

COVID-19: TILDA project to survey and protect older people in Ireland

*Lead Researchers: Professor Rose Anne Kenny, Dr Mark Ward, Dr Nollaig Bourke
Funded by: Irish Research Council and Health Research Board
Funding amount for both projects: €375,197*

In Summary

Death rates from COVID-19 in older adults are devastating, and the consequences of the pandemic on the physical, mental and emotional well-being of surviving older adults will be dramatic and long-lasting. The Irish Longitudinal Study on Ageing (TILDA) is an ongoing research project looking at the health and wellbeing of a nationally representative group of more than 8,000 people aged over 50 in Ireland.

With funding from the Health Research Board and Irish Research Council, TILDA will gather information about who has been exposed to the virus and the risk factors for developing COVID-19 in that age-group. TILDA researchers will also survey 6,000 TILDA participants about how their health, behaviours and attitudes have changed in the pandemic. Together, the studies will help policymakers and health systems to optimise the national response to COVID-19 in the longer-term.

[Project video](#): Professor Rose Anne Kenny, TCD

The Problem

Older people are suffering severe consequences more than anybody else. We need more information about the association between COVID-19 and the much more likely consequences of the infection older people in Ireland, and we need to plan to support older people as they recover from the impact of the COVID-19 pandemic.

The Projects

One project, led by Dr Nollaig Bourke at Trinity College Dublin, will look for important information relating to COVID-19 in the TILDA participation group of more than 8,000 people aged over 50 in Ireland. That study will examine blood samples from TILDA participants to see if they have been exposed to the virus that causes COVID-19 and explore risk factors. Another project will invite TILDA participants to take part in a survey about their health and wellbeing and behaviour and their experience of COVID-19.

The Outcomes

- We will be in a better position to estimate how adults over the of 50 in Ireland are likely to have been exposed to the virus that causes COVID-19, even if they haven't shown symptoms.
- The findings will inform future vaccination measures and help us to achieve maximum protection for older people.
- We will have a better picture of what factors in older people in Ireland could be linked to more severe disease, and this will help identify people at risk.
- We will know more about the experience, attitudes, health and behaviour changes among older people that have arisen from the pandemic, and we can plan to support their long-term safety and wellbeing.

Professor Rose Anne Kenny, Principal Investigator and founder of TILDA and Professor of Medical Gerontology at Trinity College Dublin, says:

“Older persons are most likely to experience severe and critical consequences of COVID including death. The majority of deaths across Europe have been in older persons. The ability to mount an immune response declines with age. Understanding immunosenescence, its relationship to COVID and therefore its impact on future vaccination responsiveness is a priority. Because TILDA has comprehensive data collected at regular periods for the past 10 years we can explore how immune profiles and other biological and social factors change over time and which changes enhance an individual’s vulnerability to infection.

“The measures which have been introduced as a result of COVID 19 have particularly impacted on the lives of people over 70. The research will further enquire about the impact of these policies on mental and physical health and hear the voice and views of those most affected. This is important if we are to understand and manage the collateral damage from COVID 19.”

How to support mental health among frontline healthcare workers in a pandemic

Lead Researcher: Professor Brian McGuire
Funded by: Irish Research Council and Health Research Board
Funding amount: €187,254

In Summary

It is important to protect the mental health of frontline healthcare workers during the COVID-19 pandemic, because they shoulder a large burden of treating people who are affected by the disease. But the current guidelines about mental health protection for frontline healthcare workers typically relate to incidents such as terrorist attacks and natural disasters. The mental health needs of frontline healthcare workers in this long-term 21st-century pandemic are unknown. A project funded by HRB and IRC at NUI Galway will gather information about the experience and needs of frontline healthcare workers during the pandemic in Ireland and overseas, and will develop best-practice principles to support the mental health of frontline healthcare workers for this and future pandemics.

[Project video](#): Professor Brian McGuire, NUI Galway

The Problem

Frontline healthcare workers are under stress due to COVID-19, but there are no existing best practice guidelines for supporting their mental health in a long-term 21st century pandemic.

The Project

A project led by NUI Galway will gather and analyse information about the experience of frontline healthcare workers in Ireland and abroad, and develop and test best practice for supporting their mental health.

The Outcomes

- We will know more about the mental health needs of frontline healthcare workers during the COVID-19 pandemic.
- The project will develop and test best practice guidelines for supporting mental health among healthcare workers for COVID-19 and future pandemics of its sort.

