongoing threat of the pandemic continue to exact a heavy toll on our society.

The uniqueness of the COVID-19 disease has posed an immense challenge for health services and countries across the globe, as well as for Ireland. The demands posed on our health and other services by COVID-19, and people working within those services, cannot be underestimated. People have displayed extraordinary and inspiring individual and collective responsibility and commitment to the common good and responded to national, regional, local and community calls for assistance to deal with this crisis.

However, a mere four months after we first became aware of COVID-19, and we mobilised to deal with the immediate challenges, it is clear that what we hoped might be a sprint is in fact a marathon. COVID-19 will continue to provide a threat to the world for the foreseeable future, though it is hoped that a vaccine or new treatments may emerge. There is no magic unwinding of the clock to a pre-COVID-19 time. There is no roadmap or precedent for dealing with a pandemic such as this and, adopting a public health led approach, we must proceed with caution and care in seeking to tread a path to a new way of life.

### **How have we been responding to COVID-19 in Ireland?**

Not for generations has Ireland been faced with a health threat as serious as COVID-19 and the daily life of every single person has been changed. In the early weeks of 2020, as this pandemic was emerging, Government and our health and social care service monitored the evolving global situation, deployed our plans and started to prepare for the disease's likely impact in Ireland. At the same time, businesses, organisations, communities, families and each of us individually were becoming informed, **changing our individual and collective behaviours** so that we would know what to do, and do the right things as COVID-19 found its way closer.

Within a very short few weeks after the first cases of COVID-19 were reported in Ireland at the end of February 2020, as with other EU countries, it became necessary to take unprecedented steps to control the disease. A tiered approach of public health social distancing measures was first advised by An Taoiseach on 13 March, and these measures were further strengthened on 24 March and again on 27 March, extended to 5 May to continue to suppress transmission of the virus.

The call for extraordinary **solidarity and community spirit**, as well as personal and collective behavioural change, inventiveness and resilience required of each and every one of us at each step to delay the transmission of COVID-19 was heeded; we complied with the restrictions and have succeeded in reducing the spread of infection. Coupled with the ability of our health and social care

services to respond to the needs of persons affected by COVID-19, these measures have saved countless lives. We are grateful and indebted to our healthcare workers, carers, and workers who provide essential services on minimising the impact on our society.

In reality, we have seen Irish society at its very best over the past couple of months, at a time when the risk to the health and wellbeing of everyone in Ireland has been at its greatest.

### ***National Action Plan in response to COVID-19***

During January, as COVID-19 became more serious in Europe, the health service and the Government stepped up national public health and emergency responses. The National Public Health Emergency Team (NPHE) and HSE National Crisis Management Teams for COVID-19 were convened and commenced their work at the end of January, as part of the wider whole-of-Government co-ordinated approach.

As this disease progressed, it emerged globally that people living in long-term residential care facilities were at particularly high risk of being susceptible to infection and subsequent adverse outcomes. Responding to these risks, on 12<sup>th</sup> March, the Irish health service published specific public health and clinical guidance in relation to infection prevention and outbreak control in residential healthcare settings, including nursing homes. One of the subgroups established under the NPHE has been particularly focussed on measures to protect vulnerable groups and individuals in society. A concerted focus has continued on enhancing measures to protect residents and staff in residential healthcare settings.

A National Action Plan was published on 16 March, setting out a whole-of-society response and the mobilisation of resources across Government and society to fight the spread of this virus. The core goals of the National Action Plan, for the health service and across Government, in continuing our response to COVID-19 are to minimise–

- the risk of becoming unwell for all people in Ireland;
- the health, wellbeing and social impact for people, in particular, those who may be at greater risk from COVID-19 through minimising the risk of illness for them while working to maintain their quality of life; and
- the social and economic disruption associated with the COVID-19 outbreak.

Put simply, under the National Action Plan, over the last couple of months, the priorities of the health and social care service have been, and continue to be, to–

- a) implement a coherent **disease control strategy** to suppress the virus so that we can minimise the impact on Irish society through:
  - *public health-led measures* to interrupt person-to-person transmission in the community (such as social distancing measures),
  - protecting *vulnerable people and healthcare and other staff* particularly in residential settings, by implementing a comprehensive range of enhanced measures to prevent outbreaks and, where outbreaks occur, controlling those outbreaks and minimising further transmission,
  - expanding *sampling, testing and contact tracing capacity* to quickly detect cases, to test close contacts and to put in place active surveillance of contacts in order to prevent further spread, and to utilise data, modelling, IT systems and continuous monitoring to enable a real-time

understanding of the evolving impact of the infection on the Irish population so as to guide how we respond, adapt and make decisions,

- b) provide **care** to those people who have become infected with COVID-19 and who need treatment,
- c) ensure that there is **sufficient capacity in our health service** to respond to the demands of COVID-19, including healthcare workers, hospital and ICU beds, as well as essential products and equipment, (e.g. personal protective equipment, ventilators, testing kits etc.),
- d) continuing to **communicate openly and transparently** with the public and healthcare workers.

### ***What has been the effect of the response?***

Our combined efforts across society have been having a clear impact. Through our collective action, particularly through the **public health social distancing measures** (staying at home, working from home etc over the last few weeks) and **changing our personal and collective behaviours** (not shaking hands, maintaining our distance etc) we have saved lives and protected countless people from becoming infected. Recognising that COVID-19 will remain a public health threat for some time, the simple changes in personal behaviours must be maintained to interrupt person-to-person transmission and to protect us all.

The NPHET, on behalf of the health service, has been gathering information about the numbers of people infected and using mathematical modelling and evidence from other countries, to predict the likely impact of the disease on the Irish population. This modelling has predicted that, if Ireland had not implemented mitigation measures (such as widespread social distancing), we could have had a peak of up to 120,000 new cases of COVID-19 per day<sup>1</sup>. Instead, we have never exceeded more than 1,000 cases reported in a day, our total cases are just over 20,000 and undoubtedly unnecessary hospitalisations and deaths have been prevented. We have also made progress over the last number of weeks in controlling the spread of the virus; the reproduction number of the virus (R) (i.e. the average number of infections generated by an infectious person) has now fallen below 1, with indications being that it is now between 0.5 and 0.8. It has since been estimated that in the initial stages of the unmitigated pandemic the R<sub>0</sub> could have been as high as 4<sup>2</sup>.

