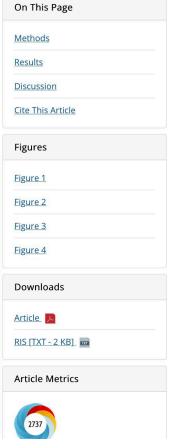
## Airborne Transmission of SARS-CoV-2 Delta Variant within Tightly Monitored Isolation Facility, New Zealand (Aotearoa)

Andrew Fox-Lewisz, Felicity Williamson, Jay Harrower, Xiaoyun Ren, Gerard J.B. Sonder, Andrea McNeill, Joep de Ligt, and Jemma L. Geoghegan Author affiliations: Counties Manukau District Health Board, Auckland, New Zealand (A. Fox-Lewis); Auckland District Health Board, Auckland (F. Williamson, J. Harrower); Institute of Environmental Science and Research, Porirua, New Zealand (X. Ren, G.J.B. Sonder, A. McNeill, J. de Ligt, J.L. Geoghegan); University of Amsterdam, Amsterdam, the Netherlands (G.J.B. Sonder); University of Otago, Dunedin, New Zealand (J.L. Geoghegan)

Cite This Article

## **Abstract**

In New Zealand, international arrivals are quarantined and undergo severe acute respiratory syndrome coronavirus 2 screening; those who test positive are transferred to a managed isolation facility (MIF). Solo traveler A and person E from a 5-person travel group (BCDEF) tested positive. After transfer to the MIF, person A and group BCDEF occupied rooms >2 meters apart across a corridor. Persons B, C, and D subsequently tested positive; viral sequences matched A and were distinct from E. The MIF was the only shared location of persons A and B, C, and D, and they had no direct contact. Security camera footage revealed 4 brief episodes of simultaneous door opening during person A's infectious period. This public health investigation demonstrates transmission from A to B, C, and D while in the MIF, with airborne transmission the most plausible explanation. These findings are of global importance for coronavirus disease public health interventions and infection control practices.





- MIF(管理隔離施設) にいる間に Aから別部屋のB、C、Dへの感染が実証
- コロナウイルス感染症の公衆衛生介入にとって世界的に重要とまで記載
- 米国CDC掲載論文 Fox-Lewis2022[4]

図 5-6-5: 米国CDCのページにも空気感染だとする論文が記載