

# Impact of COVID-19 quarantines on individual and social outcomes in community-based settings: a Living Evidence Synthesis



Burdick J<sup>1,2</sup>, Wu N<sup>1,2</sup>, Joyal-Desmarais K<sup>1</sup>, Sanuade C<sup>1,2</sup>, Vieira AM<sup>1,2</sup>, Jagwani M<sup>1</sup>, Paquet L<sup>1</sup>, Bacon SL<sup>1,2</sup> for the COVID-END PHSM LES Working Group

<sup>1</sup> META Group, Montreal Behavioural Medicine Centre, CIUSSS du Nord-de-l'Île-de-Montréal ; <sup>2</sup> Department of Health, Kinesiology, and Applied Physiology, Concordia University, Montreal, QC, Canada

## INTRODUCTION

• On February 18, 2024, there have been 774 699 366 confirmed COVID-19 cases, and 7 033 430 total cumulative deaths worldwide.

• Quarantine has been implemented to decrease transmissions but must be weighed against potential adverse effects to aid policymakers when making informed decisions.

### AIM

To assess the impact of quarantine on individual and societal outcomes in non-healthcare community-based settings.

**Table 2: Inclusion and Exclusion Criteria**

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> <li>Reported in English</li> <li>Conducted with humans</li> <li>Primary observational studies</li> <li>Published from January 1, 2020, to March 20, 2023</li> </ul>	<ul style="list-style-type: none"> <li>Mass quarantine</li> <li>Lockdown</li> <li>Modelling, qualitative, case report studies</li> <li>Review</li> <li>No comparison group</li> <li>Wrong intervention</li> </ul>

## RESULTS

- 4217 reports retrieved
- 157 assessed at full-text level
- 4 studies included
- Two Studies:** Found increased symptoms of depression and anxiety in individuals who quarantined vs those who did not.
- Two Studies:** Found no difference in outcomes between comparison groups.

## METHODS

**Study Design:** 3 rounds of a living evidence synthesis

**Table 1: PICO Research Question**

Population of Interest	All population groups
Intervention	Individuals who were quarantined due to COVID-19 variants and sub-variants
Comparison Group	Individuals in quarantine for a different time period Individuals not in quarantine
Outcome	Changes in individual and social measures

## METHODS

**Key elements of search terms:** Quarantine, confinement, self-isolation, COVID-19, SARS-COV 2, limits were placed on dates and language

**Reports were retrieved by searching:** EMBASE, Medline, PsychINFO, The National Institute of Health (NIH), iSearch COVID-19 portfolio

**Title & Abstract Screening:** Single Reviewer, Inclusions cross-checked

**Full-text Screening & Data Extraction:** Cross-checked by at least one other team member

**Table 3: Summary of included empirical studies**

Study	Country	Study Design	Sample	Groups	Outcome
Aaltonen et al., 2023	Finland	Cross-sectional survey	110 adults	a) Quarantine [since 1 week] b) Isolation [since 1 week] c) No containment control	Wellbeing/distress
Pang et al., 2020	Malaysia	Cross-sectional survey	515 university students	(a) 14-day quarantine (b) Campus lockdown without quarantine	(a) Depressive symptoms (b) Anxiety symptoms (c) Stress
Schluter et al., 2022	Canada, USA, England, Switzerland, Belgium, Philippines, New Zealand, and Hong Kong	Cross-sectional survey	9 027 adults	(a) Quarantine (b) Isolation (c) No confinement	Composite measure of depressive and anxiety symptoms
Wang et al., 2022	China	Cross-sectional survey	279 adults	(a) Quarantined (> 7 days) (b) Quarantined (< 7 days)	(a) Physical and mental component subscales of a quality-of-life assessment (b) Anxiety symptoms

## CONCLUSION

- Quarantine may be associated with increased depressive symptoms
- Initial insights for policymakers
- Interpretation is problematic due to:
  - Significant lack of observational evidence
  - Serious risk of bias of included studies

Centre intégré universitaire de santé et de services sociaux du Nord-de-l'Île-de-Montréal



Email: [jessicaburdick@hotmail.com](mailto:jessicaburdick@hotmail.com)