### ***Indirect effects***

While we have done well in Ireland over the last number of weeks in controlling the spread of infection, the economic consequences and social disruption have been dramatic; for example, many people have lost their jobs, businesses have had to close their doors, children have not gone to school, people have had to forego their social interactions and children have not been able to visit their grandparents. Across the globe it is recognised, as well as in Ireland, that the socio-economic consequences of the public health social distancing measures are likely to be severe.

These measures have also had indirect health and societal effects. The COVID-19 outbreak affects all segments of the population, and the emotional and mental health impact of the outbreak is not limited to patients, healthcare workers, or to families bereaved at this time. From social distancing to cocooning for those over 70 years of age, those extremely medically vulnerable to COVID-19, those with a disability, mental health issues, those living in poverty or marginalised groups using our social inclusion services, their usual social interactions and exercise patterns have altered significantly.

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<sup>1</sup> <https://www.gov.ie/en/publication/a950be-covid-19-modelling-data-thursday-23-april-2020/>

<sup>2</sup> <https://www.ecdc.europa.eu/en/publications-data/rapid-risk-assessment-coronavirus-disease-2019-covid-19-pandemic-ninth-update>

It is likely that the health and other impacts of the disease are being borne more by certain sections of society: the young; older people; those who are disadvantaged; people with disabilities; those who are alone and others.

While many are adapting through use of social media or innovative technology, there are reports of increases in loneliness, sense of poorer wellbeing, social isolation, domestic abuse, anxiety and self-harm including attempting suicide among the population, particularly amongst those vulnerable groups. In addition, access to traditional supports including care and treatment has been interrupted. While recognising the adaptation and indeed evolving delivery of all support and health services, there is little doubt of the negative impacts on individuals and society. Many will cope very well through strengthened family, friends, neighbourhood and health and social care services - however for others, we need to continue to build and adapt our society, economic, health and social care supports.

A wide range of mental health and wellbeing initiatives aimed at supporting the diverse mental health needs of the public during the COVID-19 pandemic, including online, are underway to provide supports to the public at large, as well as specific interventions for those in vulnerable groups such as individuals who lose their jobs, healthcare and essential workers, older adults, people with disabilities, and priority groups such as students, traveller and Roma communities and LGBTQ+. Longer term strategies will be needed to address anxiety, stress, financial pressure, grief, and general uncertainty of living with COVID-19 in our society.

The impact of COVID-19 on the health services has reached beyond infected persons and their families. Over the last number of weeks there has been an obvious reduction in patients presenting at Emergency Departments and for other hospital services, including cancer services due to reduced GP attendances and referrals. This is giving rise to concerns that people may be delaying seeking assistance for illnesses and injuries that require treatment and care. The health service quickly adapted to put in place the necessary capacity and care pathways to respond to COVID-19, however, the new challenge over the coming months will be to deliver all of the other health and social care services in a 'COVID-19-safe' way and restore the confidence of members of the public to avail of those necessary services. It is also essential to continue to protect the future health and wellbeing of our society by putting in place safe ways to provide health protection services for example, such as screening, childhood immunisation services, as well as ensuring a comprehensive seasonal flu vaccination programme this winter, which is of particular importance in light of COVID-19.

Let us also not forget our healthcare workers who are living with the challenge of working on the frontline, and concern about coming home from COVID-19 environments to family members, some of whom may be medically vulnerable or in 'at risk' groups. Infection rates amongst healthcare workers have been a particular challenge, and there continues to be a concerted focus on measures to care for our workers who are at the coalface of caring for infected patients. As we move forward with COVID-19, healthcare workers and their families must continue to be a priority.

## **Public health approach to lifting COVID-19 restrictive measures – the path to a new way of life**

### ***Planning in relation to the lifting of restrictive measures***

The risks to human health and life caused by COVID-19 warranted public health measures that have had to be imposed by countries across the globe. These extraordinary measures cannot be continued indefinitely as they come at a significant cost in terms of the quality and meaning of people's lives. Nevertheless, it must be understood that their lifting carries great uncertainty and risk.

The threat posed by COVID-19 to public health and wellbeing and its economic impact are deeply concerning. In considering which restrictions should be lifted in the coming weeks and months, it is important to avoid a false dichotomy between saving lives or livelihoods. This fails to recognise the interdependency between the two. Lifting restrictions too quickly would not only endanger people's health but would also undermine sustainable economic recovery<sup>3</sup>. Ensuring the pandemic is brought and kept under control will facilitate the resumption and maintenance of economic activity.

Based on current evidence, the World Health Organization advises that ***the most plausible future scenario in the dynamic of COVID-19 may involve recurring epidemic waves interspersed with periods of low-level transmission***. This means that when Ireland and other countries ease the social distancing restrictions, we are likely to have periods of time when the numbers of people infected increases (waves) and periods when the number of people infected decreases. We remain susceptible to infection and the risk of a large surge of infection will be ever-present; we cannot become complacent. Easing social distancing restrictions must be accompanied by a high level of adherence to the fundamental individual and collective behaviours needed to guard against transmission of the virus; otherwise re-imposition of restrictions will be unavoidable.

We need to start on the path to a new way of life, where we can work together towards adapting and engaging safely in economic and social activities. A whole-of-population approach is central to protecting the health and wellbeing of everybody in our society.

But we should not be afraid. In Ireland, we have faced other infectious diseases in the past, at times when we knew a lot less, and while they were not on the same scale nor did they spread at the speed of COVID-19, we know we can adapt and prevail.

#### ***Approach in relation to the easing of measures***

Easing the current restrictive social distancing measures is going to be a slow and incremental process. This approach is essential as easing measures too quickly is likely to result in a sudden surge in infections. Any phased reduction of public health social distancing measures may not necessarily follow the same sequence as when the measures were first introduced.

Consequently, **public health advice** should always be clearly and transparently provided as part of decision-making process to inform Government on the slow unwinding of the restrictions. This public health advice will be **grounded in guidance** of international expert bodies such as the World Health Organization, and the European Centre for Disease Prevention and Control as well as experience and learning from other countries, particularly those countries with a similar outbreak profile, and evidence where available. In addition, NPHET will be guided by the **precautionary principle** which can inform decisions under the significant uncertainty that prevails, while allowing for proportionate and timely decision-making.

