Quarantine to control COVID-19

Coronavirus disease (COVID-19) is a new virus that has spread rapidly around the globe. There is no effective treatment or vaccine for COVID-19, so restrictive measures such as quarantine, isolation and social distancing are being used to reduce transmission of the infection.

This Cochrane rapid review was commissioned by the World Health Organization (WHO) to assess whether and how effectively quarantine stops COVID-19 spreading, and if it prevents death.

Key findings

Our rapid review looked at the latest evidence from modelling studies and found:

- Combining quarantine with other measures, such as closing schools or social distancing, is more effective at reducing the spread of COVID-19 than quarantine alone.
- Quarantine of people exposed to confirmed cases may avert high proportions of infections and deaths compared to no measures.
- More comprehensive and early implementation of prevention and control measures may be more effective in containing the COVID-19 outbreak.

We included 29 studies in this rapid review

Studies looked at the number of COVID-19, SARS or MERS cases, how quickly the virus spread, how many people died, and the financial costs of quarantine.

15 SARS/MERS simulation studies

10 studies on COVID-19
Studies simulated outbreaks in China, South Korea, United Kingdom and on the Diamond Princess cruise ship.

4 SARS/MERS studies on population data

Certainty of evidence

We cannot be completely certain about the evidence we found, as the COVID-19 studies based their models on limited data and made different assumptions about the virus (e.g. how quickly it would spread).

The other studies investigated SARS and MERS so we could not assume the results would be the same for COVID-19. For this reason we judge the certainty of evidence to be low/very low.

This review includes evidence published up to 12 March 2020.