



ANNUAL REPORT PREPARED FOR MCCALL MACBAIN FOUNDATION

The Pandemic EVIDENCE Collaboration

September 2024 – August 2025

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Background

The COVID-19 pandemic revealed both the strengths and weaknesses of scientific research and knowledge sharing in response to a public health emergency. While pharmacological interventions were developed, tested, and distributed with impressive speed, decisions surrounding many non-pharmacological interventions (NPIs) were frequently based on limited evidence. As a result, there remains a lack of understanding about the potential short- and long-term benefits and harms of various public health measures, as well as the best ways to organise patient care.

In response to the pressing challenges posed by public health crises, a collaborative initiative was launched in September 2023 by independent academics and scholars from top-tier institutions around the world. Participants included Bond University in Australia, the University of Calgary and McMaster University in Canada, Oslo Metropolitan University, and the University of Oxford in the UK. These experts united with a shared mission: to identify, develop, and implement strategies for generating high-quality evidence on Non-Pharmacological Interventions (NPIs) during public health emergencies, with the aim of better informing policy and care decisions.

To advance this mission, the Pandemic Evidence Collaboration was established with the support of a generous £275,000 grant over three years from the McCall MacBain Foundation. Following the agreement to initiate this collaboration, the official launch of the Pandemic Evidence Collaboration (PEC) took place during a meeting at Kellogg College on April 11-12, 2024.

The Pandemic Evidence Collaboration (PEC) aims to address several key questions:

- How can high-quality evidence for NPIs, including but not limited to randomized controlled trials, be generated during a global public health emergency?
- How can effective and efficient knowledge exchange be promoted to ensure that scientists and public health officials focus on the most relevant policy and care questions, and that policymakers and health system leaders integrate this evidence into decision-making?



• How can the short- and long-term impacts of NPI policies be studied, particularly in terms of health (e.g., life expectancy and quality), economic factors (e.g., income, housing, and food security), psychosocial effects (e.g., community cohesion), and environmental considerations (e.g., biosafety and waste management)?

The collaboration endeavours to address these questions through projects based on three pillars and four cross-cutting themes, presented diagrammatically in a matrix below:

Cross-cutting Themes	Pillar 1 Diagnostics and Transmission	Pillar 2 Interventions and Evidence	Pillar 3 Practice and Policy
Theme 1: Definitions and Nomenclature Glossary of terms Taxonomy Classifications	Diagnostic Criteria Testing methods-PCR, lateral flow, rapid tests, serology, WGS Testing strategies	Types of NPIs: Individual vs community vs population based settings Identifying and applying NPIs to various s-Developing, testing and applying Novel NPIs in a pandemic	Assessing the cost-effectiveness of interventions in pandemics Assessing waste during pandemics and impact on policy
		Assessing the benefits and harms of NPIs	Developing a framework for grading policy Developing effective policy
Theme 2. Data Challenges Inputs to transmission models Outcomes - mortality, morbidity, infection, hospitalisations, other	Modes of Transmission Animal-animal studies Human-animal studies Human challenge studies	Developing a framework for evidence synthesis Developing evidence during and outside of pandemics	Policy for intervening in individuals and populations Adjudicating study quality for policy Reporting criteria
Data veracity Data sharing	Study Quality and Standards A framework for evidence assessment, synthesis, and adjudicating study quality	Study design for high quality: RCTs, CRTs, cohort studies and others Outcomes - mortality, infections, hospitalizations, morbidity	Role of Journals
Theme 3. Methodological Issues	Access to data with bias assessments Setting minimum methodological standards Reporting methods	Role of the Environment and infrastructure Waste in the scientific literature Role of laboratory studies Use of models and predictive modelling	Role of media and dissemination in effecting policy Behavioural tactics in setting policy



Establishing the PEC

The Pandemic Evidence Collaboration (PEC) was officially launched during a meeting at Kellogg College on April 11-12, 2024. The event was attended by representatives from the five founding partner universities: Bond University (Australia), the University of Calgary (Canada), McMaster University (Canada), Olso Metropolitan University (Norway), and the University of Oxford (UK). Each university was represented by a Founding Evidence-Informed Fellow, as outlined in the initial proposal. Additionally, members of the Founding Steering Committee and the Founding Scientific Planning Committee, who were selected during the collaboration's development phase in 2023, were present. The Founding Scientific Planning Committee drafted the original proposal for the collaboration, and the Scientific Planning Committee now serves as its operational body.

A summary of the activities and abstracts from the inaugural launch conference of the PEC has been accepted for publication in the open-access journal BMC Proceedings. The full publication can be found in the Appendix 1. Additionally, all the abstracts, along with links to the complete slide presentations from the April 2024 launch meeting, have been deposited in the Oxford Research Archive.



Role of the Founding Steering Committee

The Founding Steering Committee identified individuals from within their home institutions and beyond with a proven interest in the topic. The members of the Founding Steering Committee are leading on the following activities for the Collaboration:

- Developing and Sustaining a Global Consortium: Establishing strategies to formalise and maintain a global network, ensuring that each member site demonstrates a strong commitment to high-quality research.
- Generating Robust, Generalisable Knowledge: Starting from a position of equipoise to produce research findings that are widely applicable and minimising risk of bias.
- Facilitating Knowledge Exchange: Fostering academic-societal partnerships to promote bidirectional knowledge exchange, effectively informing both research and policy/care decision-making.
- Overseeing Scientific Programmes: Providing strategic oversight for the development and implementation of PEC's scientific programmes and initiatives.

The Founding Steering Committee at its inception consisted of the following individuals:

- Professor John Conly, Associate Professor Kirsten Fiest, Professor Tom Stelfox, University of Calgary, Alberta, Canada
- Dr Victoria Haldane, University of Toronto, Ontario, Canada
- Professor Carl Heneghan, Dr Annette Plüddemann, Dr Georgia Richards, University of Oxford, UK
- Professor Paul Glasziou, Bond University, Queensland, Australia
- Dr Mark Loeb, McMaster University, Hamilton, Ontario, Canada
- Dr Atle Fretheim, Oslo Metropolitan University, Norway



Role of the Founding Scientific Planning Committee

The Founding Steering Committee identified individuals from within their home institutions and beyond with a proven interest in the topic. The Founding Scientific Planning Committee plays a critical role in the collaboration by:

- Participating in regular meetings to guide the strategic direction of the PEC.
- Designing and developing the scientific programme for international meetings.
- Attending and actively participating in international symposiums and conferences.
- Establishing 'oven-ready' research protocols to ensure rapid project implementation during public health emergencies.
- Disseminating research findings and promoting effective knowledge exchange.
- Leading high-priority international collaborative projects.
- Fostering ongoing collaboration to generate robust evidence.
- Mentoring and supervising Evidence-Informed Fellows to build capacity and expertise.

The Founding Scientific Planning Committee consisted of the following individuals who have continued to be in post this reporting year:

- Professor John Conly (Chair), University of Calgary, Alberta, Canada
- Dr Annette Plüddemann, University of Oxford, UK
- Professor Carl Heneghan, University of Oxford, UK
- Dr Georgia Richards, University of Oxford, UK
- Dr Sara Gandini, European Institute of Oncology, Italy
- Dr Igho Onakpoya, University of Oxford, UK
- Dr Elena Cecilia Rosca, Victor Babes University of Medicine and Pharmacy Timisoara, Romania
- Susanna Maltoni, IRCCS AOUBO, Bologna, Italy
- Associate Professor Kirsten Fiest, University of Calgary, Alberta, Canada
- Dr Mark Loeb, McMaster University, Hamilton, Ontario, Canada
- Dr Oyuka Byambasuren, Bond University, Queensland, Australia
- Associate Professor Mark Jones, Bond University, Queensland, Australia
- Dr Atle Fretheim, Oslo Metropolitan University, Norway



- Associate Professor Jenine Leal, University of Calgary, Alberta, Canada
- Jessica Bartoszko, PhD candidate, McMaster University, Hamilton, Ontario, Canada

Founding Evidence-Informed Fellows

To support the initiative of building a robust evidence base for NPIs and expanding the Collaboration, Founding Partner universities (as previously listed) was invited to nominate a Founding Evidence-Informed Fellow (FEIF) to facilitate engagement and project participation (Appendix 2: Terms of Reference for Founding Evidence-Informed Fellows (FEIF)).

The FEIF role was established to provide postgraduate trainees (PhD and Master's students), Post-Doctoral Fellows, and early to mid-career researchers who have a strong interest in and capacity for enhancing evidence generation and application for NPIs with an opportunity to develop expertise in NPIs for health emergencies. Fellows are attending and presenting at relevant events, fostering an environment that promotes learning, collaboration, and innovation. We sought individuals who could make bold, thought-provoking, and constructive contributions, recognising the importance of capacity building and possessing the expertise to identify exceptional candidates to join the collaboration.

The Founding Scientific Planning Committee, the Founding Steering Committee and the FEIFS work closely together to meet the goals of the Collaboration.









Figure 1: Founding Evidence-Informed Fellows. From left to right: Georgia Richards, Oyuka Byambasuren, Jessica Bartoszko, Jenine Leal.

Since the selection of the FEIFs, they have played an integral leadership role in supporting the Scientific Steering Committee and in guiding and integrating the many Evidence Informed



Fellows who were subsequently selected to take on roles within the PEC as the next generation of evidence-based scholars.

Highlights of the many activities and scholarly pursuits of the EIFs are provided in the accompanying Table.



Georgia Richards, King's Prize Fellow, King's College London and Associate Tutor for the MSc in Evidence-Based Health Care, University of Oxford.

Activities at
Pandemic
EVIDENCE
Collaboration
Conference held in
Banff

- Plenary talk: <u>Harnessing case reports from coroners to assess the harms of interventions deployed during the COVID-19 pandemic:</u>
 the Preventable Deaths Tracker
- Co-chair closing session: Hopes and Ideas for the Future: providing better evidence in a pandemic
- Conference article: <u>Reflections on the recent inaugural Pandemic EVIDENCE Collaboration Conference</u>
- Exchange visit to Bond University and Melbourne Coroners' office under taken in autumn 2024. Complete
- Booked into European Educational Programme in Epidemiology (EEPE) 2026 for the summer course on 'Modern time series methods for public health and epidemiology'.