This follows a **risk-based approach**, considering risk both from the perspective of protecting those most vulnerable to infection as well as protecting against causes, situations, circumstances, and behaviours that may lead to risk of spread of disease. The approach must also **proportionate** and practical, **balancing overall risk with a hierarchy of benefits** in terms of population health and wellbeing, understanding, feasibility, acceptance and adherence to support ongoing restrictions, economic and social factors, human rights, ethical principles and other considerations.

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<sup>3</sup> Data analysed from 1918 influenza pandemic found that cities which instituted public health restrictions earlier in the course of the pandemic and for longer not only saved more lives but had had better economic outcomes in the year following the outbreak. Sergio Correia et al. Pandemics Depress the Economy, Public Health Interventions Do Not: Evidence from the 1918 Flu, SSRN Electronic Journal (2020). DOI: 10.2139/ssrn.3561560

The WHO and ECDC are warning that the measures have to be lifted in a **very slow, gradual and stepwise manner** in phases separated by **sufficient intervening time** (every 3 weeks) in order to avoid a rapid upsurge in infections. Measures will be assessed on a regular basis, individually and in combination to consider their impact. There will be close and continuous monitoring across Government as measures are eased, to understand their impact on the disease and as far as possible to avoid a surge. If that happens, certain measures may have to be re-imposed. The approach to reducing measures will evolve as more information becomes available and in line with international learning and experience, in particular from countries ahead of Ireland in terms of their outbreak, to assess closely the effectiveness of their approaches to easing restrictions.

From a public health perspective, key indicators have been developed to identify when to consider the slow and gradual easing of current restrictive measures. As with other countries, in Ireland these include: downward trajectories in the incidence of disease, the numbers of deaths, the numbers of cases and clusters in residential healthcare settings; hospitalisation and ICU capacity; and the delivery of sampling, testing and contact tracing.

We have seen over the last few months that small **changes in our personal behaviours** can have a big impact in saving our own lives and the lives of those around us. Maintaining regular handwashing and good respiratory hygiene, keeping 2metres distance from people, being very vigilant about flu-like symptoms, isolating if we have symptoms, and reducing the number of our close contacts are essential things we all must continue do, and get even better at, over the coming months if we are to successfully ease the current restrictions.

**Solidarity and acting together** are key to any approach to lifting restrictive measures and will be even more important now than when the measures were introduced and extended. There will be hard choices over the next few months, which may impact upon some of us at different times. We will have to accept that we cannot all get back to our normal lives at the same time, we have to move slowly. Solidarity is not only a national concern, we must be good global citizens and act with care towards those who live in other countries.

Good and continuous **communication** has been critical throughout this pandemic. Government, the Department of Health, HSE and international health organisations have endeavoured to communicate as effectively and openly as possible with the public, in providing clear, consistent and sustained information, as well as adapting information to meet the needs of key groups in society, such as vulnerable groups, healthcare workers and others.

Communication efforts will be redoubled by the health services and across Government in the context of lifting the current measures, including explaining the rationale behind decisions made to adjust measures, as we tread the path towards a new life.



## Section 2: Public Health Framework Approach to advising Government regarding reduction of measures

### Approach: public health evidence-led and risk-based

- **public health-led** and **grounded in evidence, guidance & advice** of ECDC, WHO and EU, as well as experience and learning from similar countries
- **risk-based** to protect those most vulnerable to infection and to minimise the risk of spread of disease
- **proportionate**, practical, feasible and acceptable, balancing public health risk with hierarchy of **benefits** in terms of overall population health & wellbeing, adherence, public sentiment, social & economic considerations.

### Key principles: communicating openly and acting together

- **Clear consistent sustained accessible communication** with public from **trusted sources** outlining benefits associated with all stages of phased reductions
- **Support** desired behavioural change through communication and education
- Maintain **solidarity, mental wellbeing and resilience**
- Continue to maintain **openness, transparency and confidence** in public health advice
- **Update, tailor and adapt advice**, based on data & evolving disease situation
- Tailor key messages for **target groups**, such as, vulnerable groups & health workers
- Reinforce underpinning **ethical approach** of solidarity and caring for community, minimising harm, fairness, privacy, duty to provide care, proportionality

### Core concepts for us all:

#### What we can each do:

- Maintain handwashing & respiratory hygiene
- Keep 2m distance from other people
- Be hyper-alert to, and isolate if we have symptoms, including flu-like symptoms
- Reduce close contacts and duration of contact with people outside our households (have a micro-community)
- Access advice and supports for mental wellbeing and resilience

#### What we can do together:

- Follow public health advice
- Keep informed about disease in Ireland
- Support vulnerable people and maintain solidarity in our community
- Support healthcare workers and health service
- Accept that measures can only be lifted in slow stepwise manner and may need to be reintroduced if rate of infection increases

### Principles of Approach to reducing measures

- **No assurance that it is safe to reduce social distancing measures** and stricter measures will have to be reintroduced if there is strong upsurge of infection
- Measures will be reduced in a **slow, gradual, stepwise** manner over 3 broad phases: **Early, Middle and Later Phases** with each involving **more than one subphase** and **3 weeks** between each subphase
- Reduction of measures will be **robustly and continuously monitored** in terms of adherence and effect
- Ideally a **'whole-of-country approach'**, but potentially a differentiated geographical approach depending on circumstances, e.g. urban/rural
- Approaches to reducing measures will evolve as information becomes available and in line with **international learning and experience**, especially countries ahead in terms of their outbreak
- Reducing measures **critically dependent** on health service's ability to:
  - find new cases by consistently **testing and contact tracing**, and utilise **robust information** on disease, system capacity and performance,
  - implement mechanisms to **protect 'at risk' groups** particularly, from outbreaks.

### Disease indicators

1. Trajectory in incidence of disease
  2. Trajectory in number of cases and clusters in residential healthcare settings
  3. Trajectory in number of deaths
  4. Hospitalisation and ICU occupancy
  5. Programme to consistently sample, test and contact trace.
- \* and other criteria as may arise in the future.

