



London

Cite this as: *BMJ* 2020;370:m3047<http://dx.doi.org/10.1136/bmj.m3047>

Published: 30 July 2020

Covid-19: Eight day quarantine is as good as 14 for returning travellers, study finds

Michael Day

Quarantining people who return to the UK from the US or the EU for eight days, with a polymerase chain reaction (PCR) test on day 7, is virtually as effective at preventing new community covid-19 infections as the current two week quarantine policy, London researchers have shown in a paper that has not yet been peer reviewed.

Experts said that adopting the shorter quarantine policy could help the devastated travel industry, with little additional risk to public health.

A team at the London School of Hygiene and Tropical Medicine claim that a quarantine period of eight days on arrival with a PCR test on day-7 (with a one day delay for test results) can reduce the number of infectious arrivals released into the community by a median 94% when compared with no quarantine. This reduction is similar to the 99% median reduction achieved by a 14 day quarantine period.¹

Commenting on the paper, Andrew Freedman, reader in infectious diseases at Cardiff University, said, "This modelling study . . . provides a strong argument in favour of shortening the quarantine period from the current 14 days to eight days, by performing a test on day 7 after arrival. This would have a very significant benefit to the individual traveller, as well as the travel industry as a whole."

New spike

The research comes as the British government signals its determination to cut the risk of new covid-19 cases being imported from abroad. England's health secretary, Matt Hancock, said that a new spike in covid-19 cases was "clearly" beginning to emerge in Europe.

"I think you can see a second wave starting to roll across Europe, and we've got to do everything we can to prevent it from reaching these shores and to tackle it," he told Sky News.

Mark Woolhouse, professor of infectious disease epidemiology at the University of Edinburgh, praised the standard of the research. "The paper by Clifford et al injects some much needed quantitative rigour into the ongoing policy debate around quarantining international travellers," he said. "This is a welcome illustration of the principle that testing can be used to reduce the need for quarantine."

The paper notes that the public health impact of imported infections depends on numbers of travellers as well as the levels of infection in the country of origin. "This is an important point," he said. "If there are eight times as many arrivals from the EU as from the US then quarantining just the latter only makes sense if they are more than eight times as likely to be infected."

The London researchers also commented on the importance of asymptomatic carriers of the virus. They wrote, "We also find that on arrival the transmission risk is highest from pre-symptomatic travellers; quarantine policies will shift this risk increasingly towards asymptomatic infections if eventually-symptomatic individuals self-isolate after the onset of symptoms."

¹ Clifford S, Quilty BJ, Russell TW, et al. Strategies to reduce the risk of SARS-CoV-2 re-introduction from international travellers. *medRxiv* 2020 Jul 25 (preprint). <https://www.medrxiv.org/content/10.1101/2020.07.24.20161281v2>.

This article is made freely available for use in accordance with BMJ's website terms and conditions for the duration of the covid-19 pandemic or until otherwise determined by BMJ. You may use, download and print the article for any lawful, non-commercial purpose (including text and data mining) provided that all copyright notices and trade marks are retained.