Planned or completed exchange visits



Oyungerel Byambasuren, academic general practitioner and postdoctoral researcher at the Institute for Evidence-Based Healthcare, Bond University.

Activities at Pandemic EVIDENCE Collaboration

• Plenary talk: Silent spreaders or overestimated threat? The true role of asymptomatic COVID-19. Talk available on YouTube.



Conference held in Banff

Status of projects undertaken

- Project lead for the systematic review on the effectiveness of personal air quality monitoring devices in preventing respiratory infections at Bond University. Manuscript under preparation.
- Project lead for the review on research waste in nonpharmacological intervention (NPI) studies during the pandemic.
 Project at the planning stage.

Planned or completed exchange visits

 Exchange visit with McMaster University and the Norwegian Institute for Public Health planned for April /May 2026



Jessica Bartoszko, Senior Epidemiologist, Public Health Agency of Canada and McMaster University.

Activities at
Pandemic
EVIDENCE
Collaboration
Conference held
in Banff

- Plenary talk: Infectious disease models Methodological considerations for public health decision making
- Poster presentation entitled "Modeled evidence addressing non-pharmacological interventions for viral respiratory infections: A scoping review protocol"
- Moderated oral abstract session on "Practice & Policy"
- Co-chaired panel session on "Practice and Policy: Why we need EBM to facilitate informed policy in a pandemic"

Status of projects undertaken

- Published protocol as preprint: https://osf.io/4j8ec/files/osfstorage
- Leading a scoping review on modelled evidence addressing non-pharmacological interventions for viral respiratory infections.
- · Collaborating on three EIF led studies:



- Reporting quality of diagnostic accuracy studies for viral infections of enhanced pandemic potential: protocol for a meta-epidemiologic systematic review and metaregression - Adam Komorowski
- Evaluating Public Values on Non-Pharmaceutical Interventions for Pandemic Control - Yuan (Ray) Zhang
- Evaluating the effectiveness of the enhanced mask directive in Alberta, Canada during the 2023-2024 and 2024-2025 respiratory seasons – Jenine Leal

Planned or completed exchange visits

- Spring (May) 2026 Exchange visit with the Centre for Epidemic Interventions Research (CEIR), Norwegian Institute of Public Health – Dr. Atle Fretheim
- Booked into European Educational Programme in Epidemiology (EEP) 2026 for Sumer course on 'Modern time series methods for public health and epidemiology.



Jenine Leal, Associate Professor at the University of Calgary, and Research Scientist with Standards and Surveillance for Infection Prevention and Control within Alberta Health Services.

Activities at
Pandemic
EVIDENCE
Collaboration
Conference held in
Banff

- Workshop facilitator and co-facilitator of the EIF Early Career Workshop
- Poster: The effectiveness of continuous masking in reducing the risk of respiratory infection in healthcare settings: A systematic review
- Oral: Uncovering the consequences of additional precautions on patients and healthcare workers in acute care settings: A scoping review
- Poster co-author: The utility of trending serial cycle threshold values for sars-cov-2 allowing for early de-isolation and cost savings from unnecessary use of PPE and bed blocking.
- Plenary speaker: Challenges in addressing adherence of NPIs



 Seminar co-chair: Pillar 2 interventions & evidence: Building bridges across Canada

Status of projects undertaken

- Project lead for 'Effectiveness of continuous masking in reducing the risk of respiratory infection in healthcare settings: a systematic review'. Project near completion.
- Project lead for 'Evaluation of the effectiveness of the enhanced mask directive in Alberta, Canada during the 2023-2024 and 2024-2025 respiratory seasons'. Project underway.
- Project lead for 'Uncovering the consequences of additional precautions on patients and healthcare workers in acute care settings: a scoping review'. Near completion.
- Co-author: 'Modelled evidence addressing non-pharmacological interventions for viral respiratory infections: a scoping review'.

Future Projects

- Co-author: Real-world use of Ct values to determine acute vs. nonacute COVID-19 cases and decision to stop isolation.
- Project lead for 'Attributable costs of hospital-acquired viral respiratory infections in Alberta, Canada'.
- Enrolment on London School of Hygiene and Tropical Medicine (LSHRM) course on – 'Design and Analysis of Cluster Randomised and Stepped Wedge Designs' for July 2026.

Planned or completed exchange visits

- Enrolment on Western University virtual course on 'Pragmatic Trials Training Program Modules' for August 2026
- Exchange visit with the Norwegian Institute for Public Health planned for Sept/Oct 2026.

We take pride in including the Founding Evidence-Informed Fellows, who are early-career researchers, as essential members of both the Founding and current Scientific Planning Committee. Their perspectives are valued at every level of decision-making and management within the PEC. We are committed to building their capacity and empowering them to take on leadership roles, ensuring that their voices help shape the future direction of the Collaboration and evidence-based decision-making.





Figure 2: Evidence-Informed Fellows at Banff Centre for Arts and Creativity. From left to right: Fariba Aghajafari, Jessica Bartoszko (FIEF), Gousong Wu, Ingeborg Hess Elgersma, Georgia Richards (FIEF), Oyuka Byambasuren (FIEF).

Evidence-Informed Fellows

The Scientific Planning Committee of PEC which includes the Founding Evidence-informed Fellows remains dedicated to building the capacity of the Evidence-Informed Fellows (EIFs) and promoting ongoing collaboration through various initiatives developed by the current cohort of 10 EIFs.

These additional Fellows contribute to the creation of sustainable, "oven-ready" research protocols identified through collaboration. These protocols enable the rapid initiation of projects during the early stages of public health emergencies. The EIFs continue to:

- Contribute to the development of research protocols.
- Build expertise in non-pharmacological interventions (NPIs) for public health emergencies.
- Generate innovative evidence on NPIs for public health emergencies.
- Attend and actively participate in international conferences.
- Engage in regular online meetings and contribute actively.
- Promote the consortium's work and objectives at both local and global levels.
- Support the establishment of sustainable global research partnerships.



Elizabeth Thomas, MD, PhD
Institution - Bond University / University of Oxford
Region - Australia
Specialisation - Diagnostics & Transmission / Interventions & Evidence

Activities at Pandemic EVIDENCE Collaboration Conference held in Banff

 Presentation on viral respiratory infections in childcare environments preliminary findings from a systematic review.

Updates

• The protocol for 'A systematic review to determine the incidence of circulating respiratory viruses among children who attend day care centres' has been finalised and the review is currently underway.



Kevin Bardosh, PhD
Institution - University of Oxford
Region - UK / Canada
Specialisation - Practice & Policy

- Bardosh, K., Lacour, M., Pronin, K., Correa Aste, N., & Koppl, R. (2024). How many democratic countries have conducted COVID-19 public inquiries? An exploratory study of government-led postpandemic reviews (2020-2024). BMJ Public Health, In Press.
- Appointed as Senior Science Strategist, Office of the Director and Senior Science Strategist, Office of the Director of the National Institutes of Health, Washington, District of Columbia, United States.





Yuan Zhang, PhD
Institution - McMaster University
Region - Canada / China
Specialisation - Intervention & Evidence / Practice & Policy

Activities at Pandemic EVIDENCE Collaboration Conference held in Banff

• Presentation: Evaluating Public Values on Non-Pharmaceutical Interventions for Pandemic Control – highlighted research framework, methodological considerations, and potential impact on preparedness.

Updates

- Study protocol developed; literature search completed; screening ongoing.
- Preliminary results from screening expected in coming months.
- Planned exchange visit to the University of Oxford in June 2026.



Adam Komorowski, MD
Institution - McMaster University
Region - Canada / Italy
Specialisation - Diagnostics & Transmission / Intervention & Evidence

Activities at Pandemic EVIDENCE Collaboration Conference held in Banff

- Presented two posters on PEC work.
- Moderated panel discussion on methodological issues in non-pharmaceutical intervention studies.

- Leading systematic review with Dr. Mariska Leeflang (University of Amsterdam) on WHO Enhanced Pandemic Potential Pathogen diagnostic studies and adherence to STARD guidelines.
- Helping develop reporting guideline and risk of bias tool for viral transmission studies.
- Collaborating on:
 - o Dr Bartoszko's meta-epidemiological review of GRADE use in modelling studies.
 - o Dr Thomas' systematic review of multiple pathogen detection in daycare settings.
 - Dr Zhang's evaluation of public values regarding non-pharmaceutical interventions.
- Exchange visit to University of Oxford with Dr Annette Plüddemann; collaborations established with EQUATOR and LATITUDES networks.





Eman Abukmail
Institution - Bond University
Region - Australia / Palestine
Specialisation - Intervention & Evidence /Practice & Policy

Updates

Currently on maternity leave. Upon return collaborator for review on 'The compliance-adjusted effect of
masks on interrupting or reducing the transmission of respiratory virus infections'. This review aims to
examine the degree of face mask adherence and the methods of measuring and reporting adherence in
studies investigating face mask interventions to reduce transmission of respiratory viral infections.



Ingeborg Hess Elgersma
Institution - Norwegian Institute of Public Health
Region - Norway
Specialisation - Interventions & Evidence/Practice & Policy

Activities at Pandemic EVIDENCE Collaboration Conference held in Banff

- Presentation on exploring Norwegian public attitudes towards public health policy experiments in and outside of public health crises
- Co-chair for Pillar 2 Interventions & Evidence session

- Public Acceptance of Public Health Policy Experiments. Protocol in development.
- A study protocol for a survey and embedded randomised trial on policy experiment aversion in tax policy was published. Analysis underway.
- Air filtering in schools, randomised trial. The protocol has been finalised and is soon to be published.
- ClinicalTrials.gov ID NCT07119333. Recruitment of schools is completed, and the trial will start in January 2026
- Elgersma, I. H., Rose, C. J., Refsum, E., Solberg, R. B., Elstrøm, P., Holst, C., Munthe-Kaas, H.,
 Haugen, J., Gopinathan, U., Bjørbæk, M., Rosenbaum, S. E., & Fretheim, A. (2025). Policy experiment aversion: Protocol and analysis plan for a survey and embedded randomized trial conducted during a



national debate about a real-life policy experiment on the effectiveness of an in-work tax credit. SSRN. https://doi.org/10.2139/ssrn.5408584

• Exchange visit to University of Calgary to present 'Running trails at the Norwegian Institute of Public Health, Opportunities and challenges' and to meet with the Health Policy Trials Unit at the University.



