

## **Advice to the National Public Health Emergency Team:**

### **Measures to support people in self- isolation or restriction of movements and the evidence of the effectiveness of such measures**

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## About the Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) is an independent statutory authority established to promote safety and quality in the provision of health and social care services for the benefit of the health and welfare of the public.

HIQA's mandate to date extends across a wide range of public, private and voluntary sector services. Reporting to the Minister for Health and engaging with the Minister for Children, Equality, Disability, Integration and Youth, HIQA has responsibility for the following:

- **Setting standards for health and social care services** — Developing person-centred standards and guidance, based on evidence and international best practice, for health and social care services in Ireland.
- **Regulating social care services** — The Chief Inspector within HIQA is responsible for registering and inspecting residential services for older people and people with a disability, and children's special care units.
- **Regulating health services** — Regulating medical exposure to ionising radiation.
- **Monitoring services** — Monitoring the safety and quality of health services and children's social services, and investigating as necessary serious concerns about the health and welfare of people who use these services.
- **Health technology assessment** — Evaluating the clinical and cost-effectiveness of health programmes, policies, medicines, medical equipment, diagnostic and surgical techniques, health promotion and protection activities, and providing advice to enable the best use of resources and the best outcomes for people who use our health service.
- **Health information** — Advising on the efficient and secure collection and sharing of health information, setting standards, evaluating information resources and publishing information on the delivery and performance of Ireland's health and social care services.
- **National Care Experience Programme** — Carrying out national service-user experience surveys across a range of health services, in conjunction with the Department of Health and the HSE.

## Foreword

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a highly infectious virus which has caused tens of millions of cases of COVID-19 since its emergence in 2019, with a considerable level of associated mortality. In the context of the ongoing COVID-19 pandemic, SARS-CoV-2 constitutes a significant public health concern due to its high basic reproduction rate, the absence of innate immunity in the human population, the limited evidence of effective treatment approaches, and the constrained supply of vaccines in the early stages of population-level immunisation programmes.

The National Public Health Emergency Team (NPHET) oversees and provides national direction, guidance, support and expert advice on the development and implementation of strategies to contain COVID-19 in Ireland. Since March 2020, HIQA's COVID-19 Evidence Synthesis Team has provided research evidence to support the work of NPHET and associated groups and inform the development of national public health guidance. The COVID-19 Evidence Synthesis Team which is drawn from the Health Technology Assessment Directorate in HIQA, conducts evidence synthesis incorporating the scientific literature, international public health recommendations, and existing data sources as appropriate.

From September 2020, as part of the move towards a sustainable response to the public health emergency, HIQA provides evidence based advice in response to requests from NPHET. The advice provided to NPHET is informed by research evidence developed by HIQA's COVID-19 Evidence Synthesis Team and with expert input from HIQA's COVID-19 Expert Advisory Group (EAG). Topics for consideration are outlined and prioritised by NPHET. This process helps to ensure rapid access to the best available evidence relevant to the SARS-CoV-2 outbreak to inform decision-making at each stage of the pandemic.

The purpose of this report is to outline the advice provided to NPHET by HIQA regarding measures to support people in self-isolation or restriction of movements and the evidence of the effectiveness of such measures.

HIQA would like to thank its COVID-19 Evidence Synthesis Team, the members of the COVID-19 EAG and all who contributed to the preparation of this report.



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## Acknowledgements

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Particular thanks are due to the Expert Advisory Group (EAG) and the individuals within the organisations listed below who provided advice and information.

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The advice is developed by the HIQA Evidence Synthesis Team with support from the Expert Advisory Group. Not all members of the Expert Advisory Group and Evidence Synthesis Team are involved in the response to each research question. The findings set out in the advice represent the interpretation by HIQA of the available evidence and do not necessarily reflect the opinion of all members of the Expert Advisory Group.

### **Conflicts of Interest**

None declared.



## **Advice to the National Public Health Emergency Team**

The purpose of this evidence synthesis is to provide advice to the National Public Health Emergency Team (NPHE) on the following policy question:

“What measures are being taken internationally to support compliance with self-isolation and restricted movement requirements and is there any evidence as to how effective are these measures?”

