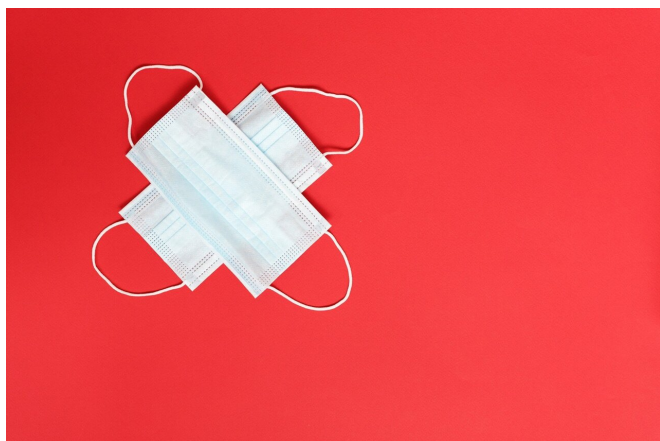


Aerosol generating procedures: Are they of relevance for transmission of SARS-CoV-2?

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Credit: Pixabay/CC0 Public Domain

Emerging evidence indicates that many currently defined aerosol generating procedures (AGPs) are unlikely to play any significant role in the generation of infectious aerosol that poses a risk to hospital staff. In a comment article published in *The Lancet Respiratory Medicine*, a research team from the University of Bristol discusses AGPs and the transmission of SARS-CoV-2 in a healthcare setting.

Current UK infection control guidance for hospitals is centered on the basis that aerosols are only generated by specific medical interventions described as aerosol generating procedures (AGPs).

The comment article suggests it is becoming increasingly clear that [transmission](#) of SARS-CoV-2 via aerosol is possible and might represent a significant transmission route. However, emerging evidence indicates that many currently defined AGPs are unlikely to play any significant role in the generation of infectious aerosol that poses a risk to staff.

More research is ongoing to measure other AGPs across a range of clinical settings. However, based on the research to date, a coughing patient with acute COVID-19 is likely to generate more infectious aerosol than many AGPs. This appears to be supported by the epidemiological evidence, which points to an increased risk of infection for ward [medical staff](#) (who care for patients who have difficulty in breathing and coughing patients with COVID-19) compared with intensive care staff—although there is some limitation to the interpretation of that data such as patient mix, among other factors.

In light of this evidence, the researchers propose an end to the term [aerosol](#) generating procedure and instead focus should be on the risk in plain sight: close, physical exposure to people suspected, or known to have, COVID-19 for prolonged time or where ventilation remains poor.

Nick Maskell, Professor of Respiratory Medicine at the Academic Respiratory Unit and Bristol Medical School: Translational Health Sciences (THS), said: "We propose that clinicians follow an evidence-based framework that accounts for the major sources of risk, with a focus on physical exposure to patients with suspected or confirmed COVID-19 as the critical component.

"Additional factors known to be relevant in viral transmission, such as ventilation, proximity, and the length time of exposure to patients, should be included in assessing risk, while recognizing the changing epidemiology of infection with setting."

"Aerosol generating procedures: are they of relevance for transmission of SARS-CoV-2?," by Fergus Hamilton, David Arnold, Bryan R Bzdek, James Dodd, AERATOR group, Jonathan Reid and Nick Maskell, is published in *The Lancet Respiratory Medicine*.

More information: Fergus Hamilton et al. Aerosol

generating procedures: are they of relevance for transmission of SARS-CoV-2?, *The Lancet Respiratory Medicine* (2021). DOI: [10.1016/S2213-2600\(21\)00216-2](https://doi.org/10.1016/S2213-2600(21)00216-2)

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