

## COVID-19 testing hesitancy: A rapid review

### Summary

There is a growing body of literature across a variety of sources that describes barriers to COVID-19 testing and offer strategies to mitigate them. However, details on the effectiveness of strategies to improve uptake of COVID-19 testing are currently scarce. Surveys identified current barriers and population preferences for testing. However, the lack of baseline testing rates makes comparison of strategies difficult. Evidence in this topic area is rapidly emerging and current evidence should be monitored and updated. The use of implementation science frameworks may be a promising means of developing, evaluating and refining approaches to addressing COVID-19 testing hesitancy.

### Implications

The development of approaches for addressing COVID-19 testing hesitancy should consider multiple, and often intersecting factors. The impact of strategies to address testing hesitancy for COVID-19 is understudied but supported by expert opinions. No high-quality studies explored the implementation or effectiveness of strategies to address COVID-19 hesitancy. However, a few surveys provide information on public preferences.

**Acknowledgements:** Funding for this rapid review is provided by Health Canada and SPOR Evidence Alliance.

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### What is the current situation?

Testing is critical to contain COVID-19; therefore, overcoming current testing barriers through evidence-based strategies is essential.

### What is the objective?

To summarize the evidence on: (1) COVID-19 testing barriers, and (2) effective communication or testing strategies.

### How was the review conducted?

A comprehensive search, designed by a library scientist, was conducted in MEDLINE, Scopus, medRxiv/bioRxiv, and the Cochrane Database of Systematic Reviews on January 8, 2021 to retrieve studies published from January 1, 2019 until the search date. Targeted grey literature searches were also conducted. Based on timelines, articles were screened and extracted by single reviewers and reviewed by another team member.

### What did the review find?

1294 unique academic articles, and 97 grey literature articles were identified. After screening, 61 articles were included (n=30 academic, n=31 grey literature).

**COVID-19 testing barriers.** The majority of articles (n=52) described barriers. Articles frequently described how intersections in the social determinants of health created disparities and exacerbated testing barriers.

- Several articles identified a current 'infodemic' of misinformation and poor communication from government and scientists as a barrier.
- Social stigma and the consequences of testing positive was a frequently cited barrier.
- Additional areas identified from the literature include: (1) access; (2) acceptability; (3) costs; and (4) follow-up supports for those testing positive.

**Strategies to mitigate COVID-19 testing barriers.** 44 articles identified at least one strategy. A range of strategies were described but details on implementation and outcomes were scarce. Several promising strategies are currently underway.

- One study found no association between information seeking online and COVID-19 testing.
- One survey found that individuals would prefer home tests (92%), followed by drive thru tests (71%), attributed mostly to fear of infection.
- Targeted testing sites reported increase in testing among vulnerable populations, however, there was no baseline for comparison.

**Use of implementation science to support COVID-19 testing.** The use of implementation science frameworks may be helpful to support the design of COVID-19 testing approaches and for evaluation and ongoing refinement.