The response to the policy question is informed by the following research questions:

RQ1. “What public health guidance or measures have been implemented to support those who are in self-isolation (due to case status) or restriction of movements (due to close contact status) to improve compliance and prevent the spread of SARS-CoV-2?” [An international review]

RQ2. “What evidence is there that measures to support those in self-isolation or restriction of movements improves compliance with these restrictive measures and prevents the spread of respiratory pathogens in a pandemic or an epidemic setting?” [An evidence summary]

The key points of this evidence synthesis, which informed HIQA's advice, are as follows:

### **Rapid review of measures to support people in self-isolation or restriction of movements and the evidence of the effectiveness of such measures**

- This rapid review consisted of two elements:
  - The first was a review of international guidance relating to measures to support those in self-isolation (due to case status) or restricting their movements (due to close contact status) during the COVID-19 pandemic.
  - The second was an evidence summary on the effectiveness of measures used to support individuals in self-isolation or restriction of movements.
- In total, guidance from two organisations and 19 countries, relating to measures to support those in self-isolation or restricting their movements, were included in the international guidance review.
- Five broad categories of measures were identified to support those who are in self-isolation or restriction of movements, these were:

- Psychological, addiction and safety measures, which included mental health support, online counselling services, stress management, support phone calls for those who live alone or want to talk to someone, support for those with alcohol or drug problems, safe housing and protection against violence (including domestic and child abuse).
  - Essential needs support measures, which included provision of medicines, food, accommodation, care (to children or vulnerable groups including the elderly) and personal protective equipment (PPE).
  - Financial support measures, which included any form of assistance payments (for example, salary protection, sick-pay and low-income support) and provision of certificates for cases and close contacts to guarantee financial support.
  - Information measures, which included the provision of information and educational resources (for example, apps, helplines and websites) for the public relating to COVID-19, self-isolation, restriction of movements or working from home.
  - Enforcement measures, which included any monitoring of regulations that was undertaken and fines or penalties incurred for acting outside of those regulations.
- There appears to be variation in the range and intensity of supports offered, the mechanisms by which the supports are offered, whether support is proactive or reactive, and if supports are universal or preferentially targeted at vulnerable groups. In general, Ireland compares favourably to other countries in terms of the level of support offered.
  - The second element of this rapid review was an evidence summary on the effectiveness of measures used to support individuals in self-isolation or restriction of movements due to confirmed or suspected infection with SARS-CoV-2 (or other respiratory pathogens (for example, SARS-CoV and MERS) during an epidemic or pandemic situation).
  - Two Australian studies were identified both of which were based on data from a survey undertaken during the 2009 H1N1 pandemic.
    - One reported on compliance with recommendations and understanding of information on quarantine. The authors reported that 90% of individuals understood what they were meant to do during the quarantine period with increased levels of understanding identified in households with cases. Overall, 55% of households were fully compliant and there was increased compliance reported in households that understood what they were meant

to do compared with those who reported that they did not (55%vs 35%; odds ratio (OR) 2.27, 95% confidence interval (CI) 1.35-3.80).

- The second study reported on compliance with recommendations as a result of access to paid sick leave or paid carer's leave to look after quarantined children. The authors reported that access to leave did not predict compliance with quarantine recommendations (OR 2.07, 95% CI 0.82-5.23).
- Although not systematically identified, international qualitative research shows that the factors individuals perceive to be of greatest importance to support them in self-isolation or restriction of movements are improved knowledge, the provision of adequate essential supplies and financial support.
- In a study conducted in Ireland, researchers hypothesised that individuals would have increased confidence in their ability to self-isolate if they used an online tool (or decision aids) to help them make a plan and develop a routine for self-isolation. The results showed:
  - behaviourally-informed decision aids generated statistically significant, positive outcomes in helping individuals decide whether they need to self-isolate, be confident in their ability to self-isolate and manage a household in which an individual needs to self-isolate
  - researchers recommended that test and trace staff and human resources departments should be utilised to direct individuals and employees, respectively, to available resources should they need to self-isolate or restrict their movements.
- This rapid review identified a wide range of measures available to support those in self-isolation or restriction of movements. However, there is a lack of evidence from primary research studies relating to the effectiveness of such measures, that is, evidence of increased compliance and or reduced spread of infection. Signposting to available resources is key to helping individuals plan for self-isolation and be confident in their ability to do so effectively.

