



The Pandemic
EVIDENCE Collaboration

Pillar 2

Interventions and Evidence





Non-Pharmacological Interventions: Working Pillars and Cross-Cutting Themes

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 settings 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
Theme 2: Data Challenges Inputs to transmission models Outcomes – mortality, morbidity, infection, hospitalisations, other Data veracity Data sharing	Modes of Transmission <ul style="list-style-type: none">• Animal-animal studies• Human-animal studies• Human challenge studies Study Quality and Standards A framework for evidence assessment, synthesis, and adjudicating study quality	Assessing the benefits and harms of NPIs Developing a framework for evidence synthesis Developing evidence during and outside of pandemics Study design for high quality: RCTs, CRTs, cohort studies and others Outcomes – mortality, infections, hospitalisations, morbidity	Developing a framework for grading policy Developing effective policy Policy for intervening in individuals and populations Adjudicating study quality for policy Reporting criteria 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
Theme 4: Funding	Short term / long term sustainable / internal and external grants, conference revenue, leveraging		



The Pandemic
EVIDENCE Collaboration

Effect of Air Purifiers in Long-Term Care Facilities to Prevent Respiratory Viral Infections

- Setting: Long-term care facilities
- Multi-country randomized trial

Other methodological considerations:

- Match facilities on their characteristics (e.g. bed size, resident populations)
- Stepped wedge design
- Pilot to inform platform trial



Protocol 1



The Pandemic
EVIDENCE Collaboration

Cost-effectiveness of Air Purifiers in Long-Term Care Facilities to Prevent Respiratory Viral Infections

- Modelled evidence
- Setting: Long-term care facilities

Other methodological considerations:

Protocol 2



The Pandemic
EVIDENCE Collaboration

N95 vs Medical Masks

- Setting: Community
- Multi-country randomized trial

Other methodological considerations:



Protocol 3



The Pandemic
EVIDENCE Collaboration

Vitamin D to Prevent the Incidence of Respiratory Viral Infections/Symptoms

- Setting: Community

Other methodological considerations:

- Overview of systematic reviews
- Consider the populations that would benefit the most

Review 1



The Pandemic
EVIDENCE Collaboration

Vitamin D to Prevent Incidence of Respiratory Viral Infections/Symptoms

- Setting: Community
- Multi-country randomized trial

Other methodological considerations:

- Pilot to inform platform trial of supplements

Protocol 4



The Pandemic
EVIDENCE Collaboration

Personal Preferences in Public Messaging Regarding NPIs for Public Health Emergencies

- Survey where participants are randomized to one type of messaging vs another

Other methodological considerations:



Protocol 5



The Pandemic
EVIDENCE Collaboration

Selection of Covariates and Designs in Observational Studies addressing Effectiveness of NPIs: Relationship to Positive vs Neutral vs Negative Findings

Other methodological considerations:

- Length of NPI follow-up

Review 2



The Pandemic
EVIDENCE Collaboration

Catalogue of Benefits and Harms: Systematically Map the Benefits and Harms of Different NPIs

Other methodological considerations:

- Consider environmental harms

Review 3



The Pandemic
EVIDENCE Collaboration

Systematic Review of Persons' Weight/Value on Benefits and Harms from NPIs

Other methodological considerations:

- If identify lack of evidence, then consider primary research of person preferences

Review 4



The Pandemic **EVIDENCE** Collaboration

Atle Fretheim, Igbo Onakpoya, Jessica Bartoszko, Mark Jones, Sara Gandini

April 11, 12 2024