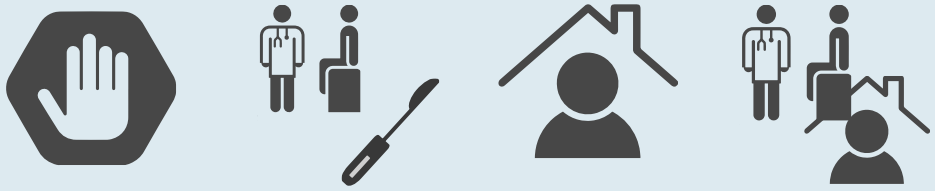
A Cochrane Rapid Review on International Travel-Related Control Measures to Contain the COVID-19 Pandemic

How effective are different international travel-related control measures in containing the COVID-19 pandemic?

TRAVEL-RELATED CONTROL MEASURES

Countries have implemented various control measures related to international travel.



METHODOLOGY

Rapid review of travel-related control measures sought to investigate:

Studies could include people of any age, anywhere and could be observational or modeling studies.

LIMITATIONS

Most studies based on mathematical prediction rather than real-life data. Widely different methods used across studies. Not all studies peer-reviewed. Very little evidence on non-transmission-related outcomes.

FINDINGS

Travel Restrictions: Modelling studies assessed outcomes related to **cases avoided** and **shift in epidemic development**. Most studies showed **positive effects**; however, effect sizes varied, e.g. a reducing cases by 2% or 98% (very low certainty).

Symptom-based border screening: A mix of modelling and observational studies assessed outcomes related to **shift in epidemic development** and **cases detected**. All studies showed **positive effects**; however, effect sizes varied, e.g. detecting 1% or 53% of cases (moderate & very low certainty).

Test-based border screening: A mix of modelling and observational studies assessed outcomes related to **cases avoided** and **cases detected**. All studies showed **positive effects**; however, effect sizes varied, e.g. detecting 58.3% or 90% of cases (very low certainty).

Quarantine: Modelling studies assessed outcomes related to **cases avoided**, **shift in epidemic development** and **cases detected**. All studies showed **positive effects**; however, effect sizes varied, e.g. reducing cases in the community by 450 or by 64,028 (low and very low certainty).

Quarantine with screening at borders: A mix of modelling and observational studies assessed outcomes related to **shift in epidemic development** and **cases detected**. Most studies showed **positive effects**; however, effect sizes varied, e.g. detecting 41% or 99% of cases (low and very low certainty).

CONCLUSIONS

1. International travel restrictions stopping or reducing cross-border travel may help contain the SARS-CoV-2 transmission
2. Screening at borders will detect some cases, but will also miss a meaningful proportion
3. Quarantine, where sufficiently long, will largely avoid further transmission.
4. Effects of measures are likely impacted by other factors (e.g. stage of epidemic, community measures to reduce transmission)

International travel-related control measures may help limit spread of disease across national borders.

Burns, J et al. International travel-related control measures to contain the COVID-19 pandemic: a rapid review. Cochrane Database of Systematic Reviews 2021. doi.org/10.1002/14651858.CD013717.pub2

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