### **COVID-19 Expert Advisory Group**

- A meeting of the COVID-19 Expert Advisory Group (EAG) was convened for clinical and technical interpretation of the evidence provided.

- The COVID-19 EAG identified additional factors which should be considered to inform both this policy question and potential further research and policy questions. These included:
  - The EAG highlighted the value of qualitative work, including Irish qualitative data, as being important to understanding factors that might impact compliance, especially in marginalised groups. It was noted that the Economic and Social Research Institute is continuing to undertake research in this area.
  - The provision of medical masks (and other PPE, where appropriate) has previously been considered, but was not feasible at the time due to logistical challenges of getting masks to individuals in a timely manner. However, the continued high level of transmission within households, as evidenced by the high secondary attack rate and large numbers of household outbreaks, highlights the need for additional measures to support self-isolation and restriction of movements within the home. The provision of medical masks to those who are self-isolating or restricting their movements, particularly to those living in circumstances where adherence to these measures is challenging, should be reconsidered.
  - It was noted that support is being provided to those who are vulnerable and or cocooning through the Community Call organised via local government, state agencies, community and voluntary groups (for example GAA clubs and religious organisations). Such groups could also have an expanded role in supporting those in self-isolation or restriction of movements. This could include assistance with obtaining essential items such as food, medicines and medical masks.
  - It was suggested that when case numbers decrease, public health teams could be deployed to outbreaks in the community to provide customised, setting-specific support, in conjunction with clear messaging to ensure the risk of transmission is minimised.
  - The importance of clear messaging for individuals who do not have native English was also highlighted. It was acknowledged that there are already a substantial number of resources available in different languages in the form of posters, videos and leaflets, but that these groups would still benefit from additional support to ensure they understand the messaging and have the resources to comply with the recommendations.

- The wide-spread use of mobile phone applications for contact tracing was acknowledged. It was also noted that some countries have also use web-based applications to support the dissemination of customised information and to help direct individuals to the relevant advice and to the range of resources and supports available to them.
- CityWest Hotel and other similar facilities have been successfully used to support those who cannot self-isolate at home. While to date this has been predominantly used by health and social care staff, it is also available to support referred members of the community. Expanded use of these resources could be considered to support individuals who cannot adequately self-isolate or restrict their movements within their own home.
- The EAG commented on the use of strict enforcement measures when case numbers are low. For example in Australia and New Zealand universal and comprehensive packages are available and used in conjunction with strict enforcement measures, to support those in self-isolation and restriction of movements. It was acknowledged that although monitoring and penalties have been implemented internationally, the effectiveness of such measures is largely dependent on the context and culture.

## **Advice**

Arising from the findings above, HIQA's advice to the National Public Health Emergency Team is as follows:

- All of the measures in place (in Ireland) to support those in self-isolation or restriction of movements are necessary, appropriate and need to remain in place.
- Given the high secondary attack rate in households, consideration should be given to the:
  - provision of medical masks for those self-isolating or restricting their movements to reduce transmission within the home
  - expanded use of Community Call to support those in self-isolation or restriction of movements. This could include assistance with obtaining essential items such as food, medicines and medical masks
  - expanded use of alternative accommodation for those who cannot effectively self-isolate or restrict their movements at home.

- Clear, concise information is critical in equipping and empowering individuals with the necessary knowledge to self-isolate and restrict their movements. In addition to the information already provided through the HSE and HPSC websites, consideration could be given to:
  - provision of information through Web apps that utilise conditional logic and aim to help people identify social and financial supports that are both available and applicable to the person's specific situation
  - enhanced information provision to support individuals without native English
  - test and trace staff and human resources departments should be utilised to direct individuals to available resources should they have been told to self-isolate or restrict their movements.
- When case numbers return to low levels, the use of universal, comprehensive packages should be considered to support individuals. Consideration could also be given to the use of enforcement measures (for example, monitoring and or penalties), where appropriate.

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