Professor Brian McGuire of NUI Galway School of Psychology says:

“Those working at the frontline of COVID-19 medical care may be experiencing enormous stress – it’s vital that we understand their experiences so we can provide suitable and effective psychological support.”

Rapid Resources to support healthcare professionals answering Ireland's Call for COVID-19

*Lead Researcher: Professor Alice Coffey
Funded by: Irish Research Council and Health Research Board
Funding amount: €199,647*

In Summary

A recent national 'call to action' has resulted in qualified nursing and other health professionals returning to practice, moving into new areas of practice or newly starting to practice, in order to support health services in the COVID-19 pandemic. These professionals are likely to benefit from additional resources to build their competence and confidence.

A project led by the University of Limerick will make online resources available, including answers to specific clinical questions to support individuals with queries. The information will be available through a website and on social media. This individualised readily available and relevant information will help healthcare professionals at the front-line dealing with COVID-19, as well as professional bodies more broadly dealing with the pandemic. The project will track the impact of the resources.

[Project video](#): Prof. Alice Coffey, University of Limerick

The Problem

Following a call to action, many newly qualified healthcare professionals are entering practice, while other qualified healthcare professionals may be returning to practice following an absence or moving into new areas of practice. The core professional skills are intact, but changes will have occurred in terms of technology and routine practice underpinning the work assigned. This HRB-IRC funded innovation will link the individual health care professionals to evidence based advice for many clinical and practical problems.

The Project

A project led by the Health Implementation Science and Technology Research Cluster at UL will triage clinical and case specific queries posed by individual healthcare professionals and ensure evidence based, timely responses. Resources will be freely available online.

The Outcomes

- Healthcare professionals will have individualised rapid access to relevant, online information to support their clinical questions when they are entering, moving to different areas of practice or returning to practice to respond to the COVID-19 pandemic.
- The resources will help to build confidence and competence among healthcare professionals in their practice.
- The online resources that this project will make available, will also support broader healthcare professionals and bodies in the pandemic.

Professor Alice Coffey, Professor of Nursing & Midwifery, and Lead of the Health Implementation Science Research Cluster at the University of Limerick, says:

“We believe that our individualised support will have practical and demonstrable impact on nursing and allied health professional’s confidence in commencing, returning to practice or moving to new areas of practice and will be of benefit to professional bodies during the COVID-19 crisis and beyond. Our project will be evaluated using a realist evaluation approach to examine the process and impact on professionals and their confidence and competence in practice. We believe that our innovation will help to reduce anxiety and build personal confidence in dealing with issues during Covid-19 but will also have wider application for professionals returning to the workplace.”

Why don't we keep our distance? Evidence for more effective communication in the pandemic

*Lead Researcher: Dr Gerard Molloy
Funded by: Health Research Board and Irish Research Council
Funding amount: €148,745*

In Summary

Keeping physically distant from others is a proven way to slow the spread of the virus that causes COVID-19, but people are less likely to stick to the recommendations than they are to follow other important steps, such as washing their hands.

A project at NUI Galway will use expertise in behaviour change interventions to gather information about how different groups in society feel about physical distancing, and how future communications could be tailored to encourage greater adherence in order to manage the COVID-19 pandemic.

[Project video](#): Dr Gerard Molloy, NUI Galway

The Problem

People do not tend to rigidly follow physical distancing recommendations, even though it is a proven way to slow the spread of COVID-19.

The Project

A project led by NUI Galway will explore how people feel about physical distancing, looking across different age groups and analyse how communications could be tailored to be more effective in encouraging this practice in the general public.

The Outcomes

- We will know more about how people feel about physical distancing and why people may be less likely to practice it compared to other measures, such as washing hands.
- The project will help deliver an evidenced-informed communications strategy for Ireland, to encourage proven behaviours that help to stop the spread of COVID-19.

Dr Gerard Molloy, from NUI Galway's School of Psychology, says:

“Collectively we have done very well with keeping apart in the early stages of the pandemic and we can see how this has reduced Covid-19 transmission and the related demands on our health services. The initial evidence indicates that maintaining this distancing has been very challenging for many people, particularly for those facing difficult personal, social and working conditions. Therefore, we need to better understand what will help people achieve the required level of distancing and how we communicate about the need for further measures, particularly if we go through a cycle of relaxing and reinstating physical distancing over the next year.”