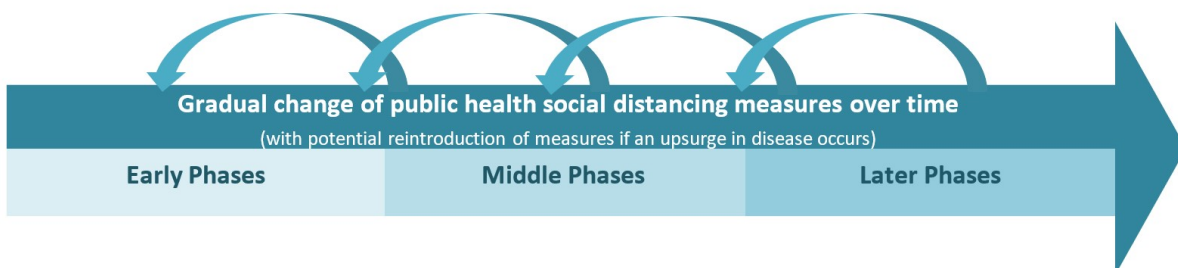
### Monitoring the Disease & reduction of measures

- **Essential Health data sources:** epidemiological data & modelling; incidence of outbreaks in residential settings; testing and contact tracing; health service capacity & performance (incl. ICU beds, hospital, access to essential products, PPE, masks)
- **Non-health information sources:** transportation data; google analytics; seismology data; other sources

### Alternative and evolving regulatory approach

- Travel and distance restrictions currently in place will change over time
- New requirements will be developed in relation to premises, transport, and business compliance
- Existing regulatory approaches will be examined and structures put in place to support organisations in meeting new requirements

WHO predicts that the most plausible scenario is recurring epidemic waves interspersed with periods of low-level



### Section 3: Guide to the NPHET public health framework approach to advising Government in relation to reducing public health social distancing measures (contained in Appendix 1)

1. The World Health Organization predicts that the most plausible scenario is recurring epidemic waves interspersed with periods of low-level transmission.
2. This document is the National Public Health Emergency Team (NPHET) public health framework approach to a planned phased reduction of social distancing measures. Its purpose is to be used in advising the Minister for Health and Government in relation to adjusting the public health social distancing measures in response to the progression of the disease.
3. It is a **living document** and will be subject to regular review in the context of the progression or suppression of the disease in Ireland at different points in time; new guidance and evidence which emanate from the research, experience and findings of international bodies and of other countries.
4. This framework approach contains a range of indicative measures set out under a number of different headings (categories) and across a number of potential phases. Over the coming period, as NPHET monitors the progress of the disease, these are intended to provide the NPHET with a **flexible menu of possible options** to consider, in providing public health advice to Government regarding the adjustment of social distancing measures.
  - a. Under each heading, a number of suggested phases and subphases are set out. The phases and subphases are broadly considered to be sequential under each heading. However, the categories can be read independently of each other (for example a middle phase Education measure might be started before a middle phase Social / Recreational measure, depending on the circumstances at the time).
  - b. Recommendations to action a measure under one phase or subphase under a given heading does not mean that all other measures in the same phase or subphase under that heading will necessarily be recommended for activation. The framework is intended to be applied flexibly, so that it would be open to the NPHET, at any point in time, to recommend measures from later phases depending on the prevailing circumstances.
5. Ongoing two-way communication with the public will be essential to ensure that-
  - a. the public are informed of the changes in restrictions as approved by Government, and the social distancing and other measures that are in place at each phase;
  - b. there is clear and coherent information about the public health rationale and an explanation of changes made by Government, with a view to encouraging adherence with measures;
  - c. there are feedback mechanisms to better understand the measures which work most effectively, areas of challenge, opportunities to innovate in protecting the safety of people while progressing towards a return to economic and social life.
6. The purpose of this public health framework approach is to inform a slow, gradual, step-wise and incremental reduction of the current public health social distancing measures, in a risk-based, fair and proportionate way with a view to effectively suppressing the spread of COVID-19 disease while enabling the gradual return of social and economic activity.
7. This framework also acknowledges that there are other important considerations regarding the reduction of measures that Government will have, such as social and economic considerations, adherence, public sentiment, acceptability, feasibility, overall population health & wellbeing and others.

## Appendix 1 – Public health framework approach to advising on reducing social distancing measures

1. Community Health Measures					
Measure category	Initial Phases 1	Early Phases (Stage 1) 2	Early Phases (Stage 2) 3	Middle Phases 4	Late Phases 5
<b>Wearing of face coverings in community</b>	<ul style="list-style-type: none"> <li>Develop guidance for wearing of face coverings in community which ensures that surgical masks and other medical grade respiratory masks are protected for use by healthcare workers (and other specified categories of persons)</li> </ul>	<ul style="list-style-type: none"> <li>Roll out guidance for wearing of face coverings in community</li> </ul>			
<b>'Stay at home' restriction</b>	<ul style="list-style-type: none"> <li>Extend restriction to within 5km of your home</li> <li>Continue to avoid unnecessary journeys</li> </ul>	<ul style="list-style-type: none"> <li>Extend restriction to within 20km of your home</li> <li>Continue to avoid unnecessary journeys</li> </ul>	<ul style="list-style-type: none"> <li>Maintain restriction to within 20km of your home</li> <li>Continue to avoid unnecessary journeys</li> </ul>	<ul style="list-style-type: none"> <li>Extend travel to outside your region</li> </ul>	
<b>Cocooning</b>	<p>Communicate to over 70s and medically vulnerable –</p> <ul style="list-style-type: none"> <li>can 'go for a walk' while strictly adhering to social distancing, also maintaining 'no touch' policy, and ideally wearing face covering</li> <li>ideally designate protected time of day for cocooners to go for a walk</li> <li>develop guidance for wider public in relation to how they can assist in keeping over 70s and medically vulnerable safe</li> </ul>	<ul style="list-style-type: none"> <li>Designate specific retail hours coordinated across all retailers for over 70s and medically vulnerable, with strict social distancing; provision of gloves, ideally wearing face coverings</li> <li>Visits to homes of over 70s and medically vulnerable by no more than a small number of persons for a short period of time wearing gloves, face coverings, maintaining strict 2m social distancing</li> </ul>			<ul style="list-style-type: none"> <li>Continue cocooning of over 70s and extremely medically vulnerable until later phases due to higher risk</li> </ul>
<b>Small groups outdoors</b>	<ul style="list-style-type: none"> <li>Allow up to a small number of persons not of same household to meet outdoors while maintaining strict social distancing</li> </ul>				
<b>Social visits</b>	<ul style="list-style-type: none"> <li>Continue to avoid non-essential social visiting</li> <li>Develop guidance in relation to <i>micro-communities</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Small number of persons may visit another household for a short period of time while maintaining strict social distancing</li> </ul>		<ul style="list-style-type: none"> <li>Slightly larger number of persons may visit another household for a short period of time while maintaining social distancing</li> </ul>	
<b>Family-type social gatherings</b>		<ul style="list-style-type: none"> <li>Funerals restricted to immediate family and close friends and limited to a maximum number of mourners for a limited period of time where social distancing can be maintained</li> </ul>		<ul style="list-style-type: none"> <li>Small social gatherings by family and close friends limited to a maximum number of attendees for a limited period of time where social distancing can be maintained (e.g. small weddings, baptisms)</li> </ul>	<ul style="list-style-type: none"> <li>Large social gatherings (e.g. large weddings to be restricted to later phases due to risk)</li> </ul>
<b>Other (non-commercial) social events</b>				<ul style="list-style-type: none"> <li>Small social (non-family) gatherings limited to a maximum number of participants for a limited period of time where social distancing can be maintained</li> </ul>	<ul style="list-style-type: none"> <li>Large social (non-family) gatherings restricted to later phases due to risk</li> </ul>
<b>Household contacts of suspect cases</b>					<ul style="list-style-type: none"> <li>Continue to restrict all household contact of suspect cases (awaiting test results or 14 days isolation)</li> </ul>
<b>Public health rationale:</b>	Social distancing measures have succeeded in reducing the transmission of COVID-19. Continuing to limit the number and duration of contacts is important in any measure reduction.				

