

## The CONTAIN Project

Creating a public health toolbox for COVID-19: a cross-border analysis to disentangle psychological, behavioural, media and governmental responses.



## Research Team

Catherine D. Darker<sup>1</sup>, [catherine.darker@tcd.ie](mailto:catherine.darker@tcd.ie), ORCID: <https://orcid.org/0000-0002-1561-7076>

Nicola O'Connell<sup>1</sup>, [oconnen4@tcd.ie](mailto:connen4@tcd.ie), ORCID: <https://orcid.org/0000-0002-5143-1797>

Martin Dempster<sup>2</sup>, [m.dempster@gub.ac.uk](mailto:m.dempster@gub.ac.uk), ORCID: <https://orcid.org/0000-0001-9499-3186>

Christopher D. Graham<sup>2</sup>, [christopher.graham@gub.ac.uk](mailto:christopher.graham@gub.ac.uk), ORCID: <https://orcid.org/0000-0001-8456-9154>

Clíodhna O'Connor<sup>3</sup>, [clíodhna.oconnor1@ucd.ie](mailto:clíodhna.oconnor1@ucd.ie), ORCID: <https://orcid.org/0000-0001-8134-075X>

Lina Zgaga<sup>1</sup>, [zgagal@tcd.ie](mailto:zgagal@tcd.ie), ORCID: <https://orcid.org/0000-0003-4089-9703>

Ann Nolan<sup>4</sup>, [nolana13@tcd.ie](mailto:nolana13@tcd.ie), ORCID: <https://orcid.org/0000-0002-5295-1567>

Gail Nicolson<sup>1</sup>, [nicolsg@tcd.ie](mailto:nicolsg@tcd.ie), ORCID: <https://orcid.org/0000-0002-5580-8635>

Emma Burke<sup>1</sup>, [burkee16@tcd.ie](mailto:burkee16@tcd.ie), ORCID: <https://orcid.org/0000-0003-0063-2158>

Luke Mather<sup>1</sup>, [luke.mather94@gmail.com](mailto:luke.mather94@gmail.com), ORCID: <https://orcid.org/0000-0002-0752-905X>

Gabriel Scally<sup>5</sup>, [gabriel.scally@btinternet.com](mailto:gabriel.scally@btinternet.com), ORCID: <https://orcid.org/0000-0001-6944-6076>

Philip Crowley<sup>6</sup>, [philip.crowley@hse.ie](mailto:philip.crowley@hse.ie), ORCID: <https://orcid.org/0000-0002-2273-1942>

Katy Tobin<sup>7</sup>, [katy.tobin@tcd.ie](mailto:katy.tobin@tcd.ie), ORCID: <https://orcid.org/0000-0002-8537-3273>

Niamh Brennan<sup>8</sup>, Niamh Brennan [nbrennan@tcd.ie](mailto:nbrennan@tcd.ie)

Joe Barry<sup>1</sup>, [joebarry@tcd.ie](mailto:joebarry@tcd.ie), ORCID: <https://orcid.org/0000-0003-2424-044X>

## **Institutional Affiliations**

1. Discipline of Public Health and Primary Care, Institute of Population Health, Trinity College Dublin, Tallaght Cross, Dublin, D24 DH74, Ireland
2. School of Psychology, Queen's University Belfast, 18-30 Malone Road, Belfast, BT9 5BN, UK
3. School of Psychology, University College Dublin, Newman Building, Belfield, D04 V1W8, Ireland
4. Trinity Centre for Global Health, Trinity College Dublin, 7-9 Leinster Street South, Dublin, D02 K104, Ireland
5. School of Medicine, University of Bristol, Bristol, Tyndall Venue, BS8 1TH, UK
6. Quality Improvement, Health Service Executive, Dr Steevens' Hospital, Dublin, D08 W2A8, Ireland
7. Global Brain Health Institute, School of Medicine, Trinity College Dublin, Lloyd Building, Dublin, D02 PN40, Ireland
8. Trinity College Library, Trinity College Dublin, Dublin, D02 PN40, Ireland

## **Funders**

This project was funded under the Health Research Board and Irish Research Council's joint COVID-19 Pandemic Rapid Response Funding Call (COV19 2020).

