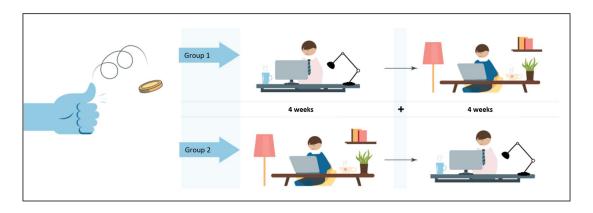


ANNUAL REPORT 2022

Centre for Epidemic Interventions Research (CEIR)

Centre for Epidemic Interventions Research (CEIR)

Annual Report 2022



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Introduction

During the COVID-19 pandemic it became apparent that the scientific basis for many infection control interventions was weak, and that more research on the effects of public health and social measures was needed. To address this gap, the Norwegian Ministry of Health asked the Norwegian Institute of Public Health to establish a research centre with a specific focus on this topic area. The Centre for Epidemic Interventions Research (CEIR) was formally established in the autumn of 2021, hosted by the Norwegian Institute of Public Health (NIPH).

CEIR has been tasked with three main activities, as defined by the following aims:

- 1. Prepare for the conduct of studies of effects of non-pharmaceutical infection control measures
- 2. Carry out effect studies
- 3. Develop and evaluate tools to support the use of research in decision-making in health crises, and improve critical health literacy in the population



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Activities 2022

In our first full year of operation, CEIR has invested time and resources in establishing the centre in terms of staff, localisation, and building collaborative relationships – in addition to activities directly related to the stated aims for the centre.

CEIR is organizationally and physically placed within the Division for Health Services at the Norwegian Institute of Public Health, and is now practically fully staffed. Formal arrangements are in place with staff from the Division of Infection Control allocating part of their work time to supporting CEIR and to ensure effective communication and collaboration between the researchers' activities in the centre and public health practitioners/advisors within the institute.

We held the first meeting with our National Advisory Board in October 2022.

CEIR web page: www.fhi.no/en/more/research-centres/ceir/

AIM 1 – Prepare for the conduct of studies of effect of non-pharmaceutical infection control measures

- Informed consent requirements for trials of public health measures have hindered several planned CEIR-studies. CEIR has contributed to the public debate about this barrier by publishing papers in scientific journals (e.g. Nytt Norsk Tidsskrift), presenting at meetings and conferences (e.g. at the Norwegian Academy of Science and Letters, Vitenskapsakademiet, 07.11.2022), and giving interviews with the media (e.g. Khrono 11.01.2022).
- By challenging decisions by the Regional Ethics Committees (REK), CEIR has sparked a debate within the National Committee for Medical and Health Research Ethics on the need to revise the current regulations for health research in Norway. This has been done through formal complaints about REK-decisions.
- CEIR has provided input to the expert group that was tasked with preparing a report to the Norwegian government, on legal and ethical issues related to collection, availability, sharing, and use of data, and the use of randomised trials during crises.
- In collaboration with the World Health Organization (WHO), CEIR has commissioned a review of the current evidence on the effects of public health and social measure, during the COVID-19 pandemic. The work is carried out by a team at the American University of Beirut, in collaboration with the Epistemonikos Foundation (Chile), with input from WHO and CEIR.

AIM 2 – Carry out effect studies

For 2022, CEIR focused mainly on planning and conducting randomised trials of infection control measures. Three trials have been completed this year:

- Wearing glasses in public to protect against infection (published)
- Social media-campaign to increase COVID-19 testing among migrants (published)
- Phone calls from general practitioners to their unvaccinated patients, to increase COVID-19 vaccine coverage (submitted for publication)

CEIR-staff have also contributed to *non*-randomised studies of infection control measures:

- Mandatory COVID-19 testing of international travelers entering Norway (published)
- Open schools and pre-schools (published)
- Closing schools versus using targeted control measures (<u>published</u>)

Several trials are also in planning or recruitment stages. These include:

2nd booster trial: In February 2022 CEIR started planning a trial to test the effectiveness of offering a 2nd booster dose of the COVID-19 vaccine, at the request of the Division of Infection Control at the Norwegian Institute of Public Health. The trial is registered in the ClinicalTrials.gov database and all necessary legal, ethical, and logistical requirements have been secured. The idea was to invite half of the population in the age group 45-64 years, without increased risk of severe COVID-19, to take the 2nd booster dose. In November 2022 the government decided to offer the booster to all members of the population between the ages 18 and 64 years old, making it practically impossible to carry out a sound trial. However, the study plan is relevant also for future booster doses.

Home office trial: In the spring of 2022, employees at the Norwegian Institute of Public Health were invited to take part in a trial to assess the risk of respiratory infection when working from home compared to being present in the workplace. This was the pilot phase of a larger randomised trial planned for the coming and following winter seasons. A major challenge proved to be recruitment of individuals, as well as companies who are willing to allow their employees take part in the study. Recruitment of participating companies is ongoing and will continue through 2023.

