

Current evidence for COVID-19 treatments

A recent [paper in the BMJ](#) shows the value of updated aggregated information about expected benefits and harms to clinicians and patients.



Signe Flottorp

“Evidence ... suggests that glucocorticoids probably reduce mortality and mechanical ventilation in patients with severe covid-19. Remdesivir probably reduces length of hospital stay. The effects of most drug interventions are currently highly uncertain, and no definitive evidence exists that other interventions result in important benefits and harms for any outcomes.”

These are the conclusions of a systematic review and network meta-analysis published in the BMJ on

30 July 2020 ([BMJ 2020;370:m2980](#)). Signe Flottorp, a member of the “core group” of the Norwegian Institute of Public Health (NIPH) Live map of COVID-19 evidence since the beginning, is one of the co-authors. Signe is a former general practitioner and public health doctor and has been a health services researcher since 1994.

The BMJ paper which will be updated soon, includes a sophisticated searching mechanism to help users find current evidence for COVID-19 treatment for selected outcomes like mortality, adverse events, length of hospital stay etc. The main source for this international project is daily searches in the US Centers for Disease Control and Prevention (CDC) COVID-19 Research Articles Downloadable Database, but the project also checks living evidence retrieval services, including the NIPH map, says Signe.

Status of the NIPH map

Our live map is recognized internationally as one of the main sources of evidence on COVID-19, says Signe. We have established a great team at the Norwegian Institute of Public Health, and we have recruited help from students and colleagues in Norway and around the world. We have built a system for coding publications in pairs or with the

machine-learning system, reconciling the codings, quality checking and regularly publishing the COVID-19 live map and newsletters.

Our map provides a visual overview of the selected categories, and we have more detailed maps for each main topic. People can quickly assess the number of publications for the main topics and identify “gaps” in the COVID-19 research. It is possible to filter according to the type of publication, get a list of publications for each “bubble” with relevant population and topic, and get the full text of publications through the included links.

The most problematic issues

The volume of publications is, however, overwhelming. It has been challenging to set up and develop the project while “drowning” in new publications every week. We have simply not been able to code all of them, and we even struggle to be up-to-date on top priority publications - the systematic reviews and randomized trials on effects of interventions. Unfortunately, we have not had time to assess the quality of top priority included studies.

It is also challenging to get time to conduct relevant and rapid systematic reviews, at the same time as we are coding, learning about machine learning, recruiting, training collaborators, and checking the quality of the work for each update.

The future

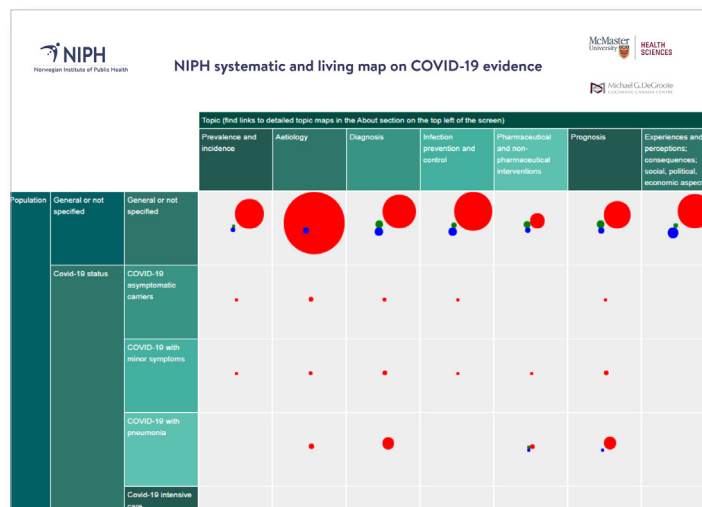
We continue to struggle with the deluge of information. But we are working towards improving and innovating our methods, continuing to collaborate well so that we can provide an even more useful and relevant systematic and living map on COVID-19 evidence. If we succeed, the NIPH Live map will be an important source of evidence for researchers, decision-makers, clinicians and lay people – for all who need easy access to evidence about COVID-19 both in Norway and internationally.

37 796 references screened; 7 221 publications included

708 publications have been added in the latest update of the map, including 217 new systematic reviews and health technology assessments (HTAs).

As of 25 August 2020, the map contains 7 221 publications categorised by topic, population, and publication type. Together with EPPI Centre, we have screened 37 796 references retrieved through our searches.

The [Live map of COVID-19 evidence](#) includes all systematic reviews, health technology assessments, RCTs, non-randomised studies with control groups, and method papers identified up to 6 July 2020. For non-randomised studies without control groups, qualitative studies and protocols, the map is updated until 4 May 2020.



International readership

The Live map of COVID-19 evidence has not been updated since mid-July due to summer vacation. But the maps and web pages have continuously been used by an international readership.



During one week in mid-August the home page of the [Live map of COVID-19 evidence](#) had 2427 unique page views. Two thirds visited the Norwegian version and one third the English version. Most of the readers were directed from Google. From the home page it is possible to get more information on the project, to see the rapid reviews on COVID-19 produced by the Norwegian Institute of Public Health and to access the main map and topic maps.

Users from 40 nations

The [main map](#) had a total of 2843 web page views from mid- July to mid-August. The readers came from 40 different nations, deduced from the IP address of their device. Norway was the top user of the Live map closely followed by the USA and Great Britain.

The average viewing time was 106 seconds. Five per cent of the viewers, however, spent more than five minutes on the page.

“Interventions to treat the infected patient” was the most popular topic page followed by “Diagnosis” and “Prognosis”.

Project leader: Gunn Vist
Editor: Magne Nylenna
Photo: University of Oslo, Colourbox
Date: 27 August 2020
E-mail: Covid-19.evidencemap@fhi.no