Guosong Wu, PhD
Institution - University of Calgary
Region - Canada
Specialisation - Interventions & Evidence/Practice & Policy

Activities at Pandemic EVIDENCE Collaboration Conference held in Banff

- Presentation on 'Impact of the COVID-19 pandemic on adverse event incidence rates in Canadian hospitals: a retrospective chart review study'
- Workshop facilitator for session on 'Accelerated evidence synthesis and dashboard science for pandemic prevention and response: Lessons from real-world initiatives at the University of Calgary's Centre for Health Informatics'

- Lead on 'Validity of ICD-10 Algorithms for Identifying Patient Safety Indicators Across the Pandemic'.
 Review complete.
- Wu, G., Cheligeer, C., Eastwood, C. A., Southern, D. A., Quan, H., Ghali, W. A., Bakal, J., Boussat, B., Flemons, W., & Forster, A. (2025). Incidence and trends of adverse events among hospitalized patients in Canada: A retrospective chart review study. BMJ Quality & Safety. Second revision.
- Wu, G., Eastwood, C., Southern, D. A., Cheligeer, C., & Quan, H. (2025). Validity of ICD-10 codes in identifying hospital adverse events. *Medical Care*. Under review.
- Wu, G., Sapiro, N., Martens, R., Harmon, M., Risling, T., & Eastwood, C. (2025). Trends and indicators of nursing workforce shortages in Canada: A retrospective ecological study, 2015-2022. *BMJ Open*, 15(6), e092114. https://doi.org/10.1136/bmjopen-2024-092114
- An exchange visit with Bond University, Australia planned for March 2026.
- Exchange visit with University of Calgary in May 2025.





Elissa Rennert-May, MSc MD
Institution - University of Calgary
Region - Canada
Specialisation - Interventions & Evidence/Practice & Policy

Activities at Pandemic EVIDENCE Collaboration Conference held in Banff

- Co-author and co-lead for poster on 'The effectiveness of continuous masking in reducing the risk of respiratory infection in healthcare settings: a systematic review'.
- Co-author of poster on 'The utility of trending serial cycle threshold values for sars-cov-2 allowing for early de-isolation and cost savings from unnecessary use of PPE and bed blocking'.

Updates

- Co-lead for 'Effectiveness of continuous masking in reducing the risk of respiratory infection in healthcare settings: a systematic review'. Project near completion.
- Co-lead for 'Evaluating the effectiveness of the enhanced mask directive in Alberta, Canada, during the 2023-2024 and 2024-2025 respiratory seasons'. Project underway.
- Co-lead for 'Attributable costs of hospital-acquired viral respiratory infections in Alberta, Canada'.
 Project in the planning stage.
- Exchange visit with the Norwegian Institute for Public Health planned for Sept/Oct 2026.

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Fariba Aghajafari, MD PhD
Institution - University of Calgary
Region - Canada / Iran
Specialisation - Interventions & Evidence/Practice & Policy

Activities at Pandemic EVIDENCE Collaboration Conference held in Banff

- Presentation on 'A scoping review of COVID-19 and other vaccination models for refugees and migrants'.
- Poster presentation on 'Benefits and harms of herbal medicines for preventing and treating acute respiratory infections: An overview of systematic reviews'.



Updates

- Co-lead on 'Vaccination Delivery Models for Refugees and Migrants: A Global Scoping Review'.
 Completed
- Co-lead on 'Benefits and Harms of Herbal Medicines for Preventing and Treating Acute Respiratory Infections: An Overview of Systematic Reviews'. Completed
- Co-lead on 'Vaccination Models of Delivery for Refugees and Migrants: A Global Scoping Review'.
- An exchange visit with the Centre for Evidence-Based Medicine, University of Oxford planned for January 2026.



Nashit Chowdhury, MSc
Institution - University of Calgary
Region - Canada / Bangladesh
Specialisation - Interventions & Evidence/Practice & Policy

Activities at Pandemic EVIDENCE Collaboration Conference held in Banff

Poster presentation on 'An intersectional perspective on pandemic coping: capacities and vulnerabilities
of non-health essential workers'.

- Chowdhury, N., Erman, D., Raihan, M., Marshall, Z., Datta, R., Aghajafari, F., Shankar, J., Sehgal, K., Rashid, R., & Turin, T. C. (2024). Exploring community- and systemic-level gender-based violence in visible minority women across five countries from an intersectionality lens: Protocol for a mixed-methods systematic review. *BMJ Open*, *14*(8), e077113. https://doi.org/10.1136/bmjopen-2023-077113
- Completed exchange with Bond University in September 2025. This collaboration provided an
 opportunity to engage with Dr Oyungerel Byambasuren's research team at the Institute for EvidenceBased Healthcare (IEBH) and explore innovative methodologies in systematic review processes. The
 exchange facilitated knowledge transfer between institutions and contributed to advancing evidence
 synthesis methodologies. A blog with further details can be accessed here.



Principles and Structure of the Pandemic Evidence Collaboration

During the Collaboration's inaugural meeting held at Kellogg College on April 11-12, 2024, participants collectively established the rationale, core principles, and objectives of the PEC, and agreed upon its working arrangements and collaborative structure:

Principles

- Prioritise NPIs to enhance population health and improve health service delivery.
- Establish a global collaboration to build capacity at the human, system, and organisational levels for future public health emergencies, nurturing current and future scientists.
- Commit to equity, diversity, inclusion, and accessibility in all aspects of the collaboration's work.
- Uphold excellence in high-quality research and knowledge exchange through strong academic and societal partnerships to guide research and policy decisions.
- Maintain equipoise and produce generalisable knowledge with minimal risk of bias.
- Define evidence-based collaboration, drawing from the founding principles of the Cochrane Collaboration.
- Foster cooperation, teamwork, integrity, openness, transparency, scientific rigour, and independence.
- Provide ongoing support and training for all members, with a focus on young investigators and developing the next generation of evidence-based experts.
- Avoid duplication of efforts to ensure efficient use of resources.
- Minimise bias in every endeavour.
- Ensure that all workstreams are relevant to current and future public health challenges.
- Offer open access to all outputs to promote transparency and broad dissemination.
- Strive for excellence in the quality of all outputs and continuously review and refine strategies to maintain high standards.



Structure

Work progressed across all three Pillars through which the PEC aims to address the key questions outlined in the Background section. Initial concepts were shared through the following presentations. The Pillars are:

- Pillar 1: Diagnostics and Transmission
- Pillar 2: Interventions and Evidence
- Pillar 3: Practice and Policy

Pillar 1: Diagnostics and Transmission

The COVID-19 pandemic exposed a major gap in reliable evidence for non-pharmacological measures. Much of the research used to guide the use of these interventions to reduce the spread of the virus was of low quality, and decisions often ignored existing studies on how respiratory viruses spread from person to person. Read

Pillar 2: Interventions and Evidence

The global use of non-pharmacological measures to reduce COVID-19 spread was unprecedented. However, there wasn't enough reliable evidence to fully understand their pros and cons. Few randomised controlled trials (RCTs) were done on NPIs during the pandemic, despite their major impact on society. Read more.

Pillar 3: Practice and Policy

Clinical practice and policy must be better informed by the best possible evidence to ensure effective resource use and sound decisions. An understanding of what has been tested to date and the social, educational and economic consequences of NPIs across different sectors of society and across the spectrum of low- to high-income countries is required. Read more.





For the individual projects, protocols were written or are works in progress. Each project was categorised into the following categories:

- Can be done with the existing resources of PEC and individuals currently part of the collaboration
- Requires further funding, draft proposals, and full protocols written for grant-awarding bodies
- Needs additional people and resources external to PEC (for instance, recruitment of medical students to help with data extraction may be necessary)

Examples of projects currently underway:

• Serial cycle threshold as a surrogate for viral cultures: Evaluating the use of cycle threshold values to determine the infectious potential of sars-cov-2.



- Review of the common cold unit studies: Analysing historical studies to gain insights into respiratory pathogen research.
- Assessing biases in transmission studies of respiratory pathogens: Developing a risk of bias tool to evaluate the quality of transmission studies.
- Catalogue of harms: systematically mapping the harms associated with different NPIs.
- Living review of coroners' prevention of future deaths reports: Continuously reviewing and analysing coroner reports published in England and Wales to identify preventable causes of death.
- Multi-country retrospective data linkage study: Conducting a cross-country analysis of coroner data to assess the impact of NPIs during the COVID-19 pandemic, with a focus on identifying harms, necessary modifications, and potential solutions.

Collaboration Meetings

At the second PEC workshop, held in November 2024 at Kellogg College, all EIFs presented their research protocols, designed to enable rapid project implementation during public health emergencies. These were shared with the entire team, creating space for collective feedback and refinement to strengthen each project. This collaborative process reinforced our overall strategy for ensuring successful project delivery.

In addition, visiting placements from Founding Partner organisations will be approved by the Founding Steering Committee, offering EIFs opportunities to collaborate more closely and gain valuable experience in diverse research settings.

35 project protocols were presented, each with a defined title and lead. We have prioritised projects that are both feasible and well supported through expertise, exchange visits, and resources from our existing collaborators.

International Conferences



Looking at the Pandemic in the Rear-view Mirror: Successes, Failures and Unintended Consequences

Banff Centre for Arts and Creativity, Banff, Canada 14-16 May 2025

The three-day conference featured daily themes aligned with the Pandemic Evidence Collaboration's <u>three pillars</u>. A delegation of interdisciplinary researchers presenting on Evidence-Based Healthcare related to NPIs descended on the picturesque town of Banff for this three-day event.

Over 120 attendees from 13 countries were able to meet with and learn from high-profile international speakers in the field, and members of the collaboration were building connections and setting out potential future alliances.





Alongside the grant from McCall MacBain Foundation, funding from the Norwegian Institute of Public Health, Li Ka Shing Institute of Virology, Northern Alberta Clinical Trials + Research Centre, University of Calgary Office of the Vice President and private donations from members of the collaboration enabled us to provide scholarships to researchers from Germany, Canada, Norway, the UK, India and Hong Kong.

