

SYNOPSIS

02/07/2020

Review of “Effectiveness of airport screening at detecting travellers infected with novel coronavirus (2019-nCoV)”

Article citation: Quilty BJ, Clifford S, CMMID nCoV working group, Flasche S, Eggo RM. Effectiveness of airport screening at detecting travellers infected with novel coronavirus (2019-nCoV). *Eurosurveillance*. 2020;25(5):2000080. Available from: <https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.5.2000080>

One-minute summary

- This study estimates the effectiveness of airport entry and exit thermal passenger screening for 2019-nCoV. Overall, this study found that 46% (95% CI: 36-58) of infected travellers would not be detected by airport screening.
- Of the remaining 54% who would be detected:
 - **44%** (95% CI: 33-56) would be detected by **exit screening** at the point of departure
 - **9%** (95% CI: 2-16) would be detected by **entry screening** at their destination
- 0% (95% CI: 0-3) would develop severe symptoms during travel, based on the assumption that travellers would not travel if their symptoms were progressing to severe.
- Based on estimates for the sensitivity of airport screening and incubation period, syndromic screening is unlikely to prevent passage of infected travellers into new regions.

Additional information

- The goal of syndromic screening at airports is to prevent infected travellers from entering non-outbreak regions. This goal is only achievable if:
 - Risk of transmission from asymptomatic infection is negligible
 - Screening sensitivity is very high
 - Incubation period is short
- Limitations to the model include: 1) potential for increased number of asymptomatic infections (given lower disease severity as compared to SARS), 2) estimates of incubation period may change, 3) estimates of recovery time may change, and 4) sensitivity of airport screening for 2019-nCoV is unknown.
- Authors developed a free interactive online tool [here](#).

PHO reviewer's comments

- Following initial publication prior to peer-review [here](#), the updated article has been published in *Eurosurveillance*.

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Review of “Effectiveness of airport screening at detecting travellers infected with novel coronavirus (2019-nCoV)”. Toronto, ON: Queen's Printer for Ontario; 2020.

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