



# Potential risks associated with intensive care unit aerosol isolation hood use

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Received: 31 May 2020/Revised: 2 June 2020/Accepted: 3 June 2020/Published online: 3 August 2020  
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## To the Editor,

We read with interest the recent article by Shaw *et al.* using an isolation hood to limit the risk of aerosol spread during non-invasive ventilation (NIV) in the intensive care unit.<sup>1</sup> Although they showed a reduction in aerosols within the hood during their simulation, after the clinical use of such an isolation hood, the process of removing and disposing of its plastic sheet may increase the risk of viral contamination despite the relative negative pressure environment created within it. As the authors indicated, the use of NIV and oxygenation with high-flow nasal cannula (HFNC) are advised during early periods of respiratory failure in the management of critically ill coronavirus disease patients.<sup>2</sup> However, some patients who do not respond to these non-invasive treatment methods may eventually require intubation at a time when they are even more hypoxic and hemodynamically unstable. Any barrier protective measure may interfere with the crisis management of these unstable patients, which could be compounded if the physicians are faced with a difficult intubation or aspiration of stomach contents. Furthermore, an early awake prone position<sup>3</sup> combined with HFNC or NIV would be an added challenge if the patient needs intubation while using this isolation hood. Therefore, until testing of the safety and efficacy of this isolation hood device can be carried out through well-designed

simulation-based or clinical studies, a more balanced approach may be needed between reducing environmental contamination (for the protection of healthcare workers) and managing critically ill patients safely.

**Disclosures** None.

**Funding statement** None.

**Editorial responsibility** This submission was handled by Dr. Hilary P. Grocott, Editor-in-Chief, *Canadian Journal of Anesthesia*.

## References

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**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

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