## Table of Contents

Research Team.....	2
Funders .....	3
1. Communicating the threat and the response – behaviour is crucial to how quickly COVID-19 spreads.....	7
1.a Overview of results from a national telephone survey .....	7
Recommendation 1: Lessons for public health messaging relating to COVID-19 .....	8
1.b Overview of results on wellbeing of people diagnosed with COVID-19.....	8
Recommendation 2: People’s experiences of COVID-19.....	9
2. Use of data .....	10
2.a Overview of the experience of the CONTAIN research team relating to case and mortality data for COVID-19 .....	10
Recommendation 3: Gathering and communicating COVID-19 data.....	12
3. Policy synchronisation – “all hands on deck” .....	13
3.a An overview of results from CONTAIN study relating to policy synchronisation.....	13
Recommendation 4: The synchronisation of policies across the whole of the island of Ireland .....	14
4. General closing remarks: .....	15
Resources.....	15
References .....	15

## Introduction

The novel coronavirus (COVID-19) was first reported on December 31, 2019 in Wuhan, China. It was declared a pandemic on the 11<sup>th</sup> March 2020, by the World Health Organization (WHO) (1). Worldwide, governments are grappling to respond, and public healthcare systems have met unprecedented challenges and disruption. At the time that this research was in the field (May - December 2020) there was no available vaccine for COVID-19 infection (2). However, despite vaccine rollouts now commencing, behavioural measures such as handwashing, social distancing and face masks continue to be recommended to help reduce person-to-person transmission and to control the pandemic effectively.

The European Centre for Disease (ECDC) and the WHO have issued technical guidance for member states and countries worldwide to use in response to COVID-19. Countries will need to find ways to treat the increasing number of COVID-19 patients, while maintaining essential health services. The complexities of health systems make this a difficult task. The pressure on individual countries' health systems will depend on the mitigation of transmission and a reduction of viral spread within communities (3).

The consequences of the new pandemic to society have been severe. Many people have experienced great personal and social consequences, and economic distress. This has occurred both in the public at large and, in particular, among specific groups, such as older people, healthcare workers, those living alone, and those with underlying health conditions (4).

Nonetheless, governments have had to pursue often unpopular policies, such as restricting people's movements and closing schools to stem the spread of the virus. The willingness of the public to accept these policies and to abide by these rules is essential to their success. Communication of government policies and public health recommendations is key to this (2). Governments need the trust and cooperation from the public to be compliant with preventive and curative public health interventions, to reduce risk. It has been identified that low levels of trust from the public in government policies can lead to lower levels of adherence in effective public health interventions (5).

The island of Ireland is unique in that it is governed by two different jurisdictional and public health systems, the Republic of Ireland (ROI) and Northern Ireland (NI). ROI is governed by the Oireachtas and the Health Service Executive (HSE) is responsible for the health system and services. NI has a devolved government 'Northern Ireland Assembly' from Westminster in the United Kingdom, with the Public Health Agency (PHA) responsible for the NI public health system. Although the two jurisdictions share the one island, both pursued independent strategies to tackle COVID-19.

This document outlines a public toolbox which seeks to compile findings from different components of the CONTAIN study (6). The aim of this toolbox is to present evidence-based recommendations based on study findings, which will inform and guide governmental and public health officials' response to COVID-19, through improved targeting of public health messaging, through advice on public health policy synchronisation and by providing lessons

learned on the clarity and transparency of COVID-19 epidemiological data capture. We hope this toolbox will equip political leaders to better respond to future COVID-19 waves and any potential future epidemics or pandemics.