In addition, in-kind contributions were provided by the Synder Institute for Chronic Diseases, the O'Brien Institute for Public Health and the Department of Medicine within the University of Calgary and Alberta Health Services.

Conference speakers

Dr Oyuka Byambasuren, Institute for Evidence-Based Healthcare, Bond University



- Dr Ken Parhar, Cumming School of Medicine, University of Calgary
- Dr Atle Fretheim, Norwegian Institute of Public Health, Centre for Epidemic Interventions Research
- Professor Gordon Guyatt, Faculty of Health Sciences, McMaster University
- Dr David Evans, Medical Microbiology and Immunology Dept, University of Alberta
- Dr Annette Plüddemann, Centre for Evidence-Based Medicine & Kellogg College, University of Oxford
- Assistant Professor Jenine Leal, O'Brien Institute for Public Health, University of Calgary
- Professor Dominik Mertz, Faculty of Health Sciences, McMaster University
- Dr Mark Jones, Institute for Evidence-Based Healthcare, Bond University
- Dr Georgia Richards, King's College of London
- Dr Lars Hemkens, University of Basel
- Dr Jessica Bartoszko, Faculty of Health Sciences, McMaster University
- Dr Sara Gandini, Department of Experimental Oncology in the European Institute of Oncology (IEO)
- Dr Verna Yiu, Provost and Vice-President, University of Alberta
- Dr Ramona Ludolph, Epidemic and Pandemic Preparedness and Prevention Department, World Health Organization.

Conference keynote talks and highlights are available on this <u>link</u>. Full programme and further details of these are included in Appendix 3.



Figure 4: Group photo of some of the Banff PEC Conference participants with the iconic Cascade Mountain in the background

EBMLive 2026 - Creating High-Quality Evidence for Non-Pharmacological Interventions (NPIs) Evidence-Informed Policy

Rhodes House, Oxford, UK 24-26 June 2026

The next international PEC conference will take place in summer 2026 at Rhodes House, Oxford. A local management group has been established to lead the organisation of the event, hosted at the home of the Rhodes Trust—known for awarding the Rhodes Scholarships in partnership with the Second Century Founders, including John McCall MacBain, O.C., and supported by the McCall MacBain Foundation.

The conference will focus on advancing the evidence base for non-pharmacological interventions and their role in shaping effective, evidence-informed policy. Preliminary themes include:

- Strengthening evidence for NPIs during and after pandemics
- Assessing the impact of NPIs on mortality
- Addressing the needs of vulnerable populations (e.g. children, older adults, at-risk groups)
- Identifying unintended consequences and potential harms of NPIs
- Communicating evidence on NPIs during and beyond a pandemic

Sustainability of the Collaboration

The PEC is committed to sustaining its efforts through a comprehensive business plan and matched funding strategy. Surplus income generated from both international conferences will contribute to the matched funding initiative. In addition:

- The Norwegian Institute of Public Health has generously provided up to £30,000 to support attendance and travel bursaries for early to mid-career researchers and residents of low- to middle-income countries to participate in the Banff event in May 2025.
- An additional £6,950 was secured through the efforts of Founding Steering Committee members Professor Carl Heneghan and Dr Annette Plüddemann, who taught an evidence-based medicine course as part of the Oxford Global programme at the Said Business School's Thatcher Business Education Centre. The course enrolled 50 students from China, covering topics such as the fundamentals of evidence-based practice, the role of the NHS, and the application of evidence during the pandemic, along with the challenges faced in developing effective strategies.
- The O'Brien Institute for Public Health at the University of Calgary, in partnership with its Corporate and Foundations Development Team, is actively seeking additional funding opportunities on behalf of the collaboration.
- Dr Georgia Richards, a Founding Evidence-Informed Fellow, has been awarded a prestigious King's Prize Fellowship along with a £20,000 research grant. She will use this funding to enhance the Preventable Deaths Tracker with insights specific to future pandemics and to draft a protocol for assessing coroner reports from the pandemic across all Pandemic Collaboration founding sites. Additionally, Georgia is developing several grant applications to create a comprehensive death investigation platform that integrates various data sources beyond coroner reports.
- PEC members Associate Professor Mark Jones, Dr Mark Loeb, Dr Atle Fretheim, Professor John Conly, Dr Elissa Rennert-May, Ingeborg Hess Elgersma, and Dr Jessica Bartoszko have been awarded CDN \$15,000 in funding from the University of Calgary's O'Brien Institute for Public Health to support the project titled "Evaluating the Effectiveness of the Enhanced Masking Directive in Alberta, Canada During the 2023-2024 and 2024-2025 Respiratory Seasons."

Long-Term Ambition of the Collaboration

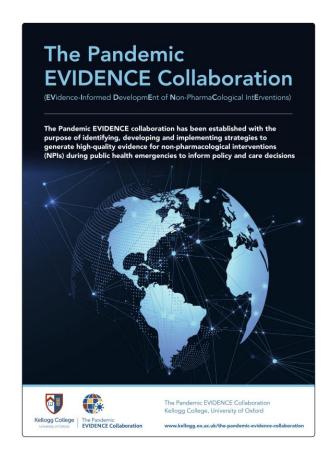
The long-term outcomes of the Collaboration can be evaluated based on the agreed-upon principles, which focus on the effective application of NPIs to enhance population health and health service delivery during public health emergencies. This includes building human, system-level, and organisational capacity to respond to future crises, producing high-quality research, and fostering academic-societal partnerships to guide research and policy decision-making. The ultimate aim is to generate generalisable knowledge with minimal bias. Specific goals include:

- Expanding Collaboration and Partnerships: Increasing the number of collaborators and partner organisations following the May 2025 Banff Meeting through academic exchanges. Several small group sessions have been organised to facilitate meaningful interactions and networking.
- Increasing Evidence-Informed Fellowship Funding: Securing additional funding for EIP opportunities through matching programmes within host institutions.
- Developing Expertise within the Collaboration: Enhancing the expertise available to support EIPs through the academic exchange programme, which will provide enriching experiences for them.
- Project Prioritisation: Prioritising projects for future funding by engaging with the Founding Scientific Planning Committee and participating in interactive discussions to identify those with the greatest impact potential.
- Ensuring Sustainability: Strengthening the sustainability of the Collaboration by publishing both peer-reviewed papers and grey literature, thereby attracting the attention of funding agencies.
- Developing DPhil Funding Proposals: Creating funding proposals for DPhil
 opportunities with the support of senior mentors. Currently, PEC members Professor
 Carl Heneghan and Dr Annette Plüddemann are collaborating with the University of St
 Andrews, School of Medicine, and the Mackenzie Institute for Early Diagnosis on a
 proposal for early diagnosis research, including the role of early diagnosis in
 pandemics.
- The Centre for Evidence-Based Medicine (CEBM) aims to establish a Wiser evidencebased healthcare theme to partner with the University of Sydney's <u>Wiser Healthcare</u> <u>programme</u>



Appendices

Appendix 1: PEC 11-12 April 2024 meeting abstracts





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MEETING ABSTRACTS

Open Access

The Pandemic EVIDENCE Collaboration



Oxford, UK. 11-12 April 2024

Health Sciences and Microbiology, Immunology, and Infectious Diseases, and O'Brien Institute for Public Health, Cumming School of Medicine, University of Calgary and Alberta Health Services, Calgary, Canada; ¹¹Department of Health Research Methods, Evidence, and Impact, Faculty of Health Sciences, McMaster University, Hamilton, Canada; ¹¹Department of Experimental Oncology, European Institute of Oncology IRCCS, 20141 Milan, Italy; ¹²Research and Innovation Unit, IRCCS Azienda Ospedaliero-Univer-sitaria di Bologna, Bologna, Italy, ¹³Department of Neurology, Victor Babes University of Medicine and Pharmacy, Piata Eftimie Murgu 2, Timisoara 300041, Romania BMC Proceedings 2025, **19(18)**: 1

Developing Evidence-Informed Non-Pharmacological Interventions during Public Health Emergencies: Purpose, Rationale and Principles and Questions to Answer

(*EVidence-Informed DevelopmEnt of Non-PharmaCological IntErventions Collaboration)

Conly J.1, Stelfox T.2, Heneghan C.3, Loeb M.4, Fretheim A.5, Glasziou P.6, Haldane V.7, Fiest K.8, Leal J.9, Plüddemann A.3, Jefferson T.3, Onakpoya I.3, Richards G.3, Jessica Bartoszko J.10, Jones M.6, Byambasuren O.6, Gandini S.11, Maltoni S.12, Rosca C.13, for the Pandemic EVIDENCE* Collaboration ¹Departments of Medicine, Microbiology, Immunology & Infectious Diseases, and Pathology & Laboratory Medicine, Synder Institute for Chronic Diseases and O'Brien Institute for Public Health, Cumming School of Medicine, University of Calgary and Alberta Health Services, Calgary, Canada; 2Department of Critical Care Medicine, University of Alberta, Edmonton, Canada; 3Centre for Evidence Based Medicine, Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK, 4Departments of Pathology & Molecular Medicine and Health Research Methods, Evidence, and Impact, Faculty of Health Sciences, McMaster University, Hamilton, Canada; ⁵Centre for Épidemic Intervention Research, Norwegian Institute of Public Health, Folkehelseinstituttet, Postboks 222, Skøyen and Faculty of Health Sciences, Oslo Metropolitan University, Oslo, Norway, 6Institute for Evidence-Based Healthcare, Bond University, Gold Coast, Australia; 7Institute of Health Policy, Management and Evaluation, University of Toronto, Toronto, Canada; 8Departments of Critical Care Medicine, Community Health Sciences, and O'Brien Institute for Public Health, Cumming School of Medicine, University of Calgary and Alberta Health Services, Calgary; 9Departments of Community



Purpose: To identify, develop and implement strategies to generate high-quality evidence for non-pharmacological interventions (NPIs) during public health emergencies to inform policy and care decisions. Rationale: The COVID-19 pandemic has identified important strengths and limitations of science and knowledge exchange during public health emergencies. Pharmacological interventions, including vaccines and antiviral therapies for COVID-19 were developed, tested and disseminated worldwide with impressive timeliness and effectiveness. At the same time, decisions for many NPIs, including individual and community based public health interventions (e.g., masking, physical distancing, closures of schools, airport screening) and medical care measures (e.g., acute care organization, long-term care organization, triage, vaccine delivery, personal protective equipment delivery, access to services) appear to have been made with limited evidence. The result is that four years after the WHO characterized COVID-19 as a pandemic, there remains limited understanding of the potential short- and longterm benefits (e.g., reduced disease transmission and mortality) and harms (e.g., declines in mental health, drug overdoses, isolation, delayed cancer care, prolonged surgical wait times, educational performance of children/youth) of many NPIs and how to best organize patient care. Current approaches to research and knowledge exchange for NPIs are likely to result in a similar lack of strong evidence to inform decisionmaking during future public health emergencies. In this context, we

propose to establish a collaboration of leading independent academic evidence-based medicine centres from around the world to address this knowledge gap.

