Letters

SARS-CoV-2 testing in travellers: Can we be smarter?

An editorial in *CMAJ* emphasized that a smarter response to the COVID-19 pandemic is required.[1] Re-evaluating the mandatory reverse transcription–polymerase chain reaction (RT-PCR) testing policy for all travellers entering Canada may be a good place to be smarter.

According to the Public Health Agency of Canada,[2] in the past 4 months, 605 000 vaccinated travellers were tested and 1031 were identified as positive for SARS-CoV-2 infection (16 cases/10 000 tested). With an average cost of $200 per test, a total of $120 million or $120 000 per positive test has been spent. That's quite a cost. Other costs to this strategy include the time wasted arranging for testing and the illusory sense of security associated with a negative RT-PCR test, given the high false-negative rate in the first days after exposure. At what level of detection does this policy of screening all vaccinated travellers no longer make sense? Will we maintain this policy if detection rates fall to 10 in 10 000, 5 in 10 000, or 1 in 10 000?

In clinical medicine, decision-analysis based on cost-effectiveness has been instrumental in tackling these difficult questions. In public health, we now seem guided by a simplistic case-minimization approach without considering associated costs and benefits. While costs of unselected testing are high, the benefits from identifying these largely asymptomatic individuals are unknown, as their infectious and transmissibility rates remain poorly defined. Although random testing of the general population is not recommended, the positivity rate when this was done in the United Kingdom[3] was 6 times higher than the current rate among travellers entering Canada.

Imposing a national policy simply because it identifies extra cases without a formal cost-effectiveness analysis lacks intellectual rigour and justification. The positivity yield in nonvaccinated travellers is about fourfold higher than in the vaccinated cohort.[2] Similarly, in the general population, positivity yields are increased about sixfold in symptomatic individuals.[3] More detailed modelling is necessary to make optimally informed decisions, but targeted testing of unvaccinated or symptomatic travellers may well represent a first-pass, more sensible and cost-effective approach to detection of SARS-CoV-2 infection. Replacing the current indiscriminate and capricious testing of vaccinated travellers, which appears to principally benefit private companies, with a simple $100–$200 health tax would likely purchase substantially more societal health benefits.

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