## Appendix 1 – Public health framework approach to advising on reducing social distancing measures

1. Community Health Measures					
Measure category	Initial Phases 1	Early Phases (Stage 1) 2	Early Phases (Stage 2) 3	Middle Phases 4	Late Phases 5
	<p><i>As the stringency of physical distancing measures is reduced, members of the public should be encouraged to carefully consider with whom they come into contact; consistently meeting with the same colleagues and small group of friends will lead to lower rates of transmission than meeting with a diverse and changing group. The promotion of 'micro-communities' will allow for work to be conducted and for social interaction to promote wellbeing, while still limiting the spread of infection<sup>4</sup>. The effectiveness of containment and mitigation depends on limiting the number of social contacts, but also the duration of each contact<sup>5</sup>.</i></p> <p>The continued protection of people aged over 70 and those with underlying health conditions is in line with recommendations of WHO, ECDC and EU Commission which all recognise the importance of protecting the vulnerable populations. <i>International and national evidence shows that those over 70 years and people with specific underlying health conditions are groups with an elevated risk for COVID-19. On this basis it is recommended that the cocooning measures for the over 70s and for those in at risk groups be continued<sup>6,7</sup>.</i></p> <p>ECDC and WHO, on basis of increasing evidence that infected persons with mild or no symptoms can contribute to spread of COVID-19, advise that public wearing of face coverings may reduce spread of infection by the wearer.</p>				

<sup>4</sup> ECDC Rapid Risk Assessment Coronavirus disease 2019 (Covid-19) in the EU/EEA and the UK – Ninth update 23 April 2020

<sup>5</sup> OECD: Flattening the covid-19 peak: Containment and mitigation policies, Updated 24 March 2020

<sup>6</sup> WHO Considerations in adjusting public health and social measures in the context of COVID-19: interim guidance, 16 April 2020

<sup>7</sup> ECDC Rapid Risk Assessment Coronavirus disease 2019 (Covid-19) in the EU/EEA and the UK – Ninth Update 23 April 2020

## Appendix 1 – Public health framework approach to advising on reducing social distancing measures

2. Education & Childcare Measures					
Measure category	Initial Phases 1	Early Phases (Stage 1) 2	Early Phases (Stage 2) 3	Middle Phases 4	Late Phases 5
Education & Childcare	<ul style="list-style-type: none"> <li>DCYA-supported in-reach service where registered childcare workers provide support in an essential healthcare worker's home</li> </ul>		<ul style="list-style-type: none"> <li>Opening of crèches, childminders and pre-schools for children of essential workers in phased manner with social distancing and other requirements applying</li> </ul>	<ul style="list-style-type: none"> <li>Opening of crèches, childminders and pre-schools for children of all other workers on a gradually increasing phased basis (e.g. one day per week) and slowly increasing thereafter</li> </ul>	
	<ul style="list-style-type: none"> <li>Opening of school and college buildings for access by teachers for organisation and distribution of remote learning</li> </ul>			Possibly on a phased basis commencing at the beginning of the academic year 2020/21: <ul style="list-style-type: none"> <li>Primary and secondary schools</li> <li>Universities, 3<sup>rd</sup> level education centres and adult education centres</li> </ul>	
Public health rationale:	The introduction of the above on a phased and stepwise basis allows for arrangements to be put in place for the control of population density onsite in childcare/pre-school and education facilities at junior levels to facilitate social distancing and reduce risk of transmission of the disease.  <i>It appears that COVID-19 infections are less frequently observed in children<sup>8</sup> and that child-to-adult transmission appears to be uncommon<sup>9</sup>.</i> <i>The effectiveness of containment and mitigation depends on limiting the number of social contacts, but also the duration of each contact<sup>10</sup>.</i>				

<sup>8</sup> ECDC Rapid Risk Assessment Coronavirus disease 2019 (Covid-19) in the EU/EEA and the UK – ninth update 23 April 2020

<sup>9</sup> ECDC Rapid Risk Assessment Coronavirus disease 2019 (Covid-19) in the EU/EEA and the UK – ninth update 23 April 2020

<sup>10</sup> OECD: Flattening the covid-19 peak: Containment and mitigation policies, Updated 24 March 2020