Principles:

- The focus will be on NPIs and their application to improve population health and health service delivery.
- Public health emergencies will be considered any urgent and critical situation that endangers a population's lives, health and/or safety (e.g., pandemics, natural or human-made disasters).
- Establish a global based collaboration of evidence-based centres to build individual scientist (current and future), system level and organizational capacity for future public health emergencies.
- Equity, diversity, inclusion and accessibility will be considered in all aspects of the work.
- Members of the evidence-based collaboration† will have demonstrable conviction and strength in high-quality research and knowledge exchange with academic-societal partnerships to bidi-rectionally inform research and policy/care decision-making.



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 Members will maintain a strong position of equipoise and produce generalizable knowledge at a low risk of bias.

†Defining evidence-based collaboration: (adapted/modified from the original founding principles within the Cochrane Collaboration) https://www.cochrane.org/about-us

- ${\cal I}$ Maintain co-operation, teamwork, integrity, openness, transparency, scientific rigour and independence
- ${\cal I}$ Create continuous support and training of all members with a focus on young investigators and the next generation of evidence-based experts
- \mathcal{I} Ensure duplication of effort does not occur
- \mathcal{I} Focus on minimisation bias with every endeavour
- ${\cal I}$ Promotion of relevance in all workstreams
- \mathcal{I} Provide open access for all outputs
- I Strive for excellence in the quality of all outputs
- I Ensure continuous review of all strategies

Questions to be answered:

- How do we generate high-quality evidence (including, but not solely limited to, randomized controlled trials) for NPIs during a global public health emergency?
- 2. How do we foster effective and efficient knowledge exchange during a global public health emergency so that scientists and public health officials address the most relevant policy and care questions, and policymakers and health system leaders incorporate the resulting evidence into decision-making?
- 3. How do we study the short- and long-term consequences of NPI policies, including inequities, on health (e.g., length and quality of life), economic (e.g., income, housing and food security), psy-chosocial (e.g., community cohesion) and environmental (i.e., natural and built environment ([https://www.gchu.org.uk] e.g., biosafety and waste management)?

*https://www.kellogg.ox.ac.uk/kellogg-centres/the-pandemic-evide nce-collaboration/people/. Formulated April 12 2024

The Founding of the Pandemic EVIDENCE* Collaboration (*EVidence-Informed Development of Non-PharmaCological Interventions Collaboration)

Conly J.1, Stelfox T.2, Heneghan C.3, Loeb M.4, Fretheim A.5, Glasziou P.6 Departments of Medicine, Microbiology, Immunology & Infectious Diseases, and Pathology & Laboratory Medicine, Synder Institute for Chronic Diseases and O'Brien Institute for Public Health, Cumming School of Medicine, University of Calgary and Alberta Health Services, Calgary, Canada, ²Department of Critical Care Medicine, University of Alberta, Edmonton, Canada; 3Centre for Evidence Based Medicine, Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK; ⁴ Departments of Pathology & Molecular Medicine and Health Research Methods, Evidence, and Impact, Faculty of Health Sciences, McMaster University, Hamilton, Canada; 5Centre for Epidemic Intervention Research, Norwegian Institute of Public Health, Folkehelseinstituttet, Postboks 222, Skøyen and Faculty of Health Sciences, Oslo Metropolitan University, Oslo, Norway; 6Institute for Evidence-Based Healthcare, Bond University, Gold Coast, Australia BMC Proceedings 2025, 19(18): 2

The COVID-19 pandemic has highlighted the strengths and limitations of scientific research and knowledge exchange during a public health emergency. While pharmacological interventions were rapidly developed, tested, and distributed with remarkable efficiency, decisions regarding many non-pharmacological interventions (NPIs) were often



made with limited evidence. As a result, there is still a lack of understanding regarding the potential short- and long-term benefits, harms, and unintended consequences of various public health measures, as well as the optimal ways to organise patient care.

In response to these challenges, a collaborative initiative was launched in September 2023 by independent academics and scholars from institutions around the world, including Bond University in Australia, the University of Calgary and McMaster University in Canada, Oslo Metropolitan University in Norway and the University of Oxford in the UK. These experts came together with a shared goal: to identify, develop, and implement strategies for generating high-quality evidence on NPIs during public health emergencies to better inform policy and care decisions.

To advance this mission, the Pandemic Evidence Collaboration was established with the support of a generous £275,000 grant over three years from the McCall MacBain Foundation. This initiative unites diverse expertise and resources to propel the project forward, ensuring that future public health decisions are based on rigorous, evidence-based research.

* https://www.kellogg.ox.ac.uk/kellogg-centres/the-pandemic-evide nce-collaboration/people/

Adapted with permission: McCall MacBain Foundation Annual Report https://www.kellogg.ox.ac.uk/wp-content/uploads/2024/12/PEC-MMF-Report-2023-24.pdf

3.

Non-Pharmacological Interventions: Nomenclature, Taxonomy, and a Working Definition

Conly J.1, Aronson J. K.2, Plüddemann A.2, Stelfox T.3, Onakpoya I.2, Gandini S.4, Loeb M.5, Rosca C.6, TJefferson T.2, Fiest K.7, Leal J.8, Heneghan C.2 Departments of Medicine, Microbiology, Immunology & Infectious Diseases, and Pathology & Laboratory Medicine, Synder Institute for Chronic Diseases and O'Brien Institute for Public Health, Cumming School of Medicine, University of Calgary and Alberta Health Services, Calgary, Canada; ²Centre for Evidence Based Medicine, Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK; 3Department of Critical Care Medicine, University of Alberta, Edmonton, Canada; 4Department of Experimental Oncology, European Institute of Oncology IRCCS, 20,141 Milan, Italy; 5Departments of Pathology & Molecular Medicine and Health Research Methods, Evidence, and Impact, Faculty of Health Sciences, McMaster University, Hamilton, Canada; Department of Neurology, Victor Babes University of Medicine and Pharmacy, Piata Eftimie Murgu 2, Timisoara 300,041, Romania; ⁷Departments of Critical Care Medicine, Community Health Sciences, and O'Brien Institute for Public Health, Cumming School of Medicine, University of Calgary and Alberta Health Services, Calgary; Departments of Community Health Sciences and Microbiology, Immunology, and Infectious Diseases, and O'Brien Institute for Public Health, Cumming School of Medicine, University of Calgary and Alberta Health Services, Calgary, Canada BMC Proceedings 2025, 19(18): 3

Many terms have been used to describe interventions that do not involve the use of pharmacological products in the setting of communicable diseases. Terminology has varied from physical, non-pharmaceutical, non-drug, non-pharmacologic, and non-pharmacological interventions, as well as public health measures and public health and social measures. Previous epidemics and pandemics, and especially the recent COVID-19 pandemic, have highlighted the importance of non-pharmacological interventions (NPIs), and the term is now recognized globally. The use of the terms public health measures or public health and social measures have variably also been inclusive of the use of vaccines which would be considered a pharmacological product. Given this background and confusion over terminology and descriptions, we sought to review this topic and provide clarity regarding nomenclature, taxonomy, and definitions with an aim to ensure an explicit shared understanding of any interventions that do not involve pharmacological products, given the importance of conducting NPI evaluations for future epidemics and pandemics. For clarity, we would define a NPI as a measure not involving a medicinal product, used in



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humans with the intent to treat or prevent disease. In this context, a medicinal product would be one which has intended effects on physiological bodily functions through any pharmacological, immunological or metabolic action, as outlined by the European Medicines Agency. The use of pharmacological interventions versus NPIs have different regulatory frameworks, different descriptors and different evaluation approaches. It has been well recognized that there was a dearth of high quality evidence generated for NPIs in the same manner as PIs such as vaccines and antivirals during the recent COVID-19 pandemic, which has been already termed a "pandemic tragedy" in late 2021.

https://www.kellogg.ox.ac.uk/wp-content/uploads/2024/11/updated-Nomenclature-Taxonomy-and-a-Working-Definition.pdf

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The Pandemic EVIDENCE* Collaboration Meeting Planning (*EVIdence-Informed DevelopmEnt of Non-PharmaCological IntErventions Collaboration)

Conly J.1, Davis R.2, Heneghan C.2

Departments of Medicine, Microbiology, Immunology & Infectious Diseases, and Pathology & Laboratory Medicine, Synder Institute for Chronic Diseases and O'Brien Institute for Public Health, Cumming School of Medicine, University of Calgary and Alberta Health Services, Calgary, Canada; **Centre for Evidence Based Medicine, Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK **BMC Proceedings 2025, 19(18): 4*

The COVID-19 pandemic was a dramatic event in world history and although the development and deployment of pharmacologic interventions, specifically vaccines and antivirals occurred at an unprecedented pace with the benefit of high-quality randomized trials, the same cannot be stated for non-pharmacological interventions (NPIs). With the recognition of the poor quality of high-quality evidence to guide the optimal deployment of NPIs, the impetus to create the Pandemic EVIDENCE Collaboration became obvious. The inaugural meeting was held at the campus of Kellogg College at the University of Oxford April 11, 12 2024. The agenda consisted of introductions of the members who hailed from 10 countries from 3 continents followed by establishing agreement on the founding principles, formally appointing the Collaboration and confirming small working group allocations, aims and outputs. The aims and outputs were focused on defining three major pillars including diagnostics and transmission, interventions and evidence and practice and policy with four crosscutting themes of definitions and nomenclature, data challenges, methodological issues and funding each with proposed research protocols, action plans and engagement strategies. Other parts of the agenda were devoted to the

introductions of the 4 Founding Evidence -Informed Fellows, including their project areas of interest and the proposal for 10–12 additional Evidence-Informed Fellowships. Formal presentations on the "Use and Misuse of Modelling Studies during the COVID-19 Pandemic: What is their Optimal Role?" and "The Need for Conducting Randomized Trials in a Pandemic to Provide High Quality Evidence: Overcoming the Challenges" were presented. The final part of the agenda was devoted to the planning for a major international conference to be held in Banff Canada in May 2025.

