

SYNOPSIS

02/27/2020

Review of "De-isolating COVID-19 suspect cases: a continuing challenge"

Article citation: Tay J, Lim PL, Marimuthu K, Sadarangani SP, Ling LM, Ang BSP, et al. De-isolating COVID-19 suspect cases: a continuing challenge. Clin Infect Dis. 2020 Feb 26 [Epub ahead of print]. Available from: https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciaa179/5758073

One-Minute Summary

- This research letter describes the challenges of deciding when **suspect cases** of coronavirus disease 2019 (COVID-19) can be removed from isolation (de-isolation).
- For de-isolation to occur, a suspect case's COVID-19 status must be confirmed. This can be
 difficult due to several factors, including the test characteristics (i.e., sensitivity), sample type
 and specimen collection technique and the fact that suspect cases may not test positive until
 several days into clinical illness and after repeated testing.
- There are also operational challenges to consider related to de-isolation, including:
 - The management of **isolation room occupancy** as suspect cases are admitted and held for repeat testing (i.e., isolation rooms in finite supply).
 - The risk of **nosocomial infection** in hospital, if de-isolation were to occur before the case's COVID-19 status was known.
- The authors provide a decision-making matrix for de-isolation developed by Singapore's
 National Centre for Infectious Diseases. This algorithm incorporates epidemiological and clinical
 features (i.e., clinical symptoms, whether an alternate etiology was found and whether the
 suspect case had close contact with a confirmed COVID-19 case) and acknowledges that test
 results may be negative early in the course of illness.

Additional Information

- The authors note that the detection of alternate respiratory pathogens should not rule out COVID-19 co-infection on its own. The authors point out that co-infections occur in 10%-20% of acute viral respiratory infections such as SARS or MERS.
- The authors note that due to delayed COVID-19 positivity in relation to illness onset, staff
 continue to use personal protective equipment when providing care to patients testing
 negative, but who are still within the first seven days of respiratory symptoms.

PHO Reviewer's Comments

The authors do not specify whether the challenges described in the article, as well as the
decision-making matrix for de-isolation, pertain to healthcare facilities only; however, many of
the points they raise are specific to isolation of patients in healthcare facilities.

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Review of "De-isolating COVID-19 suspect cases: a continuing challenge". Toronto, ON: Queen's Printer for Ontario; 2020.

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