## Appendix 1 – Public health framework approach to advising on reducing social distancing measures

3. Health & Social Care Services Measures					
Measure category	Initial Phases 1	Early Phases (Stage 1) 2	Early Phases (Stage 2) 3	Middle Phases 4	Later Phases 5
<b>a) Increasing delivery of “non-COVID-19” care and services alongside COVID-19-care</b>	<p>Increasing delivery of non-COVID-19 care and services alongside COVID-19 care to meet demand through:</p> <ul style="list-style-type: none"> <li>• Capacity planning for ongoing delivery of COVID-19 and non-COVID-19 care and services side by side, utilising modelling capability to assist in predicting demand for: primary, acute (including ICU), community, social care, mental health, disabilities and other services along the continuum of care.</li> <li>• Implement measures to ensure safe delivery of COVID-19 and non-COVID-19 care and services side by side.</li> <li>• Continue to deliver care and services in new ways (e.g. through telephone, online, virtual clinics etc) and new models of care to meet demand and to alleviate concerns of patients, service users and healthcare workers.</li> <li>• Communication campaign with public to:                             <ul style="list-style-type: none"> <li>- encourage people to present for care when they need it,</li> <li>- advise of health and social care services initiatives to reduce risk of contracting COVID-19, and</li> <li>- what to expect in regard to non-COVID-19 care access.</li> </ul> </li> <li>• Implement activities to mitigate risk in the provision of care and services (in addition to social distancing measures) such as the use of masks, personal protective equipment, testing and other measures that may emerge over time.</li> <li>• Continue to support the mental health and wellbeing initiatives directed to meeting the diverse mental health and resilience needs of the public during these times.</li> <li>• Continue to maintain mechanisms to provide community support to those in vulnerable groups.</li> </ul>				
<b>b) Visiting</b>			<ul style="list-style-type: none"> <li>• Enable phased approach to visiting at hospital / residential healthcare centre / other residential settings / prisons etc., bearing in mind the particular features of types of settings and each individual centre, also considering personal protective equipment availability and other protections.</li> </ul>		<ul style="list-style-type: none"> <li>• Return to normal visiting for hospital / residential healthcare centre / other residential settings / prisons</li> </ul>
Public health rationale:	<p>The full resumption of the Health Services is contingent on the demands placed on it by the transmission of COVID-19. The WHO recently highlighted the importance of taking a dual approach i.e. balancing COVID-19 care with health service recovery.</p> <p><i>Maintaining population trust in the capacity of the health system to safely meet essential needs and to control infection risk in health facilities is key to ensuring appropriate care-seeking behavior and adherence to public health advice. Continuation of primary health care services is essential. Where possible, the use of technological solutions such as telemedicine to monitor patients and remote consultations should be considered, to minimize risk to patients. Countries will need to make difficult decisions to balance the demands of responding directly to COVID-19, while simultaneously engaging in strategic planning and coordinated action to maintain essential health service delivery, mitigating the risk of system collapse.... Establishing effective patient flow (through screening, triage, and targeted referral of COVID-19 and non-COVID-19 cases) is essential at all levels.<sup>11</sup></i></p>				

<sup>11</sup> WHO Covid Strategy Update: 14 April 2020

## Appendix 1 – Public health framework approach to advising on reducing social distancing measures

4. Economic Activity (Work)					
Measure category	Initial Phases 1	Early Phases (Stage 1) 2	Early Phases (Stage 2) 3	Middle Phases 4	Later Phases 5
<p>Economic Activity (Work)</p> <p>(applying over and above currently permitted work arrangements)</p>	<p>Applying a risk-based approach:</p> <ul style="list-style-type: none"> <li>Permit phased return of outdoor workers (e.g. construction workers, gardeners etc). Social distancing requirements continue to apply.</li> <li>Continue to maintain remote working for all workers / businesses that can do so.</li> </ul>	<p>Applying a risk-based approach:</p> <ul style="list-style-type: none"> <li>Permit phased return of workers, such as solitary and other workers that, due to nature of work, can maintain 2m distance constantly. Social distancing requirements continue to apply.</li> <li>Continue to maintain remote working for all workers / businesses that can do so.</li> </ul> <p>Organisations to develop plans for return to onsite working by employees in light of COVID-19 considering:</p> <ul style="list-style-type: none"> <li>Social distancing compliance</li> <li>Hygiene and cleaning</li> <li>Compliance in higher risk situations</li> <li>plans for medically vulnerable / pregnant etc</li> <li>extended opening hours to enable social distancing.</li> </ul> <p>State to develop mechanism for supporting, advising on, assessing, regulating planning for return to onsite working by organisations.</p>	<p>Applying a risk-based approach:</p> <ul style="list-style-type: none"> <li>Organisations where employees have low levels of daily interaction with people and where social distancing can be maintained.</li> <li>Continue to maintain remote working for all workers / businesses that can do so.</li> </ul>	<p>Applying a risk-based return to onsite working:</p> <ul style="list-style-type: none"> <li>Organisations where employees cannot remote work to be considered first for return to onsite working arrangements.</li> <li>Depending on business, shift work, staggered hours etc should be operated to increase % of workforce available for work in any 24-hour period, as long as they can limit the number of workers interacting with each other.</li> <li>Continue to maintain remote working for all workers / businesses that can do so.</li> </ul>	<p>Applying a risk-based return to onsite working applicable fairly across all sectors:</p> <ul style="list-style-type: none"> <li>Phased “return to onsite working” arrangement</li> <li>‘Higher risk’ organisations which by their nature cannot easily maintain social distancing implement plans for how they can eventually progress towards onsite return of full staff complement.</li> </ul>
Public health rationale:	<p>Public health risk is lower in workplaces where adequate arrangements are made to limit population density in order to facilitate social distancing and limit person to person contact and the time spent in contact.</p> <p><i>The re-start of the economic activity should be phased in, thus ensuring that authorities and businesses can adequately adjust to increasing activities in safe way recognising the interdependency between public health and wellbeing and economic activity. There are several models (jobs suitable for teleworking, economic importance, shifts of workers etc.) but not all the population should go back to the workplace at the same time, with an initial focus on less endangered groups and sectors that are essential to facilitate economic activity (e.g. transport)<sup>12</sup>.</i></p> <p><i>The effectiveness of containment and mitigation depends on limiting the number of social contacts, but also the duration of each contact<sup>13</sup>.</i></p>				

<sup>12</sup> EU Commission – European Roadmap towards lifting COVID-19 containment measures 14 April 2020

<sup>13</sup> OECD: Flattening the covid-19 peak: Containment and mitigation policies, Updated 24 March 2020