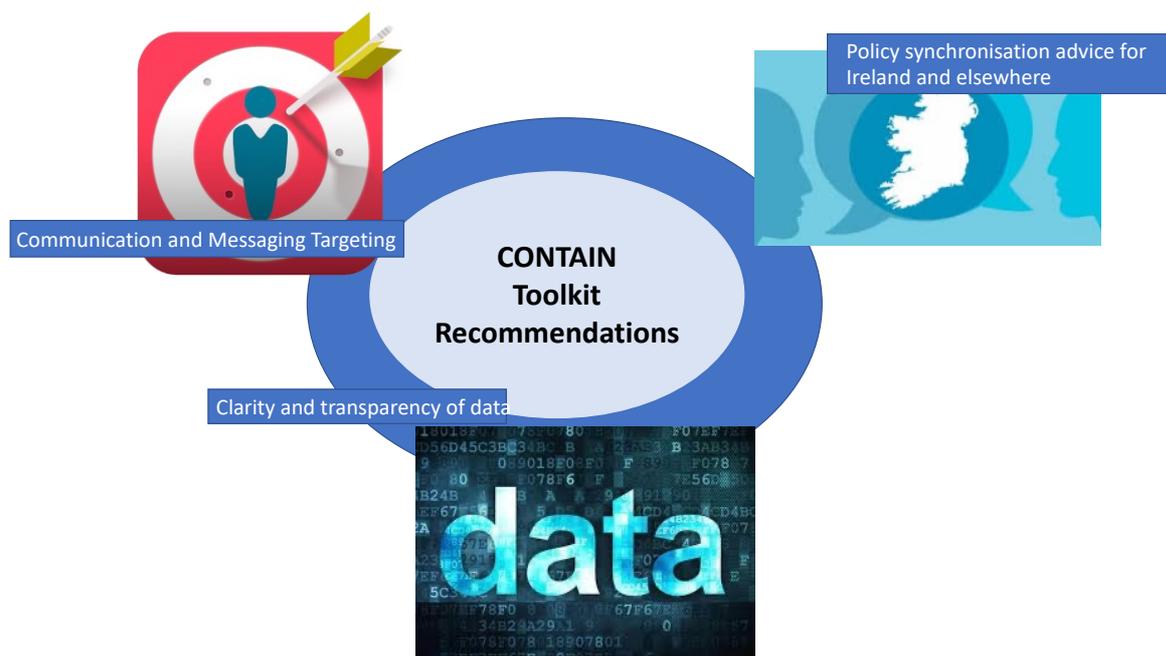
The CONTAIN study is a project run within the Discipline of Public Health and Primary Care, in the School of Medicine in Trinity College Dublin. It seeks to better understand individual, social and political responses to COVID-19 on the island of Ireland. Ireland has two separate governmental and public health jurisdictions, but very similar demographics and shared culture. This allows for a unique opportunity to investigate how people in separate countries, on one island, respond to the pandemic.

The study has four connected studies. The first study assesses people's psychological and behavioural response to COVID-19, using a large telephone study and eight focus groups. The second study investigates social media and formal media responses to COVID-19 in both countries. The third study brings together study one and two and maps the findings against the incidence and mortality rate of COVID-19. The fourth and final study investigates the policy response in ROI and NI, with a view to identifying the most significant public health policy insights from both countries.

In this document, we compile findings from each study to make three specific recommendations:

1. Communication of the threat and response, and targeted public health messaging
2. Recommendations for future capture and storage of epidemiological data
3. Lessons in policy synchronisation

Key question in response to COVID-19 pandemic: ***How to slow the spread of a novel coronavirus?***



## **1. Communicating the threat and the response – behaviour is crucial to how quickly COVID-19 spreads**

In conjunction with vaccine roll out, focus remains on efforts to control and reduce coronavirus transmission based upon behavioural change and maintenance. This requires the need for widespread adherence to public health messages and measures. A lot of Governments, including those in the ROI and NI, have crafted messages through a lens of ‘social solidarity’. It is common to see phrases such as “protect each other”, emphasising how adhering to the guidelines benefits not only individuals but also society as a whole, including the most vulnerable (e.g., the elderly and the sick). Governments and public health teams around the world are emphasising pro-social behaviours (e.g., mask wearing and social distancing) and good personal hygiene behaviours (e.g., hand washing and good sneeze and cough etiquette). There is a balance to be struck in outlining these pandemic pro-social behaviours while also keeping the general public apprised of the risk of contracting the virus in the community. Alongside this it is important to understand how people might respond to and cope with the threat of a global pandemic and changes to their lives that are made in an effort to reduce that threat (e.g., lockdown, school closures, working from home). How can we best encourage as many people as possible, if not all, to engage in the types of behaviours that are being asked of them during this pandemic?

Everyday, people make ‘risk’ based judgements, like when to cross the road. Judging risk is critical to our survival. Risk perception research focuses on judgements and behaviours (taking/avoiding risks) related to health (e.g., probability of ill health or death). This is challenging at times - even for health experts and bio-statisticians to get right. There are three aspects of perceived risk – perceived likelihood (the probability that a person will be harmed by the hazard), perceived susceptibility (an individual’s constitutional vulnerability to a hazard; e.g., their age, whether they have any other underlying medical conditions), and perceived severity (the extent of harm a hazard would cause; e.g., *if I contracted COVID-19 how sick do I think I will get?*).

### **1.a Overview of results from a national telephone survey**

Our study found that most people report complying with handwashing guidelines (97.6%) and social distancing guidelines (93.6%). The minority of people who say they ‘rarely’ or ‘never’ handwash within the last two weeks were more often men than women, tended to report experiencing more loneliness, believed there were more barriers to washing their hands, tended to believe that it was not easy for them to wash their hands frequently (low self-efficacy) and were less likely to believe friends or family thought it a good idea to wash their hands either.

