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# Contact tracing and health inequalities during disease outbreaks : a rapid review protocol. V.2

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### 1 Contact tracing and health inequities during disease outbreaks: a rapid review of empirical literature.

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### 2 Contact tracing plays a key role in the control of outbreaks and epidemics. It is used to contain diseases that are spread from human-to-human such as Ebola, tuberculosis, and HIV, and it has become a central tool for governments to control the spread of COVID-19.<sup>1,2</sup> Contact tracing is a process that is used to identify, educate, and monitor individuals who have had close contact with someone who is infected.<sup>3</sup> Health inequities can be further exacerbated if they are not considered in the design of interventions, such as contact tracing.<sup>4</sup> Understanding if inequities are accounted for in the design of contact tracing interventions and if so, how, is central to this study and to the HoSPiCOVID research project.<sup>5</sup>

## Objectives

3

The purpose of this rapid review is to study if and how health inequities are considered in the design of contact tracing interventions for COVID-19 and other infectious diseases.

## Search strategy

4

We will conduct a comprehensive search of the following electronic databases: MEDLINE and Web of Science. All results will be taken into account, including research results and program descriptions. The search strategy was developed in collaboration with librarians from the Institute for Research on Sustainable Development (IRD) and the University of Montreal.

### Search terms:

We will use the following terms for our searches:

- contact tracing;
- design, planning;
- disease, epidemic, pandemic.

### Inclusion and exclusion criteria:

To be included in the rapid review, articles must document the design of contact tracing interventions in any country in the world which has experienced an epidemic.

Our research will focus on articles published in scientific journals and that :

- document the design of contact tracing interventions during outbreaks;
- have been published between 2013 (West African Ebola virus epidemic) and 2020;
- have been published in English, French, Chinese, Spanish and Portuguese;
- are empirical according to the ATCER tool<sup>6,7</sup> (empirical degree  $\geq 90$ );

We will exclude from our searches:

- articles that are not empirical (grey literature i.e. press articles, letters, editorials...) or have an empirical degree lower than 90 according to the ATCER tool;
- articles which do not describe the design of contact tracing;
- publications published prior to 2013;
- papers which are not available in full PDF version.

### Main outcomes:

- Whether or not health inequities were considered in the design of contract tracing interventions.
- If health inequities were considered in the design of a contact tracing intervention, which inequities were considered, and how were incorporated into the intervention, including the use of a specific theory.

## Data extraction

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All identified studies will be imported from PubMed and Web of Science into Rayyan QCRI, a systematic review application, for screening of the titles, abstracts and full texts. Two reviewers will independently assess the relevance of titles and abstracts based on the inclusion and exclusion criteria, and when there is discordance between the two reviewers, a third reviewer will review the titles and abstracts of the discordant results. The second stage of review will involve each reviewer independently identifying potentially relevant publications based on a full article review, any discordance will involve a third reviewer, and data abstraction will occur for articles that meet the inclusion criteria.

The information that will be extracted from the articles will include:

- characteristics of the paper (title, authors, year);
- context of the paper (country, epidemic);
- characteristics of the contact tracing program implementation;
- whether or not health inequities were considered in the design or implementation of the program or intervention;
- if health inequities were considered; which inequities were considered, how, and any use of a specific theory;
- main results of the study.

#### Risk of bias (quality) assessment

- 6 The quality of the studies will be assessed using the Mixed Methods Appraisal Tool (MMAT) developed by Hong et al.<sup>8</sup>

#### Strategy for data synthesis

- 7 The synthesis of the articles will follow the recommendations of the PRISMA method.<sup>9</sup> The criteria for the data synthesis will be based on the number of studies that have reported the outcomes of interests, i.e. contact tracing design. The outcomes will be reported in a descriptive manner and will also be subject to thematic analysis. This rapid review is part of the HoSPiCOVID research project.<sup>5</sup> Workshops and a final international workshop in the summer/fall of 2021 will bring together policy and decision makers, hospital and public health professionals, researchers and civil society organizations to collectively produce operational recommendations based on the lessons learned between countries. This knowledge transfer strategy, based on the project's evidence and the expertise of the participants, will enable the sharing of lessons about contact tracing at an operational level.

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