## Appendix 1 – Public health framework approach to advising on reducing social distancing measures

5. Commercial Activity (Retail)					
Measure category	Initial Phases 1	Early Phases (Stage 1) 2	Early Phases (Stage 2) 3	Middle Phases 4	Later Phases 5
Commercial Activity (Retail)  (applying over and above currently permitted retail arrangements)	<p>Applying a risk-based approach:</p> <ul style="list-style-type: none"> <li>Open retail outlets that are primarily outdoor (e.g. garden centres, hardware stores etc)</li> <li>Open retail outlets that were open in Tier 2 (e.g. homeware, opticians, motor, bicycle &amp; repair, office products, electrical, IT, phone sales &amp; repair etc.)</li> </ul> <p>Retailers to develop plan for safe operation and protection of staff and customers considering:</p> <ul style="list-style-type: none"> <li>Social distancing compliance</li> <li>Hygiene and cleaning</li> <li>Compliance in higher risk situations</li> <li>Extended opening hours to enable social distancing</li> </ul>	<p>Applying a risk-based approach:</p> <ul style="list-style-type: none"> <li>Small retail outlets with small number of staff on basis that the retailer can control number of individuals that staff and customers interact with at any one time</li> <li>Open marts where social distancing can be maintained</li> </ul>	<p>Applying a risk-based approach:</p> <ul style="list-style-type: none"> <li>Phase in opening of all other non-essential retail outlets on basis of restriction on the number of staff and customers per square metre so that social distancing can be maintained. To be limited to retail outlets with street-level entrance and exit i.e. which are not in enclosed shopping centres due to higher risk.</li> </ul>	<p>Applying a risk-based approach:</p> <ul style="list-style-type: none"> <li>Commence loosening restrictions on higher risk services involving direct physical contact for periods of time between people and for which there is a population-wide demand (e.g. hairdressers, barbers).</li> </ul>	<ul style="list-style-type: none"> <li>Opening of enclosed shopping centres where social distancing can be maintained.</li> <li>Further loosening of restrictions on services involving direct physical contact for periods of time between people for which there is not a population-wide demand (e.g. tattoo, piercing) for later phases due to risk.</li> </ul>
Public health rationale:	<p>Ease restrictions in such a way as to protect the ability to maintain social distancing prerequisite for and between customers and staff, thereby limiting the transmission rate and protect the capacity of the health system to cope with the inevitable increase in disease.</p> <p>Retail outlets that are small in size with low staff numbers may be well placed to limit and control the number of customers that their staff interacts with on a daily basis thus reducing risk.</p> <p>There is a higher risk associated with the spread of the infection associated with person to person contact e.g. hairdressers, beauticians etc.</p> <p>Control of the population density is more difficult in outlets which are designed for the congregation of people e.g. indoor shopping centres / malls thereby facilitating person to person transmission.</p> <p>A review of the progression of the disease within and between each stage is required.</p> <p><i>The effectiveness of containment and mitigation depends on limiting the number of social contacts, but also the duration of each contact.<sup>14</sup></i></p> <p><i>Some measures could be lifted first where population density or individual density is lower or where access control is achievable (.....small stores versus shopping malls)<sup>15</sup>.</i></p> <p><i>Commercial activity (retail) with possible gradation (e.g. maximum number of people allowed, etc.)<sup>16</sup>.</i></p>				

<sup>14</sup> OECD: Flattening the covid-19 peak: Containment and mitigation policies: Updated 24 March 2020

<sup>15</sup> WHO Considerations in adjusting public health and social measures in the context of COVID-19: 16 April 2020

<sup>16</sup> EU Commission – European Roadmap towards lifting COVID-19 containment measures: 14 April 2020



## Appendix 1 – Public health framework approach to advising on reducing social distancing measures

6. Cultural & Social Measures					
Measure category	Initial Phases 1	Early Phases (Stage 1) 2	Early Phases (Stage 2) 3	Middle Phases 4	Later Phases 5
a) Culture & religious	<ul style="list-style-type: none"> <li>Open outdoor public amenities and tourism sites (e.g. carparks, beaches, mountain walks etc) where people are non-stationary and where social distancing can be maintained</li> </ul>	<ul style="list-style-type: none"> <li>Open public libraries with numbers limited, social distancing observed and strict hand hygiene on entry</li> </ul>	<ul style="list-style-type: none"> <li>Open playgrounds where social distancing and hygiene can be maintained</li> </ul>	<ul style="list-style-type: none"> <li>Open museums, galleries, and other cultural outlets where people are non-stationary, social distancing can be maintained and strict hand hygiene on entry</li> <li>Open religious and places of worship where social distancing can be maintained</li> </ul>	<ul style="list-style-type: none"> <li>Open theatres and cinemas where social distancing can be maintained</li> </ul>
b) Sport	<ul style="list-style-type: none"> <li>Open outdoor public sports amenities (e.g. pitches, tennis courts, golf courses etc) where social distancing can be maintained</li> <li>Permit people to engage in outdoor sporting and fitness activities, either individually or in very small groups (maximum 4 people), where social distancing can be maintained and where there is no contact</li> </ul>	<ul style="list-style-type: none"> <li>Permit people to engage in outdoor sporting and fitness activities, involving small group team sports training (but not matches) where social distancing can be maintained and where there is no contact</li> </ul>	<ul style="list-style-type: none"> <li>Permit “behind closed doors” sporting activities events where arrangements are in place to enable participants to maintain social distancing</li> </ul>	<ul style="list-style-type: none"> <li>Permit sports team leagues but only where limitations are placed on the numbers of spectators and where social distancing can be maintained</li> <li>Open public swimming pools where effective cleaning can be carried out and social distancing can be maintained</li> </ul>	<ul style="list-style-type: none"> <li>Permit close physical contact sports (rugby, boxing, wrestling)</li> <li>Open gyms, exercise, dance studios and sports clubs, only where regular and effective cleaning can be carried out and social distancing can be maintained</li> <li>Permit sports spectatorship which involve mass gatherings only in accordance with both indoor and outdoor numbers restrictions and where social distancing can be complied with</li> </ul>
c) Social / Recreational			<ul style="list-style-type: none"> <li>Open cafés and restaurants providing on-premises food &amp; beverages where they can comply with social distancing measures and strict cleaning in operation</li> </ul>	<ul style="list-style-type: none"> <li>Commence opening of hotels, hostels, caravan parks, holiday parks for social and tourist activities initially on a limited occupancy basis (or number of people per square metre) and then increasing over time (and where social distancing is complied with). Hotel bars remain closed</li> </ul>	<ul style="list-style-type: none"> <li>Indoor recreational venues (roller skating, bowling alley, bingo halls where numbers can be limited, cleaning can be maintained, restrictions where social distancing can be complied with. Open pubs, bars, nightclubs, casinos, where social distancing and strict cleaning can be complied with</li> <li>Permit festivals, events and other social and cultural mass gatherings only in accordance with both indoor and outdoor numbers.</li> </ul>
Public health rationale:	<p>Recognises need to balance social distancing with physical, cultural and social needs, to support mental and physical health and wellbeing. The public health rationale is to lift restrictions in such a way as to protect the ability to maintain social distancing prerequisite, thereby limiting the transmission rate and protect the capacity of the health system to cope with the inevitable increase in disease. This will be done where the visiting population density can be minimised. Restrictions on sporting, entertainment, culinary and cultural sites to be relaxed on phased basis linked to ability to maintain social distance, with emphasis on sport and exercise in the initial and early phases, and social aspects in the later phases.</p> <p><i>The effectiveness of containment and mitigation depends on limiting the number of social contacts, but also the duration of each contact<sup>17</sup>.</i></p> <p><i>Social activity measures (restaurants, cafes, etc.), with possible gradation (restricted opening hours, maximum number of people allowed, etc.)<sup>18</sup></i></p>				