A slightly different picture arose amongst those people reporting ‘rarely’ or ‘never’ socially distancing. These people were more often in lower- and middle-income groups (social class B, C1 and D) compared to people in the highest group (social class A). They were more likely to be younger, male, had fewer people living in their household aged under-18, and were more likely to be a healthcare worker. They tended to report having lower mood, lower fear of COVID, and they reported lower belief in the efficacy of social distancing behaviour (response efficacy). Similar to those not complying with handwashing regulations, they tended to report that maintaining a distance of 2 metres from others was difficult, they

believed there were higher costs to social distancing and they didn't think their friends or family thought it was a good idea to socially distance either.

We did not observe any difference in the rate of non-adherers to handwashing or social distancing in either NI or ROI. The people who reported not socially distancing were mostly a different group who reported not handwashing.

### **Recommendation 1: Lessons for public health messaging relating to COVID-19**

Language and messaging matters. There is value in engaging with a wide variety of people on how to get this right. This would include those who are already adhering, people who adhere to some of the advice some of the time, plus those that do not adhere at all. There is a need to continue to use universal messaging, alongside more targeted communications. COVID-19 prevention messaging is likely to be more effective if it is tailored to groups who are at greater risk of infection, particularly young males from lower socio-economic groups.

#### **1.b Overview of results on wellbeing of people diagnosed with COVID-19**

Although some of those infected with COVID-19 are asymptomatic, others experience a progression and variety of symptoms. These can be mild (81% of cases), severe (14%), or critical (5%); people in this category may need to be mechanically ventilated, need intensive care treatment and might die (7,8). There is accumulating evidence and recognition that many with COVID-19 report longer lasting effects, such as fatigue, dyspnoea, joint pain and chest pain that are experienced long after the acute phase of infection(9). As has emerged from previous epidemics (10,11), effects such as anxiety, depression and post-traumatic stress disorder have been reported in many people. It is perhaps not surprising that mental health and well-being has been negatively affected, given the effect and persistence of the physical symptoms of COVID-19, along with attenuating effects such as the undermining of social and occupational functioning, particularly unemployment, loneliness and anxiety, as well as the uncertainty about treatment and health outcome.

Our qualitative findings explored the lived experience and personal accounts of those diagnosed with COVID-19 within Ireland. Results highlight the variability of symptoms experienced, feelings of fear, stress related to quarantining, and fatigue and debilitation long after the acute phase of COVID-19. Frustration navigating treatment services is a common thread in our and other studies (12). A negative experience of the testing process, and intrusiveness and ineffectiveness of contact tracing, highlights major issues in this fundamental tenet of controlling COVID-19 in this pandemic:

*"I never, ever got that test, never. And then after day 9 I rang the GP again who I know quite well and she knew by my voice that things were serious and then I was rushed to hospital by ambulance so I never actually got a test only in hospital when they tested."* Mark

*"For us it was a bit of a mess, one Sunday we got 15 calls from the same centre asking us the exact same questions from 15 different people and this is when we were ill you know and you know just weren't up for that."* John

The testing process proved difficult for some participants who had to travel long distances to a testing site in Northern Ireland when there was a significantly closer site but on the ROI side of the border, and it was suggested by many in the focus group that an all-Ireland approach should be taken:

*“Definitely because the closest testing centre to me is about 4/5 mile away and it’s in the south and I don’t know if I can go to it but the other is about 45-minute drive away in the north.”* Norma

*“an all-Ireland approach definitely. I feel that that should be the case definitely.”* Jim

A lack of after-care was upsetting and frustrating for those who had lingering symptoms following the acute phase of infection:

*“It’s a bit frustrating because you felt you know that you were left in limbo and I still to this day haven’t seen any GP em and even though I have complications following on from that and em so I suppose the care afterwards would be more my challenge with regards experience of Covid.”* Amy

## **Recommendation 2: People’s experiences of COVID-19**

Individuals who have been diagnosed with COVID-19 can be in a state of physical and mental stress during and after the acute infection phase. At the start of the pandemic, the testing and contact tracing systems were patchy, as well as a lack of aftercare for those who continue to suffer symptoms brings further stress and frustration to individuals. A pragmatic and sensible allocation of testing sites dependent on distance, irrespective of which side of the border a person resides, would reduce personal burden on unwell individuals. There is also a need to provide timely and effective testing and tracing to those who present for testing. A system of follow-up of healthcare treatment to those diagnosed with COVID-19 should be implemented.