* https://www.kellogq.ox.ac.uk/kelloqq-centres/the-pandemic-evide nce-collaboration/people/

4

Pandemic EVIDENCE* Collaboration Pillar 1: Diagnostics and Transmission

(<u>"EVidence-Informed DevelopmEnt of Non-PharmaCological IntErventions Collaboration</u>)

Conly J.¹, Pluddemann A.², Jefferson T.², Rosca T.³, Heneghan C.²
Departments of Medicine, Microbiology, Immunology & Infectious Diseases, and Pathology & Laboratory Medicine, Synder Institute for Chronic Diseases and O'Brien Institute for Public Health, Cumming School of Medicine, University of Calgary and Alberta Health Services, Calgary, Canada; ²Centre for Evidence Based Medicine, Nuffield Department of Pri



mary Care Health Sciences, University of Oxford, Oxford, UK; ³Department of Neurology, Victor Babes University of Medicine and Pharmacy, Piata Eftimie Murgu 2, Timisoara 300,041, Romania BMC Proceedings 2025, 19(18): 5

The COVID-19 pandemic starkly revealed a lack of high-quality evidence for non-pharmacological interventions (NPIs). The evidence produced to support the optimal deployment of NPIs in an effort to reduce transmission of SARS-CoV-2 was often of poor quality, and decisions were made without considering the wealth of previous research on respiratory virus transmission from human challenge studies. Respiratory virus infections cause illnesses varying from the "common cold" to invasive pneumonitis with multisystem involvement with severity dependent on the host-virus-immune response interaction. Despite the learnings from the recent pandemic, significant gaps remain in our understanding of the diagnosis of acute respiratory viral infections and their sequelae, the modes of transmission, and how to effectively synthesise the existing evidence from the past 70 years of research on respiratory viruses. It is crucial to examine further the evidence on how common respiratory viral agents are transmitted. The transmission dynamics to allow for a replication-competent virus to move from a reservoir to a susceptible host and establish an invasive infection is complex and it is likely multiple modes of transmission exist from direct reservoir-to-host (contact, droplet deposition, transplacental) and indirect reservoir-to-intermediary-to- host (vehicle-borne, foodborne, waterborne, and airborne) routes. To enhance our understanding of both diagnostics and transmission, we need to characterise viral entry and attachment, viral load dynamics, duration of virus infectivity both inside and outside the host, duration of viral nucleic acid shedding using molecular testing, the role of whole genome sequencing, and factors that may affect the duration of infectivity and transmission. There are still uncertainties surrounding current testing strategies and their connection to NPIs, as well as fundamental issues such as the accuracy of symptom reporting during acute respiratory infections. The importance of animal-to-animal, human-to-animal and human-tohuman challenge studies in expanding our knowledge of the transmission of respiratory viruses cannot be overstated.

https://www.kellogq.ox.ac.uk/wp-content/uploads/2024/11/Pillar-1-2.pdf

2

Pandemic EVIDENCE* Collaboration Pillar 2: Interventions and Evidence

(<u>"EVidence-Informed DevelopmEnt of Non-PharmaCological IntErventions Collaboration</u>)

Fretheim A.¹, Onakpoya I.², Bartoszko J.³, Jones M.⁴, Gandini S.⁵ ¹Centre for Epidemic Intervention Research, Norwegian Institute of Public Health, Folkehelseinstituttet, Postboks 222, Skøyen and Faculty of Health Sciences, Oslo Metropolitan University, Oslo, Norway; ²Centre for Evidence Based Medicine, Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK; ³Department of Health

Research Methods, Evidence, and Impact, Faculty of Health Sciences, McMaster University, Hamilton, Canada; ⁴Institute for Evidence-Based Healthcare, Bond University, Gold Coast, Australia; ⁵Department of Experimental Oncology, European Institute of Oncology IRCCS, 20,141 Milan, Italy *BMC Proceedings* 2025, 19(18): 6

The use of non-pharmacological interventions (NPIs) on a global scale to reduce the transmission of SARS-CoV-2 was unprecedented. However, there was a lack of high-quality evidence to fully understand the benefits and harms of these interventions. There was a dearth of randomised controlled trials (RCTs) of NPIs during the COVID-19 pandemic, highlighting the lack of evidence relative to the significant role NPIs played during the pandemic from a societal perspective. As a result, there was limited understanding of how infrastructure and physical barriers affect the transmission of respiratory viruses and how environmental factors impact the effects of NPIs. There was also a lack of understanding of how to best apply evidence for NPIs to individuals and populations and



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identify their benefits, harms and unintended consequences, all of which should receive equal weighting. The lack of high quality research on the use of physical barriers, physical distancing, facial coverings, avoidance of crowds, closures of schools, businesses, and large gatherings, disinfection of high-touch surfaces, use of ultraviolet light and air purifiers, ventilation, CO2 monitors, screen and test strategies and travel restrictions limits our ability to deduce the benefits, harms and unintended consequences. Furthermore, the widespread nosocomial transmission in hospitals and long-term care homes and its devastating effects on the elderly require a better understanding of the role of the built environment as a risk factor. High-quality evidence requires the development and testing in RCTs to assess the feasibility, applicability, effectiveness and unintended consequences of NPIs. However, the lack of preparation meant RCTs were difficult to develop and undertake during the pandemic. Pilot and feasibility studies are needed to determine how we may best develop evidence for NPIs for viral respiratory pathogens in seasonal endemic and epidemic settings and how this evidence should be optimally applied in the intervening years to reduce uncertainties during future pandemics.

https://www.kellogg.ox.ac.uk/wp-content/uploads/2024/11/Pillar-2.pdf

Pandemic EVIDENCE* Collaboration Pillar 3: Practice and Policy (*EVidence-Informed Development of Non-PharmaCological Interventions Collaboration)

Leal J.¹, Byambasuren O.², Richards G.³, Maltoni S.⁴, Stelfox T.⁵, Fiest K.⁶, Bartoszko J. 7

Departments of Community Health Sciences and Microbiology, Immunology, and Infectious Diseases, and O'Brien Institute for Public Health, Cumming School of Medicine, University of Calgary and Alberta Health Services, Calgary, Canada; 2Institute for Evidence-Based Healthcare, Bond University, Gold Coast, Australia; 3Centre for Evidence Based Medicine, Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK; 4Research and Innovation Unit, IRCCS Azienda Ospedaliero-Universitaria di Bologna, Bologna, Italy; 5Department of Critical Care Medicine, University of Alberta, Edmonton, Canada; 6Depart-ments of Critical Care Medicine, Community Health Sciences, and O'Brien Institute for Public Health, Cumming School of Medicine, University of Calgary and Alberta Health Services, Calgary, Canada; 7Department of Health Research Methods, Evidence, and Impact, Faculty of Health Sciences, McMaster University, Hamilton, Canada BMC Proceedings 2025, 19(18): 7

Clinical practice and policy must be better informed by the best possible evidence to ensure effective resource use and sound decisions. An understanding of what has been tested to date and the social, educational and economic consequences of NPIs across different sectors of society and across the spectrum of low- to high-income countries is required. As an example, the implications and costs of closing schools on learning, socialisation, and mental health need to be assessed For effective policy, we need to improve our approach to addressing pandemics. This approach includes using real-time data and evidence, which is crucial in informing evidencebased policy decisions. Central questions still need to be addressed, mainly how policy should be better informed about the benefits, harms and unintended consequences of any of any interventions. There is also a clear need to improve the communication of scientific findings and evidence to enable more effective decision-making, especially about how scientists can most effectively advise governments. Methods to assess the costeffectiveness of pandemic NPIs are urgently needed to allocate scarce resources efficiently. Additionally, it is paramount to minimise waste, identify substandard and misleading studies, and improve communication, including the management of a parallel infodemic, for more effective pandemic policies.

https://www.kellogg.ox.ac.uk/wp-content/uploads/2024/11/Pillar-3.pdf



8

Recruitment of Founding Evidence-Informed Fellows for the Pandemic EVIDENCE* Collaboration (*EVidence-Informed Development of Non-PharmaCological Interventions Collaboration)

Davis R.1, Heneghan C.1, Conly J.2

Centre for Evidence Based Medicine, Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK; ²Depart-ments of Medicine, Microbiology, Immunology & Infectious Diseases, and Pathology & Laboratory Medicine, Synder Institute for Chronic Diseases and O'Brien Institute for Public Health, Cumming School of Medicine, University of Calgary and Alberta Health Services, Calgary, Canada BMC Proceedings 2025, 19(18): 8

To support the initiative of building a robust evidence base for NPIs and expanding the Collaboration, Founding Partner/Steering Committee representatives from their respective Universities were invited to nominate a Founding Evidence-Informed Fellow (EIF) to facilitate engagement and project participation. The EIF role has been established to provide postgraduate trainees (PhD and Master's students), Post-Doctoral Fellows, and early to mid-career researchers who have a strong interest in and capacity for enhancing evidence generation and application for NPIs with an opportunity to develop expertise in NPIs for public health emergencies. Fellows will be encouraged to attend and present at relevant events, fostering an environment that promotes learning, collaboration, and innovation. We sought individuals who could make bold, thoughtprovoking, and constructive contributions, recognising the importance of capacity building and possessing the expertise to identify exceptional candidates to join the collaboration. Founding EIF nominees were required to submit a letter of recommendation from their direct supervisor at their respective Universities, along with a three-page CV. Each nomination was reviewed and approved by a member from one of the different Founding Partner members within their respective Universities. Founding Partner & Steering Committee members were notified in advance of the nominations to ensure a timely review process.