<sup>17</sup> OECD: Flattening the covid-19 peak: Containment and mitigation policies, Updated 24 March 2020:

<sup>18</sup> EU Commission – European Roadmap towards lifting COVID-19 containment measures, 14 April 2020

## Appendix 1 – Public health framework approach to advising on reducing social distancing measures

7. Transport & Travel Measures					
Measure category	Initial Phases 1	Early Phases (Stage 1) 2	Early Phases (Stage 2) 3	Middle Phases 4	Later Phases 5
	<p>Public health risks connected with travel include-</p> <ul style="list-style-type: none"> <li>collective and time-bound nature of public transport,</li> <li>numbers of vehicles (including private cars) travelling to specific destinations resulting in significant crowding at those locations (e.g. urban areas, popular public sites and amenities etc.),</li> <li>travel from areas of higher infection rate to areas of lower infection rate potentially increasing spread.</li> </ul>				
<b>a) Transport and travel (national)</b>	<ul style="list-style-type: none"> <li>Public transport providers &amp; Local Authorities to provide detailed data on traveller numbers to enable monitoring of movement as part of data feed on assessing impact of lifting of measures</li> </ul>	<p>Public transport providers-</p> <ul style="list-style-type: none"> <li>actively restrict &amp; monitor nos. travelling to ensure SD compliance</li> <li>cleaning and timetables to be enhanced to ensure SD can be complied with</li> </ul> <p>People travelling in private transportation also to consider how to maintain SD and hygiene and compliance with any other requirements while travelling and at destination</p>	<p>Consider implement travel restrictions on nos. travelling to and in major urban centres on weekdays and weekend days:</p> <ul style="list-style-type: none"> <li>public transport providers to actively restrict &amp; monitor nos. travelling to ensure SD compliance</li> <li>restrictions to be implemented on nos. of private cars</li> </ul> <p>People travelling in private transportation also to consider how to maintain SD and hygiene and compliance with any other requirements while travelling and at destination</p>	<p>Progressively decrease restrictions on numbers travelling in major urban centres-</p> <ul style="list-style-type: none"> <li>on public transport and</li> <li>in private cars</li> </ul> <p>People travelling in private transportation also to consider how to maintain SD and hygiene and compliance with any other requirements while travelling and at destination</p>	<ul style="list-style-type: none"> <li>Resume tourist travel to offshore islands by non-residents</li> </ul> <p>People travelling in private transportation also to consider how to maintain SD and hygiene and compliance with any other requirements while travelling and at destination</p>
<b>b) Travel to and from overseas</b>	<ul style="list-style-type: none"> <li>National policy is to be determined. NPHE current approach from public health perspective is that persons entering from overseas other than for specific essential services should provide details on entry of a plan for 14 days self-isolation. In the absence of a credible plan, mandatory quarantine 14-day period to be imposed. Testing on entry to be considered</li> <li>Avoid non-essential overseas travel - consistent message in relation to travel from the State</li> </ul>				
<b>c) Leisure cruise vessels</b>	<ul style="list-style-type: none"> <li>Maintain restrictions on non-essential leisure cruise vessels</li> </ul>				
<b>d) International engagement</b>	<p>Continued engagement with Northern Ireland regarding public health approaches to better contain the infection spread on island.</p> <p>Support coordinated engagement on de-escalation measures at EU &amp; international level, including with UK.</p>				
Public health rationale:	<p>Social distancing measures to limit social interaction and slow down the spread of the virus can be complemented by restriction on non-essential travel.</p> <p>Increasing the numbers of the population using public transport must be done in a way which continues to limit the amount of contact people have with each other and limits the amount of time spent in each other's company in order to reduce transmission of the disease. The continued cleaning, modification of timetables and the restriction of numbers will go some way to facilitating social distancing in conjunction with individual responsibility for hand hygiene, cough etiquette and physical distancing.</p> <p><i>The gradual reintroduction of transport services should be adapted to the phasing out of travel restrictions and the phasing in of particular types of activities while taking account of the level of risk in the areas concerned. Lower-risk, individualised transport (e.g. private cars) should be allowed as soon as possible, while collective means of transport should be gradually phased in with necessary health-oriented measures (e.g. reducing the density of passengers in vehicles, higher service frequency, issuing personal protective equipment to transport personnel and/or passengers, using protective barriers, making sanitizing/disinfecting gel available at transport hubs and in vehicles, etc.)<sup>19</sup></i></p> <p><i>The effectiveness of containment and mitigation depends on limiting the number of social contacts, but also the duration of each contact<sup>20</sup>.</i></p>				

<sup>19</sup> EU Commission – European Roadmap towards lifting COVID-19 containment measures 14 April 2020

<sup>20</sup> OECD: Flattening the covid-19 peak: Containment and mitigation policies, Updated 24 March 2020