- Improvements on the effectiveness and timeliness of testing and tracing should be implemented; testing sites should be allocated depending on distance from individuals; after-care for those diagnosed with COVID-19 should automatically be provided. Participants suggested follow-up appointments from their
- Number of individuals who present for testing are processed in a timely manner and contact tracing conducted effectively;  
This recommendation is relevant to minimising the spread of COVID-19 as well as reducing stress and burden on those trying to get tested.  
The implementation of this recommendation can be carried out in the short term and continued for the duration of the pandemic.
- Several participants in our study reported lingering physical (fatigue, pain) and mental health (trauma-responses, insomnia, anxiety etc.) suggesting that post-acute care for those with COVID-19 may be indicated.

## 2. Use of data

*“We’re not just fighting a pandemic; we’re fighting an infodemic,”* said Tedros Adhanom Ghebreyesus, the WHO’s director-general at the 2020 Munich Security Conference.

Data is a vital component in helping governments, healthcare organisations and other sectors battle the COVID-19 coronavirus pandemic. It is about not only looking at individual cases, but also trends and patterns with regards to the spread of the virus. Ultimately data should provide insights. These insights, such as whether strategies to ‘flatten the curve’ are working can have far reaching implications – e.g. demonstrating the effectiveness of behavioural measures. As countries try different public health strategies to limit the spread of COVID-19, they will need data to provide an understanding of whether these strategies are working. Institutions like the WHO and the ECDC have built interactive maps and dashboards that show the numbers of cases in each country around the world. The way in which COVID-19 data is collected and indeed how cases and even deaths are measured can be different between countries. Countries may also change how they collect data relating to the pandemic. There is a lack of alignment among the two jurisdictions on the island of Ireland about what is being measured and compared.

### **2.a Overview of the experience of the CONTAIN research team relating to case and mortality data for COVID-19**

The ECDC has developed a definition of what constitutes a case of COVID-19 (13). It would appear that this matches the ROI definition (14) and seems to be the same as the NI case definition, although NI do not give a specific definition – only a list of symptoms indicating eligibility for testing (15). The ECDC (16) utilises the WHO’s definition of what constitutes a COVID-19 death (17). In terms of deaths related to COVID-19 in the ROI and NI, it is less clear as to how these are classified.

In the ROI, the Health Protection Surveillance Centre (HSPC) has been responsible for the collection, management and reporting of COVID-19 epidemiological data.

In NI, responsibility for reporting on COVID-19 epidemiological data has deviated between government organisations. Up to 19<sup>th</sup> April 2020, the Public Health Agency (PHA) was responsible for reporting on epidemiological data for COVID-19. Between 28<sup>th</sup> February and 23<sup>rd</sup> March 2020, the publishing by the PHA was very inconsistent, with only five reports published during this period. PHA reports were published daily from the 24<sup>th</sup> March until 19<sup>th</sup> April 2020, but from 20<sup>th</sup> April onwards, the NI Department of Health (DOH) assumed responsibility for the reporting of COVID-19 epidemiological data.

The NI DOH created a dashboard containing infographics which were retrospectively populated with epidemiological data from January onwards. Of concern was the incongruency between figures reported by the PHA and DOH for the same period up until 19<sup>th</sup> April.

Since January, the Northern Ireland Statistics and Research Agency (NISRA) has published reports on the number of COVID-19 related deaths in NI. There was also incongruency between figures published by NISRA and figures published by the DOH. This incongruency

between data reported by different government agencies for the same time period raised serious concerns about the validity of NI epidemiological data. For example, for data up to 12<sup>th</sup> June 2020, NISRA reported a cumulative death toll of 802. For the same date, the DoH reported a figure of 540. This switching of reporting duties from the PHA to the DoH in the middle of the pandemic left it unclear as to how many cases and deaths were in fact confirmed.

Of further concern was the regular retrospective amendment of epidemiological data by the DOH on their data dashboard. On numerous occasions throughout the summer months, significant retrospective amendments were made to the 'cumulative confirmed cases' number for dates going back to early March 2020. Cumulative confirmed case numbers for a given day could increase or decrease. These retrospective changes often came without any type of warning or justification or log of changes, from the DOH.

A final point of concern with the epidemiological data published by the DOH was the discrepancy between its data and media accounts of when the first case of COVID-19 was confirmed in NI. This discrepancy raised further concerns about the reliability and validity of epidemiological data.

There are many ways a country could account for the number of COVID-19 fatalities. It could just count anyone who died with coronavirus-like symptoms, but unless a person was tested, it's unclear whether that individual succumbed to coronavirus directly. And even if a patient had the virus, that individual's cause of death could have been unrelated to infection (e.g., road traffic accident), or due to coronavirus combined with something else. This becomes a significant problem when it is done on a global scale during a pandemic.

