

To: [redacted] 5.1.2e [redacted] 5.1.2e [redacted]@rivm.nl]  
 From: BMJ Open  
 Sent: Sat 11/14/2020 9:42:23 AM  
 Subject: Reminder: BMJ Open  
 Received: Sat 11/14/2020 9:42:30 AM

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 COVID-19: A message from BMJ: <https://authors.bmj.com/policies/covid-19>  
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14-Nov-2020

Dear [redacted] 5.1.2e

Recently, I invited you to review Manuscript ID bmjopen-2020-045941, entitled "Robust test and trace strategies can prevent COVID-19 resurgences: a case study from New South Wales, Australia." I have yet to hear from you about this.

This e-mail is simply a reminder to respond to the invitation to review. I appreciate your help in accomplishing our goal of having an expedited reviewing process.

The Journal is located at [redacted] 5.1.2h

You may e-mail me with your reply or click the appropriate link at the bottom of the page to automatically register your reply with our online manuscript submission and review system. If you are unable to review at this time, I would appreciate you recommending another expert reviewer.

Please do not hesitate to contact me if I can be of any assistance.

Sincerely,

BMJ Open Editorial Office  
 info.bmjopen@bmj.com

\*\*\* PLEASE NOTE: This is a two-step process. After clicking on the link, you will be directed to a webpage to confirm. \*\*\*

Decline - [redacted]

Agreed: [redacted]

5.1.2h

Declined [redacted]

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#### MANUSCRIPT DETAILS

TITLE: Robust test and trace strategies can prevent COVID-19 resurgences: a case study from New South Wales, Australia

AUTHORS: [redacted] 5.1.2e

**ABSTRACT:** Objectives: The early stages of the COVID-19 pandemic illustrated that SARS-CoV-2, the virus that causes the disease, has the potential to spread exponentially. Therefore, as long as a substantial proportion of the population remains susceptible to infection, the potential for new epidemic waves persists even in settings with low numbers of active COVID-19 infections, unless sufficient countermeasures are in place. We aim to quantify vulnerability to resurgences in COVID-19 transmission under variations in the levels of testing, tracing, and mask usage.

**Setting:** The Australian state of New South Wales, a setting with prolonged low transmission, high mobility, non-universal mask usage, and a well-functioning test-and-trace system.

**Participants:** None (simulation study)

**Results:** We find that the relative impact of masks is greatest when testing and tracing rates are lower (and vice versa). With very high testing rates (90% of people with symptoms, plus 90% of people with a known history of contact with a confirmed case), we estimate that the epidemic would remain under control until at least the end of 2020, with as little as 70–110 new infections estimated over October 1 – December 31 under high mask uptake scenarios, or 340–1400 without masks, depending on the efficacy of community contact tracing. However, across comparable levels of mask uptake and contact tracing, the number of infections over this period would be up to 6 times

higher if the testing rate was 80% instead of 90%, 17 times higher if the testing rate was 65%, or more than 100 times higher with a 50% testing rate.

Conclusions: Our work suggests that testing, tracing and masks can all be effective means of controlling transmission. A multifaceted strategy that combines all three, alongside continued hygiene and distancing protocols, is likely to be the most robust means of controlling transmission of SARS-CoV-2.