

What we do

In just a few months, COVID-19 infection has become a global pandemic. This new coronavirus presents unique challenges for pandemic control. Aotearoa New Zealand has chosen an elimination strategy to contain spread of the virus. Both the pandemic itself and the response are having profound and inequitable impacts on health and wellbeing in this country and neighbouring Pacific countries.

The goals of this research are to:

1. Describe the pandemic and its population health impacts in New Zealand and the Pacific
2. Evaluate the response to help shape and improve its effectiveness and equity
3. Contribute to long-term improvements in New Zealand's ability to manage pandemic threats
4. Identify health, equity and sustainability benefits arising from a well-designed recovery

Who we are

Co-search brings together a diverse multidisciplinary team that includes:

- Pandemic experts from Otago, Massey, and Auckland universities including epidemiology, microbiology, vaccine strategy, and disease modelling scientists;
- Māori researchers (including partnership with Takiri Mai Te Ata Whanau Ora Collective and Kōkiri Marae in Wellington);
- Pacific researchers associated with the University of Otago;
- Emergency management experts from the Massey Joint Centre for Disaster Research;
- Systems science experts from ESR;
- University of Otago students running a project that aims to understand lived experience of the pandemic;
- A photographer and videographer from the University of Otago Wellington who will contribute to the historical record by visually documenting the pandemic and the response.

Co-search is led by Professor Michael Baker (Director) and Dr Amanda Kvalsvig (Lead Researcher) at the Department of Public Health, University of Otago Wellington. It includes a network of more than 20 collaborating researchers, 3 universities, a Crown research institute, community organisations and an international advisory group.

Funding

- Health Research Council (HRC) and the Ministry of Health (HRC 20/1066 [PI: Baker] & 20/990 [PI: Gray])
- Sargood bequest, Wigram Foundation and other donors
- Salary and administrative support from Otago, Massey, and Auckland Universities

For more information

<https://www.otago.ac.nz/wellington/covid19response>

Professor Michael Baker michael.baker@otago.ac.nz

Dr Amanda Kvalsvig amanda.kvalsvig@otago.ac.nz

Programme manager: Dr Virginia Signal virginia.signal@otago.ac.nz

Co-Search projects

Pandemic epidemiology

Aim: To generate a comprehensive epidemiological description of the pandemic, and its impacts and inequalities | **Lead:** Michael Baker michael.baker@otago.ac.nz

Big data/modelling

Aim: To use an individual-based network model of contagion to simulate the effects of interventions | **Lead:** Shaun Hendy shaun.hendy@auckland.ac.nz

Population impacts

Aim: To assess the impact of both the pandemic and pandemic response on population wellbeing, with a particular focus on equity impacts | **Lead:** Amanda Kvalsvig amanda.kvalsvig@otago.ac.nz

Māori-led research

Aim: To evaluate a Marae-based pandemic response and reflect on lessons for the future | **Lead:** Cheryl Davies cheryl@kokiri-hauora.org.nz

Pandemic response planning

Aim: To assess the effectiveness of pandemic response planning in NZ | **Lead:** David Johnston D.M.Johnston@massey.ac.nz

Systems research

Aim: To develop a systemic understanding of community response and impact to guide response adaptations | **Lead:** Mat Walton mathew.walton@esr.cri.nz

Border management and Pacific countries

Aim: To document and evaluate the effectiveness of border controls and the NZ Response to COVID-19 in the Pacific | **Leads:** Lucy Telfar Barnard lucy.telfar-barnard@otago.ac.nz and Viliami Puloka viliami.puloka@otago.ac.nz

Physical distancing and masking

Aim: To understand responses to physical distancing and self-isolation | **Lead:** Lesley Gray lesley.gray@otago.ac.nz

Contact tracing and digital tools

Aim: To develop interventions to enhance contact tracing | **Leads:** Ayesha Verrall aysha.verrall@otago.ac.nz and Andy Anglemeyer andrew.anglemeyer@otago.ac.nz

Vaccination strategies and infrastructure

Aim: To support development and delivery of an effective, equitable and safe COVID-19 vaccination strategy | **Lead:** Nikki Turner nikki.turner@otago.ac.nz

Lived experience

Aim: To understand lived experience of the pandemic and response measures | **Lead:** Louise Signal louise.signal@otago.ac.nz

Benefits from a well-designed recovery

Aim: To investigate opportunities arising from a well-designed recovery | **Lead:** Tim Chambers tim.chambers@otago.ac.nz

Images and media

Aim: To provide a visual description of the COVID-19 pandemic and response | **Lead:** Luke Pilkinton-Ching luke.pilkinton-ching@otago.ac.nz