Throughout the pandemic, ordinary citizens are being presented with data and graphs on a daily/weekly basis through press briefings. Findings from the focus groups suggest people found it difficult to track the epidemiological data closely:

*"I mean you have to evaluate all news don't you and I mean trust is a big word. I think there's a lot of politics in play all the time because you know these are politicians at the same time as they are in government and a lot of them have ulterior motives, trying to present themselves as the saviours of the nation and so you just have to balance the information that you get and you know I would corroborate it with bits of other pieces like I have to say mostly BBC, some newspapers, Sunday newspapers, that kind of thing, mostly BBC." Caroline*

*"We got a lot of 24-hour news services you know now and it's bombarding you all the time isn't it?" Laura*

*"I find it so frustrating with the information. Initially I believed everything that I was being told and then the 5.30 news on TV3 and then very early on I got on to this worldometer about Covid with all the worldwide statistics and between the whole lot I don't believe anybody now. Em we are being told that Ireland are doing so well but when you go on to that Worldometer thing we are almost the same deaths, we're*

*not far behind America, you know I find that really horrifying that everything is being told we're doing grand."* Joan

COVID-19 is demonstrating the importance of surveillance data for effective decision making. Citizens are being exposed to data modelling and epidemiology on a daily basis and being asked to engage and make sense of the data presented, alongside subsequent recommendations from governments and public health teams. The decisions that are being taken based upon COVID-19 case and mortality data, such as lockdowns, restrictions and lifting of same, have wide-ranging and long-lasting implications for individuals, families, governments, healthcare providers, business owners and more. In order for governments to formulate a joined up response and ongoing strategy for these challenges, high quality, robust, accurate data is key. It is important that the way in which data is communicated both within and across countries is streamlined.

### **Recommendation 3: Gathering and communicating COVID-19 data**

Part of the solution involves those who are measuring cases and deaths to come together to identify the similarities and differences in their approaches. Taking guidance from organisations such as the ECDC and the WHO is important as these types of institutions have decades of experience and set the benchmark for monitoring and surveillance. By doing this it provides a fundamental layer of trust and alignment. Also it would increase the possibility of sharing, comparing and understanding case data in a meaningful way. This is particularly important for countries that geographically buffer one another, which is the case for the ROI and NI. The border between NI and the ROI is porous with many of the population, especially those living in 'border counties' move back and forth across the border for work, education and social life. From a data perspective COVID-19 has provided us with an opportunity to modernise our data collection processes at speed, while also exposing the challenges in producing real time trustworthy data that is comparable from one area or time period to the next.

- Both jurisdictions should ensure that they are using the same case definition and criteria for assigning death certification.
- It should be the responsibility of one agency only to gather, validate and communicate data.
- Data should be available through publicly accessible forums for the general public, and communicated in an easy to understand way.
- Additional data to the type and standard that maybe required by academic researchers should be made available on request, unless there is a lawful basis for not doing so.
- Data on COVID-19 is a vital component in helping governments, healthcare organisations and other sectors battle the COVID-19 coronavirus pandemic, therefore this goal is of utmost relevance.
- This goal can be achieved in the short-term and is indeed required in order to successfully navigate this pandemic.

### **3. Policy synchronisation – “all hands on deck”**

The interconnectivity of countries and populations living within them are one of the issues that has been highlighted with regards to COVID-19. It is an active example of community health. Countries are dependent in one way or another on their neighbours – this could be in terms of economic trade, political interdependence, social ties between people from neighbouring countries, information, ideas and environmental inter-dependence across national boundaries. Maintaining control of infectious virus, such as COVID-19, is difficult to envisage without the coordinated approach for public health measures like lockdowns and relaxations of same. Long-term success of any potential lockdown or indeed exit strategy hinges on what happens regionally (perhaps even globally), as intercountry and international importation could thwart efforts to prevent resurgence through testing and contact tracing (18). To account for potential international importation, the European Commission recommended that governments provide advance warning of plans to relax lockdowns (19). Governments have acknowledged that there are some issues, such as tackling chronic disease, which require a ‘whole-of-government’ approach. In such policies, quite often roles and responsibilities are carved out for individuals, communities, governments and other sectors of society like schools and higher education institutions, health systems, and even commercial businesses. Inherent in the success of such initiatives is the glue that sticks these factors together – political will and buy-in.