Air cleaners in bars and restaurants: Early piloting has also started for a trial of air cleaners in bars and restaurants, for 2023.

Use of face masks in public spaces: We have secured ethics approvals for randomised trials of using face masks in public spaces to reduce risk of respiratory infection, and of face masks versus respirators (e.g., FFP2/FFP3) for staff in long term care facilities. The trials may be launched in 2023.

NOST evaluation: The Norwegian Institute of Public Health is in the process of launching NOST – A tool for observing infection control measures in the health service. CEIR has been asked to support an evaluation of the effectiveness of this program. A randomised trial carried out in hospital departments is being planned.

AIM 3 — Develop and evaluate tools to support the use of research in decision-making in health crises, and improve critical health literacy in the population CEIR has in collaboration with Epistemonikos Foundation in Chile and InfoDesign Lab in Oslo further developed the interactive Evidence to Decision framework/tool, to support transparent and informed decision-making among policymakers and other decisionmakers, e.g., health professionals and health authorities making recommendations. The tool iEtD tool will now be translated to Norwegian, for further user testing.

¹ A recent example of the application of the Evidence-to-decision framework: <u>Infection prevention and control in the context of coronavirus disease (COVID-19)</u>: a living guideline. World Health Organization 2023.

In the CHOICE-project CEIR has, in collaboration with international partners mainly in Rwanda, Kenya and Uganda, developed learning resources for use in high schools, aimed at improving the students' ability to critically assess health claims – a skill that is particularly relevant in the face of "infodemics" during epidemics and other health crises. Randomised trials of the resources were conducted in each of the three East African countries in 2022, including a total of 244 schools and 11,343 students. The results will be published in 2023.

CEIR launched *The Message Lab* in late 2022 – an approach to testing different ways of communicating information about the effects of interventions – to the general population, or other groups. The first trial conducted by the Message Lab concerns the results from CEIR's own study of wearing glasses to protect against COVID-19 infection. Participants in the Message Lab-trial will be shown the glasses-study results with uncertainty about the results presented in different ways. Outcome measures include understanding of uncertainty, perceived benefit and harm, and intended behaviour. The results will be published in 2023.

The interactive Summary of Qualitative findings (iSoQ) tool is a free, online, interactive platform to support authors of qualitative evidence syntheses to apply the GRADE-CERQual approach for assessing how much confidence to place in the findings of their syntheses.² In collaboration with the Epistemonikos Foundation in Chile, in the last year we completed version 1 of iSoQ, launched this for use internationally and now have close to 500 users.

Together with political scientists in Bergen, Trondheim, and Toronto we are systematically reviewing examples of *public participation in decisions about public health and social measures* used to manage the Covid-19 pandemic. The aim of this review is to inform decisions about how best to enable public participation and deliberation in decisions about public health and social measures, and to inform decisions about evaluations of public participation in the context of pandemics and epidemics. The results will be published in 2023.

In the SUPPORT-SYSTEMS project we explore whether decision-making processes for health systems strengthening, and universal health coverage (UHC) can be made more inclusive, responsive and accountable. We focus on the extent to which actively involving civil society voices and other stakeholders can humanise decision-making processes for UHC and promote equity.

Finances

CEIR was funded primarily by ear-marked funding in the Norwegian national budget (20 mill. NOK). In addition, CEIR received funding from the Norwegian Research Council for the CHOICE-project (described above).

² A recent example of the application of the GRADE-CERQual approach: <u>Flaherty SJ et al. Maternity care during COVID-19</u>: a qualitative evidence synthesis of women's and maternity care providers' views and experiences. <u>BMC Pregnancy Childbirth</u>. <u>2022 May 26;22(1):438</u>.

CEIR-staff 2022

- Mona Bjørbæk, Senior Advisor
- Ingeborg H. Elgersma, Researcher
- Petter Elstrøm, Researcher
- Signe Flottorp, Researcher
- Atle Fretheim, Centre Director
- Christine Holst, Researcher
- Heather Munthe-Kaas. Researcher
- Andy Oxman, Researcher
- Matthew Prescott Oxman, PhD-candidate
- Christopher J. Rose, Statistician
- Sarah Rosenbaum, Researcher
- Runar Solheim, Researcher
- Tone Bruun, Epidemiologist
- Didrik Vestrheim, Epidemiologist
- Oliver Kacelnik, Epidemiologist
- Arnfinn Helleve, Researcher
- Simon Lewin, Researcher
- Chui Hsia Yong, Communication and publications manager
- Annlaug Selstø, Senior Advisor