Goals of the Evidence-Informed Fellowship.

The Evidence-Informed Fellowship aims to:

- Identify, develop and implement strategies to generate high-quality evidence for NPIs during public health emergencies.
- Foster effective and efficient knowledge exchange during pandemics so scientists and public health officials address the most relevant policy and care questions.
- Collaborate with policymakers and health system leaders to incorporate the resulting evidence into decisionmaking.
- Evaluate the short- and long-term consequences of NPI policies on health (e.g., length and quality of life), economic (e.g., income, housing, and food security), psychosocial (e.g., community cohesion), and environmental (i.e., natural

- and built environment— e.g., biosafety and waste management) well-being.
- Support the professional development of trainees and early career researchers within the evidence-based medicine and public health community.

Deliverables

Evidence-Informed Fellows (EIFs) are expected to regularly participate in Pandemic EVIDENCE Collaboration activities. This participation may include, but is not limited to, the following activities:

- Attend collaboration meetings and provide updates on their ongoing research projects and activities.
- Contribute meaningfully to Pandemic EVIDENCE Collaboration research projects. Contributions should meet co-authorship criteria defined by the International Committee of Medical Journal Editors

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- Co-author at least one peer-reviewed publication
- Attend conferences affiliated with the Pandemic EVIDENCE Collaboration in-person: 1) Banff, Canada, May 2025 and 2) Oxford, United Kingdom, June 2026
- Present in-person (via poster or oral presentation) at one or both conferences affiliated with the Pandemic EVIDENCE Collaboration

Progress will be reviewed by the Scientific Planning Committee annually and EIFs who are not on track to meet these deliverables will require discussions, planning and remedial actions to ensure deliverables will be met. Term

The term of each EIF shall end on 31 December 2026, unless extended, non-participation is agreed upon or terminated early by the Pandemic

EIFs are expected to behave professionally. If a conflict of interest arises, or the appearance thereof, in the course of the work of the Evidence-Informed Fellowship, the individual involved must declare its existence and remove themselves from participating in the discussion or from any further participation in the Evidence-Informed Fellowship depending on the specific circumstances of the conflict of interest. Amendments to the terms of reference

The terms of reference will be reviewed annually. Amendments to the terms of reference will be made by the Scientific Planning Committee and communicated to EIFs electronically and at the first scheduled meeting thereafter.

Adapted with permission: McCall MacBain Foundation Annual Report https://www.kellogg.ox.ac.uk/wp-content/uploads/2024/1 2/PEC-MMF-Report-2023-24.pdf









 ${\bf EVIDENCE\ Collaboration\ Scientific\ Planning\ Committee\ and\ the\ Operations\ Management\ Group.}$

Reporting structure

The Pandemic EVIDENCE Collaboration shall include no more than 18 EIFs; of which, four will be designated Founding EIFs (one from each Founding Partner organization). Evidence-Informed Fellows will report to the Scientific Planning Committee.

Meetings

The EIFs will meet at the discretion of the Founding EIFs and/or Scientific Planning Committee. EIFs are encouraged to establish their own meeting schedule to work on specific projects identified by themselves and/or the Scientific Planning Committee.

Management Support

EIFs will be supported by the Founding EIFs and members of the Scientific Planning Committee as appropriate. EIFs may request feedback from any collaborators within the Pandemic EVIDENCE Collaboration as needed to fulfil their goals. There will be responsibility for the EIFs to report back to their line manager at their host institutions. Renumeration

EIFs will receive a £6500 travel and accommodation allowance for the duration of the Fellowship. Remaining funds can contribute to additional skills training (e.g., short courses, specific research skills development and visiting knowledge exchange programs at another institution). Funds will be held and managed at Kellogg College, University of Oxford. Expenses will be paid for by Kellogg College via re-imbursement following submission of receipts and approval or directly via invoice. Professional conduct and ethics

Confidentiality

EIFs should assume all shared information and documents in the course of the work of the Evidence-Informed Fellowship by way of the Pandemic EVIDENCE Collaboration are confidential, unless explicitly stated otherwise by the Pandemic EVIDENCE Collaboration Management Committee. Transparency and COIs

Appendix 2: Evidence-Informed Fellows Grading Criteria

Excellent (4) Meets all or the majority of requirements

- Active interest in improving the generation and use of evidence for Non-Pharmacologic Interventions (NPIs) in public health emergencies
- Current experience working in acute viral respiratory infections or related areas
- Current experience working in evidence-based medicine (EBM)
- Current experience in developing high-quality evidence related to issues germane to pandemics and/or epidemics to pandemics and/or epidemics
- Excellent relevant publication record in the generation and use of evidence related to NPIs, acute respiratory viral infections, pandemics and /or epidemics and EBM
- Supported by the home institution and the line manager
- Available to travel

Average (3)

- Interest in improving the generation and use of evidence for NPIs in public health emergencies
- Previous experience working in acute viral respiratory infections or related areas
- Previous experience working in EBM
- Previous experience developing high-quality evidence related to issues germane to pandemics and/or epidemics
- Relevant publication record in the generation and use of evidence related to NPIs, acute respiratory viral infections, pandemics and /or epidemics and EBM
- Supported by the home institution and the line manager
- Available to travel

Fair (2)

- Knowledge of the generation and use of evidence for NPIs in public health emergencies
- Knowledge of areas related to acute viral respiratory infection or related areas
- Knowledge of EBM
- Knowledge about developing high-quality evidence related to issues germane to pandemics and/or epidemics
- A publication record related to NPIs, acute respiratory viral infections, pandemics and /or epidemics and EBM
- Supported by the home institution and the line manager
- Available to travel

Poor (1)

- Unsatisfactory understanding of the generation and use of evidence for NPIs in public health emergencies
- Unsatisfactory understanding of acute viral respiratory infection or related areas
- Lack of knowledge in EBM
- Lack of knowledge in developing high-quality evidence related to issues germane to pandemics and/or epidemics and/or epidemics
- A publication record unrelated or not relevant to NPIs, acute respiratory viral infections, pandemics and /or epidemics and EBM
- Supported by the home institution and the line manager
- Available to travel

Appendix 3: Banff Conference Programme

Day Zero	o Tuesday May 13 [™] 2025
13:00 – 15:00	Evidence-Informed Fellows Early Career Workshop Aim to develop researchers who respond efficiently and creatively to emerging situations. Road Test Ideas – space to present and develop skills as an applied researcher in a multi-disciplinary group.
_ Day One	e, Wednesday, May 14∗ 2025
08:30 – 09:00	Badge Collection
08:30 – 09:00	Coffee & Poster installation
09:00 – 09:30	Welcome and Introduction Dr Katrina Milaney, Associate Vice-President (Research), University of Calgary Professor Carl Heneghan, Director, Centre for Evidence-Based Medicine & Kellogg College, University of Oxford
09:30 – 11:00	Session One Panel Discussion Characteristics of COVID-19: Assessing the Difficulties of Research Evidence Co-Chairs John Conly & Georgia Richards Professor Mark Loeb, Faculty of Health Sciences, McMaster University Dr Oyuka Byambasuren, Institute for Evidence-Based Healthcare, Bond University Dr Ken Parhar, Cumming School of Medicine, University of Calgary Dr Atle Fretheim, Norwegian Institute of Public Health, Centre for Epidemic Interventions Research
11:00 – 11:30	Refreshment Break / Poster viewing
11:30 –	Parallel Abstract Sessions (Oral presentations)



KC201 Pillar 2 Interventions & Evidence (data challenges / other)

Benefits and harms of remdesivir for COVID-19 in adults: Early steps in a systematic review with meta-analysis of pivotal clinical trials - Marc Chretien

School Opening
Associated with
Significantly Lower TestAdjusted COVID-19 Case
Rates in Children Ambarish Chandra

Antidepressant prescribing trends in Northern Poland: findings from the COVID-19 pandemic - **Pawel Zagozdzon**

Applying the COM-B Model to Assess Barriers and Facilitators of the Covid-19 Pandemic Public Health Measures in Black Communities in Canada: A Qualitative Study - **Obidi Ezezika**

KC103

Pillar 2 Interventions & Evidence (methodological issues)

Randomized trials of public health and social measures for controlling pandemics: statistical challenges and opportunities - **Christopher James Rose**

Are Masks Necessary? A Challenge to Prevent COVID Transmission on a Pediatric Mental Health Acute Care Unit - **Jennifer Happe**

Prioritising Public Health and Social Measures (PHSM) evidence syntheses for a national public health agency - **Serena Carville**

Automated local lockdowns for SARS-CoV-2 epidemic control in Denmark in 2021- assessment of effect by controlled interrupted time series analysis - Laura Espenhain

KC105 Pillar 3 Practice & Policy

Side-effects of using lockdown as public health measure: Impact of COVID-19 Restrictions on Violence against Young Girls and their Mental Health in Bhopal, Madhya Pradesh - Rajnish Prasad

Exploring Norwegian public attitudes towards public health policy experiments in and outside of public health crises - Ingeborg Hess Elgersma

Interventions to enable or improve evidence-informed decision-making in public health and preventive medicine practice: A scoping review - **Emily Groot**

Impact of the COVID-19
Pandemic on Adverse Event
Incidence Rates in Canadian
Hospitals: A Retrospective
Chart Review Study Guosong Wu

12:45 – 14:00	Lunch - Vistas Dining Room
14:00 – 15:30	Parallel Abstract Sessions (Oral Presentations & Workshops)



KC103 Pillar 2 Interventions & Evidence

A Scoping Review of COVID-19 and Other Vaccination Models for Refugees and Migrants -Fariba Aghajafari

Controlling outbreak of infectious disease using Non-Pharmaceutical Interventions (NPIs): Learning from Kerala's Response Nipah Virus Outbreak - Ranjish Prasad

Addressing Youth Mental Health Literacy for Pandemic and Public Health Crises: Evidence-Based Consensus Statements for the Youth MindTrack and Beyond -Stephana Julia Moss