Getting a measure of silent infection: a key to COVID-19 recovery planning

Lead Researcher: Professor Catherine Comiskey
Funded by: Health Research Board and Irish Research Council
Funding amount: €96,340

In Summary

Ireland has taken public health measures such as closing schools and businesses and encouraging social and physical distancing to slow the spread of the COVID-19 virus. Planning for future easing of such restrictions is hampered because we don't know how many people in the community have been infected with the virus but have not shown symptoms. A HRB and IRC-funded project led by Trinity College Dublin will use mathematical models to estimate the levels of asymptomatic infections, and this will help to inform planners and policymakers about a possible second wave, and when and how Ireland can ease social restrictions related to COVID-19.

[Project video](#): Prof. Catherine Comiskey, TCD

The Problem

Policy makers and planners in Ireland need to advise on school openings, safety for nursing homes and protection of the vulnerable communities in the COVID-19 pandemic. But we don't know how many people have been infected with the virus and have not shown symptoms.

The Project

A project led by Trinity College Dublin will use back calculation methods and models on data of cases with symptoms, and from this provide crucial estimates about the scale of the asymptomatic COVID-19 population in Ireland.

The Outcomes

- We will have a better estimate of how many people in Ireland have been infected with COVID-19 but who have not displayed symptoms.
- The information will help planners and policymakers to estimate the critical points and communities where levels of past infection could be protective against the virus.
- This will help to devise plans to ease COVID-19 restrictions Ireland while protecting people from the pandemic and a possible second wave of spread.

Professor Catherine Comiskey of Trinity College Dublin School of Midwifery & Nursing says:

“With this project we plan to provide an estimate of the number of people who may have had COVID-19 and do not know they have had it. These are called the asymptomatic cases. Knowing how many people had COVID-19 and their ages will help policy makers make safer decisions on re-opening our communities and hopefully preventing a second wave.”

Improving healthcare delivery for COVID-19 patients in Dublin's north inner city

Lead Researchers: Dr John Lambert, Professor Walter Cullen
Funded by: Health Research Board and Irish Research Council
Funding amount: €199,098

In Summary

Dublin's north inner city is an area of high social deprivation and a high incidence of COVID-19. Led by University College Dublin School of Medicine, the North Dublin COVID-19 Cohort Study was established in April 2020, and researches the health of people living in this region of the city who have been effected by COVID-19.

By analysing healthcare information about patients attending the Mater Hospital and general practices with COVID-19, and by involving consenting patients in follow-up studies, it will capture important insights into the health experience of people living in Dublin's north inner city during the pandemic and will provide reports to the HSE and other health agencies. In this way, it will help to plan health services according to the needs of this at-risk population and reduce the negative effect of the pandemic on local communities.

[Project video](#): Dr John Lambert, UCD

The Problem

Local communities in north inner-city Dublin are at high risk of infection and illness from COVID-19.

The Project

Established during the aftermath of the outbreak, the North Dublin COVID-19 Cohort Study is led by University College Dublin to gather important information on COVID-19 in north inner-city Dublin. It will examine hundreds of anonymised patient records from people attending the Mater Hospital for COVID-19, and will follow the progress of patients who consent to be part of the project.

The Outcomes

- The project will issue technical reports about COVID-19 in north inner-city Dublin to the HSE, the Health Protection Surveillance Centre and European agencies for infectious disease monitoring.
- As a result of this project, we will know more about how to ensure our health services can reduce the negative impact of the COVID-19 pandemic on the local population.

Professor Walter Cullen, co-Principal Investigator of the North Dublin COVID-19 Cohort Study says:

“While COVID-19 has impacted on all areas of Irish society its impact on the communities living in this area are especially severe. In this project, people who require hospital treatment for COVID-19 infection will be monitored after discharge to see what problems they experience and to see how these can be best prevented and treated. Strong links between primary and

secondary care are a key part of the response to COVID-19 and this project will inform how this can best address the healthcare needs of the many people in Ireland and worldwide affected by COVID-19.”

Dr John Lambert, University College Dublin and co-principal on the project emphasises,

“We do not know if survivors of covid-19 will have long-term complications both in terms of quality of life and possible long-standing damage to the heart, lungs, and brain, which is targeted by this virus. Our longitudinal follow up study with these patients will ensure that they are carefully monitored and provided with appropriate treatment if necessary.”