National Advisory Board

- Bjørn-Inge Larsen (Head of Advisory Board), Helse- og omsorgsdepartementet (Ministry of Health and Care Services)
- Liv Arum, Pensjonistforbundet (Norwegian Pensioners' Assocation)
- Ingrid Tyridal Bjerring, Kommuneoverlege, Lier commune (Municipal Chief Medical Officer, Lier Municipality)
- Per Øystein Eikrem, Finansdepartementet (Ministry of Finance)
- Merete Habberstad, NHO reiseliv (Norwegian Hospitality Association)
- Håkon Kavli, Kunnskapsdepartementet (Ministry of Education and Research)
- Jan Emil Kristoffersen, Legeforeningen (Norwegian Medical Association)
- Hege Lorentzen, Kommunesektorens organisasjon (KS) (Norwegian Association of Local and Regional Authorities)
- Espen Nakstad, Helsedirektoratet (Norwegian Directorate of Health)
- Esperanza Diaz, Pandemisenteret, Universitetet i Bergen (University of Bergen)
- Cecilie Sjåland, Landsorganisasjonen i Norge (LO) (Norwegian Confederation of Trade Unions)
- Einar Ove Standal, Utdanningsforbundet (Union of Education Norway)
- Bente Westrum, Statsforvalteren i Innlandet (County Governor, Innlandet)
- Kirsten Brubakk, Norsk Sykepleierforbund (Norwegian Nurses Organisation)

Publications 2022

In scientific journals

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Fretheim A. <u>Covid-19: Pinlig mangel på kunnskap om effekter av smitteverntiltak</u>, Nytt norsk tidsskrift. 78-84.
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• Iversen BG, Desenclos J-C, Fretheim A, Viso A-C, Schmidt T, Sane J, Lopes PVV, Perehinets I, Ottersen T. What has been the role of national public health institutes in providing knowledge during the COVID-19

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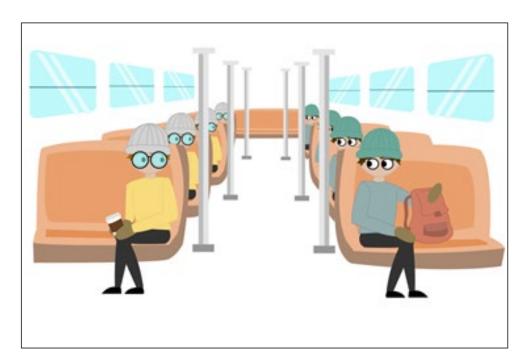
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Op-eds

• Stoltenberg C, Fretheim A, Solberg R. Hjelp oss å finne ut av dette: <u>Bidrar hjemmekontor til å bremse smittespredning?</u> Dagens Næringsliv, 26.10.22.

Academic Presentations etc.

- Randomised trials of infection control measures, Health Economics Seminar, University of Oslo, 15.02.2022 (Atle Fretheim)
- Do we need randomized trials of infection control measures? Why aren't they being done? EbM-Congress 2022, Deutsches Netzwerk Evidenzbasierte Medizin e.V. 18.03.2022. (Atle Fretheim)
- Where are the randomized trials? Experiences from Norway during the COVID-19 pandemic. More on Evidence to Impact, 9th virtual ISEHC Conference, 17.10.2022. (Atle Fretheim)
- Air quality trials at CEIR. BESSI Air quality webinar, 23.06.2022. (Atle Fretheim)
- A trial of 2nd booster dose to assess impact on severe COVID-19. EU Trial coordination board, 22.09.2022. (Atle Fretheim)
- Planlegging av studie på effekt av 2. oppfriskningsdose covid-19 vaksine (4. dose). Webinar for kommuneleger, FHI, 14.09.2022 (Petter Elstrøm)
- Forekomst av resistente bakterier. Webinar for kommunehelsetjenesten, FHI, 22.09.2022. (Petter Elstrøm)
- Er forskningsetikken en bremsekloss for forskning på folkehelsetiltak? Debattmøte, Vitenskapsakademiet, 07.11.2022. (Atle Fretheim)
- Hvordan kan vi vite om smitteverntiltakene som anbefales under en pandemi fungerer? Smitteverndagene, FHI, 10.11.2022. (Atle Fretheim)
- Health communication in and out of public health emergencies: To inform or to persuade? AIFA (Italian Medicines Agency) International Seminar, 27.01.2022. (Andy Oxman)
- Helsepåstander: Hva skal man tro og hva skal man gjøre? Sandvika vgs. 14.10.2022. (Andy Oxman)
- Critical thinking about healthcare: Where have we been and where are we going. XVIII Meeting of the Iberoamerican Cochrane Network, 18.10.2022. (Andy Oxman)
- Forskning, kommunikasjon, deltakelse, og kritisk tenkning: hjørnesteinene i gode beslutninger. Kunnskap i bruk, NORNESK konferanse, 25.10.2022. (Andy Oxman)



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