Loneliness during the COVID-19 pandemic in Indigenous communities in the Northwest Territories, Canada -Fariba Kolahdooz

Challenges faced by health policymakers in responding to the COVID-19 pandemic in the Northwest Territories, Canada - **Se Lim Jang**

KC101 Workshop

Accelerated evidence synthesis and dashboard science for pandemic prevention and response: Lessons from real-world initiatives at the University of Calgary's Centre for Health Informatics - Mairead Whelan, Danielle Southern, Harriet Ware

KC201 Workshop

Exploration of evidence-based interventions targeted at reducing the risk of social frailty among older adults during times of public health emergencies: A focus on what, where and how to implement - Jayna Holroyd-Leduc, Monika Kastner, Krystle Amog & Brooklynn Fernandes

15:30 Refreshment Break / Poster viewing -16:00



16:00 – 17:00	Session Two Guest Keynote Speaker Co-chairs Atle Fretheim and Oyuka Byambasuren Evidence-Based Medicine a Historical Outline of its Application in Clinical Medicine and its Potential in the Management of a Pandemic Professor Gordon Guyatt, Faculty of Health Sciences, McMaster University
18:00 19:30	Welcome Reception / Poster viewing

Day Two Thursday May 15 [®] 2025					
08:30 - 09:00	Badge Collection				
08:30 - 09:00	Coffee				
09:00 – 10:30	Session Three Pillar One Diagnostics and Transmission The Benefits and Harms of NPIs: Methodological Standards and Study Design Co-Chairs Carl Heneghan and Adam Komorowski Dr David Evans, Medical Microbiology and Immunology Dept, University of Alberta Dr Annette Plüddemann, Centre for Evidence-Based Medicine & Kellogg College, University of Oxford Assistant Professor Jenine Leal, O'Brien institute for Public Health, University of Calgary Professor Dominik Mertz, Faculty of Health Sciences, McMaster University				
10:30 – 11:00	Refreshment Break / Poster viewing				
11:00 –12:30	Parallel Abstract Sessions (Oral presentations)				



KC103

Pillar 1 Diagnostics & Transmission

Generative AI and unstructured audio data for precision pandemic management – **James Anibal**

Epidemiology and transmission of respiratory viruses among children attending day care: a systematic review – Carl Heneghan

Effectiveness of the Lolli-Methode in managing COVID-19 clusters in schools: Insights from the EuCARE project -Giulia Doi

Elevator Poster Pitches

Benefits and Limitations: Some insights from adaptation of CoWIN Platform for COVID-19 Vaccination in India - Rajnish Prasad

Antibiotic consumption and its link to the exaggeration of COVID-19 -

Muhammad Asaduzzaman KC201

Pillar 2 Interventions & Evidence (methodological issues / other)

Uncovering the consequences of additional precautions on patients and healthcare workers in acute care settings: a scoping review - Prakriti Pathania

The impacts of COVID-19 on children's health behaviour and well-being in Northwest Territories - **Moutasem Zakkar**

Methods of Measuring and Improving Public Health and Social Measures Adherence During Epidemics and Pandemics: A Systematic Review - Chi Wai Ng

Evidence review to support a WHO guideline on public health and social measures for mitigation of pandemic and epidemic influenza -Caitriona Murphy

Personal protective effect of wearing surgical face masks in public spaces on self-reported respiratory symptoms in adults: pragmatic randomised superiority trial - **Runar Solberg** KC105

Pillar 2 Interventions & Evidence (data challenges)

Evaluating Public Values on Non-Pharmaceutical Interventions for Pandemic Control - **Yuan Zhang**

Data, Policy, and Pandemic: Post-hoc Structural Breakpoint Analysis of Mortality Rates in Germany -Christopher Germann

Enhancing Population Adherence: Analyzing Demographic and Modifiable Factors in Public Health Emergencies - **Jessica Y**. **Wong**

Exploring mental health and learning loss of students during the COVID-19 Pandemic: an international study within the EuCARE project - Fedrica Bellerba



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12:30 – 14:00	Lunch - Vistas Dining Room
14:00 – 15:30	Session Four Pillar Two Interventions and Evidence Challenges in designing studies for evidence based NPIs in a pandemic Co-Chairs Tom Stelfox and Victoria Haldane
	Dr Mark Jones, Institute for Evidence-Based Healthcare, Bond University Dr Georgia Richards, Kings College London & University of Oxford Dr Lars Hemkens, University of Basel Dr Jessica Bartoszko, Faculty of Health Sciences, McMaster University
15:30 –16:00	Refreshment Break / Poster viewing
16:00 –17:30	Parallel Abstract Sessions (Oral Presentations & Workshops)



	KC201 Workshop Levels of Evidence for Interventions During a Pandemic - Carl Heneghan & Annette Pluddemann	Pillar 3 Practice & Policy (methodological issues / other) Understanding and Communicating the Potential Benefits and Harms of Non-Pharmacological Interventions During Health Emergencies: A Nigerian Perspective - James Olufemi Famuyiwa (ZOOM) Data-fetishism and politicization of science: the case study of the health narrative of Covid-19 - Andrea Miconi Emergency preparedness and integrated surveillance potential of a rapid COVID-19 and TB diagnostic in Bangladesh: An adaptive response in health system governance – Farzana Zaman Patient-Driven Collaboration in Long COVID Research: Enhancing Engagement and Outcomes Through Lived Experience for Long COVID Web - Farwa Naqvi From 'CoWIN' to 'Vaccine Maitri' (Vaccine friendship): India's Journey in Combating COVID-19 pandemic - Kamal Gulati (ZOOM)
18:30 – 21:00	Conference Dinner	
Day Three Friday, May	16 th 2025	
09:00 – 09:30	Badge Collection	
09:00 - 09:30	Coffee	



09:30 – 11:00	Session Five Pillar Three Practice and Policy Why we need EBM to facilitate informed policy in a pandemic				
	Co-Chairs Mark Jones ar	nd Jessica Bartoszko			
	Dr Sara Gandini, Department of Experimental Oncology in the European Institute of Oncology (IEO) Verna Yiu, Provost and Vice-President, University of Alberta				
11:00 – 11:30	Refreshment Break / Po	oster viewing			
11:30 – 12:30	Parallel Abstract Sessions (Seminars)				
	KC103 Seminar Translating evidence into policy and practice: An evidence-informed Public Health and Social Measures work programme – Serena Carville	KC105 Seminar Exploring the importance of perspective in study design to assess the effects or impacts of non-pharmacological interventions during public health emergencies – Tara Schuller	KC201 Seminar Building Bridges Across Canada: Advancing Post- COVID Condition Research, Awareness, and Management Through Long COVID Web – Doug Gross		
12:30 – 13:30	Lunch - Vistas Dining Room				
KC103 13:30 – 14:30					
14:30 – 15:30	Coffee – Safe Journey home				
POSTER BOARDS					
BOARD 01	Reporting quality of diagnostic accuracy studies for viral infections of enhanced pandemic potential: protocol for a meta-epidemiologic systematic review and meta-regression - Adam Komorowski				
BOARD 02	Development of a risk of bias tool for quality assessment of studies of the transmission of respiratory viruses - Adam Komorowski				



BOARD 03	The Utility of Trending Serial Cycle Threshold Values for SARS-COV-2 Allowing for Early De-Isolation and Cost Savings from Unnecessary Use of PPE and Bed Blocking - Jessalyn Almond
BOARD 04	Correlating SARS-CoV-2 Infectivity in Clinical Samples with Cycle Threshold Values - David Evans
BOARD 05	Viral Cultures for Assessing Airborne Transmission of SARS-CoV-2: a Systematic Review Protocol - Igho Onakpoya
BOARD 06	Effectiveness of non-pharmaceutical interventions as implemented in the UK during the COVID-19 pandemic: a rapid review of experimental, epidemiological and mathematical modelling studies - Ruth McQuillan
BOARD 07	Evaluation of the Norwegian national tool for observation of infection prevention measures in healthcare (NOST) – a cluster randomized trial - Petter Elstrøm
BOARD 08	Antibiotic consumption and its link to the exaggeration of COVID-19 - Muhammad Asaduzzaman
BOARD 09	Return-to-work for People Living with Long COVID: A Scoping Review of Interventions and Recommendations - Doug Gross
BOARD 10	Capacities and Vulnerabilities of Non-health Essential Workers from Visible Minority Communities to Cope with Mental Health Effects during the COVID-19 Pandemic - Nashit Chowdhury
BOARD 11	Gaps In Using Immunological Markers to Study Interventions: Insights from the COVID-19 Pandemic - Nicole Shaver
BOARD 12	Inequalities in Scotland's response to the COVID-19 Pandemic - Kieren Egan
BOARD 13	Evaluating the effectiveness of the enhanced masking directive in acute care hospitals in Alberta, Canada, during the 2023-2024 and 2024-2025 respiratory seasons - Jenine Leal
BOARD 14	Protocol: Benefits and harms of herbal medicines for preventing and treating acute respiratory infections: an overview of systematic reviews - Fariba Aghajafari
BOARD 15	Disparity in the global evidence base for the effectiveness of public health and social measures during influenza and COVID-19 pandemics - Wey Wey Lim
BOARD 16	Rapid acceleration of digital health technologies in a pandemic: a double-edged sword - Rosie Cooper
BOARD 17	Post-COVID-19 Condition Impact on the Canadian Healthcare Workforce: A Living Systematic Review and Agent-Based Modelling Project - Madison McGuire
BOARD 18	Use of Technology in Pandemic Response – Benefits and Limitations: Some insights from adaptation of CoWIN Platform for COVID-19 Vaccination in India - Rajnish Prasad
BOARD 19	Modelled evidence addressing non-pharmacological interventions for viral respiratory infections: A scoping review protocol - Jessica Bartoszko
BOARD 20	Assessing the effectiveness of continuous masking policies in reducing transmission of respiratory infections: A systematic review - Jessalyn Almond



BOARD 21	Evidence from Alberta - How hospital-based respiratory surveillance adapted through the COVID-19 pandemic - Jennifer Ellison
BOARD 22	Understanding and Communicating the Potential Benefits and Harms of Non-Pharmacological Interventions During Health Emergencies: A Nigerian Perspective James Olufemi Famuyiwa