#### **3.a An overview of results from CONTAIN study relating to policy synchronisation**

The results from the qualitative aspects of the CONTAIN project demonstrated that there are many intricate cross-border independencies between ROI and NI such as common travel, employment, and trade links. Despite widespread agreement that public health initiatives in NI and ROI should cooperate, this has proved difficult in practice, with the development of separate contact tracing apps and separate COVID-19 testing systems. Findings from the study indicate that there are significant policy differences between NI and ROI and this is apparent in the closure of schools, public places and events, with most commentators noting that NI tended to be slower and less strict in the implementation of lockdown measures. Focus group participants in NI commented on how the perception of slowness of their government, compared to the ROI was a concern to them. Often times health policy and healthcare decision making can become politicised. Many believe that COVID-19 public health response had become politicised, whereby parties tended to work in opposition rather than in unison. All commentators in the media, social media and focus groups commented on the truism that the virus didn’t recognise borders and a unified, synchronised approach would be the most pragmatic.

The ROI has explicitly aligned itself with multilateralism and tended to be a little more conservative and cautious. While there are exceptions, the UK has broadly followed multilateral guidance and in most cases only 3-4 days after the ROI. There are nuanced differences in the way that each has said the same thing:

- NI follows on foot of UK with usually a few days delay especially in March/April.

- Some communication/messaging is more ambiguous and that may have contributed to false perceptions around the policies in each jurisdiction, managing tension between local & international priorities;

#### **Recommendation 4: The synchronisation of policies across the whole of the island of Ireland**

Looking at coordination of policy responses between countries, especially countries like the Republic of Ireland (ROI) and Northern Ireland (NI) that shared the same geographical island, plus a rich cultural and political history is not necessarily an easy discussion to have, never mind to agree on a coordinated policy response. However, COVID-19 has shown itself to have a global reach, as a virus it does not care about borders.

*“I think an all island approach would have been definitely beneficial because as earlier people said you know there’s people crossing it every day to go to work and for pleasure or wherever so the idea of us having two separate arrangements and not talking to each other I don’t think was a good idea.” Paul*

*“it’s the common sense approach to have an all-Ireland approach to it, there’s no chance of controlling the virus unless you get away from the politics.” Rose*

There is therefore a need to consider and to implement a solidarity approach to act synchronistically in terms of lockdowns and easing of restrictions. Even the timing and use of masks and whether this public health approach is coordinated is an important aspect to consider. There may be a need to look at the synchronisation of mitigation efforts through a collaborative approach. This would go far beyond the memorandum of understanding regarding the sharing of information between the two countries with regards to COVID-19 and more towards the necessary policy synchronisation of the two jurisdictions that inhabit the island of Ireland.

- North and South must implement a solidarity approach to act synchronistically in terms of lockdowns and easing of restrictions, contact tracing, testing and also public health messaging.
- Joint statements, from North and South, should be made with regard to policy on restrictions and responses to COVID-19 and any future pandemics
- This is achievable as broadly both Governments have aligned themselves with multilateralism and therefore coordination of policy responses between countries can be attained.
- COVID-19 has shown itself to have a global reach, as a virus it does not care about borders.
- This goal is time-sensitive and in implementing this recommendation in the shortest time possible will have important effects of the course of the pandemic on the island of Ireland.

#### 4. General closing remarks:

Despite similarities with previous pandemics and a rapid response by the scientific community to understand COVID-19 and reduce its global impact, there is still much that we do not know, especially given the novel features of COVID-19, and governments varying responses to the crisis worldwide. There is therefore an urgent need for researchers from a wide variety of backgrounds to come together and prioritise their expertise in the fight against COVID-19.

#### Resources

<https://www.cdc.gov/nonpharmaceutical-interventions/pdf/gr-pan-flu-npi.pdf>

<https://www.publichealth.va.gov/flu/materials/index.asp>

<https://ctb.ku.edu/en/coronavirus-tools>

<https://www.sciencedirect.com/science/article/pii/S235277142030046X>

#### References

1. Ghebreyesus Adhanom T. WHO Director-General's opening remarks at the media briefing on COVID-19 (11th March 2020) [Internet]. Geneva, Switzerland: World Health Organization; 2020 Mar [cited 2020 Nov 6]. Available from: <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>
2. European Centre for Disease Prevention and Control. Guidelines for the implementation of non-pharmaceutical interventions against COVID-19 [Internet]. Stockholm, Sweden: ECDC; 2020 [cited 2020 Nov 6]. Available from: <https://www.ecdc.europa.eu/sites/default/files/documents/covid-19-guidelines-non-pharmaceutical-interventions-september-2020.pdf>
3. World Health Organization. Strengthening the health systems response to COVID-19: policy brief: recommendations for the WHO European Region [Internet]. Geneva, Switzerland: WHO Regional Office for Europe; 2020 Apr [cited 2020 Nov 6]. Available from: <https://apps.who.int/iris/handle/10665/333072>
4. Van Bortel T, Basnayake A, Wurie F, Jambai M, Koroma AS, Muana AT, et al. Psychosocial effects of an Ebola outbreak at individual, community and international levels. *Bull World Health Organ*. 2016 Mar 1;94(3):210–4.
5. Vinck P, Pham PN, Bindu KK, Bedford J, Nilles EJ. Institutional trust and misinformation in the response to the 2018–19 Ebola outbreak in North Kivu, DR Congo: a population-based survey. *Lancet Infect Dis*. 2019 May 1;19(5):529–36.
6. Darker CD, O'Connell N, Dempster M, Graham CD, O'Connor C, Zgaga L, et al. Study protocol for the COvid-19 Toolbox for All IslaNd (CONTAIN) project: A cross-border analysis in Ireland to disentangle psychological, behavioural, media and governmental responses to COVID-19. *HRB Open Res*. 2021 Feb 15;3:48.

7. Siordia JA. Epidemiology and clinical features of COVID-19: A review of current literature. *J Clin Virol*. 2020 Jun 1;127:104357.
8. Shen K, Yang Y, Wang T, Zhao D, Jiang Y, Jin R, et al. Diagnosis, treatment, and prevention of 2019 novel coronavirus infection in children: experts' consensus statement. *World J Pediatr*. 2020 Jun 1;16(3):223–31.
9. Carfi A, Bernabei R, Landi F, Gemelli Against COVID-19 Post-Acute Care Study Group. Persistent Symptoms in Patients After Acute COVID-19. *JAMA*. 2020 Aug 11;324(6):603–5.
10. Lee AM, Wong JGWS, McAlonan GM, Cheung V, Cheung C, Sham PC, et al. Stress and psychological distress among SARS survivors 1 year after the outbreak. *Can J Psychiatry Rev Can Psychiatr*. 2007 Apr;52(4):233–40.
11. Mak IWC, Chu CM, Pan PC, Yiu MGC, Chan VL. Long-term psychiatric morbidities among SARS survivors. *Gen Hosp Psychiatry*. 2009 Aug;31(4):318–26.
12. Ladds E, Rushforth A, Wieringa S, Taylor S, Rayner C, Husain L, et al. Persistent symptoms after Covid-19: qualitative study of 114 “long Covid” patients and draft quality criteria for services. *medRxiv*. 2020 Oct 14;2020.10.13.20211854.
13. European Centre for Disease Prevention and Control. Case definition for coronavirus disease 2019 (COVID-19), as of 29 May 2020 [Internet]. Stockholm, Sweden: ECDC; 2020 May. Available from: <https://www.ecdc.europa.eu/en/covid-19/surveillance/case-definition>
14. Health Protection Surveillance Centre. COVID-19 interim case definition [Internet]. Dublin, Ireland: Health Service Executive; 2020 Jun [cited 2020 Nov 6]. Available from: <https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/casedefinitions/covid-19interimcasedefinitionforireland/>
15. Public Health Agency. COVID-19 Frequently Asked Questions [Internet]. Belfast, Northern Ireland; 2020 [cited 2020 Nov 6]. Available from: <https://www.publichealth.hscni.net/node/4802>
16. European Centre for Disease Prevention and Control. Surveillance definitions for COVID-19; deaths due to COVID-19 [Internet]. Stockholm, Sweden: ECDC; 2020 [cited 2020 Nov 6]. Available from: [https://www.ecdc.europa.eu/en/covid-19/surveillance/surveillance-definitions#:~:text=A%20COVID%2D19%20death%20is,disease%20\(e.g.%2C%20trauma\)](https://www.ecdc.europa.eu/en/covid-19/surveillance/surveillance-definitions#:~:text=A%20COVID%2D19%20death%20is,disease%20(e.g.%2C%20trauma)).
17. World Health Organization. Emergency use ICD codes for COVID-19 disease outbreak [Internet]. Geneva, Switzerland: WHO; 2020 [cited 2020 Nov 6]. Available from: <https://www.who.int/classifications/icd/covid19/en/>
18. Chinazzi M, Davis JT, Ajelli M, Gioannini C, Litvinova M, Merler S, et al. The effect of travel restrictions on the spread of the 2019 novel coronavirus (COVID-19) outbreak. *Science*. 2020 Apr 24;368(6489):395–400.

19. McKee M. A European roadmap out of the covid-19 pandemic. BMJ [Internet]. 2020 Apr 17 [cited 2020 Oct 30];369. Available from: <https://www.bmj.com/content/369/bmj.m1556>