Can SARS-CoV-2 be detected in a few exhalations?
9 February 2022

Transmission electron micrograph of SARS-CoV-2 virus particles, isolated from a patient. Image captured and color-enhanced at the NIAID Integrated Research Facility (IRF) in Fort Detrick, Maryland. Credit: NIAID

In a study published by Wiley in *Influenza and Other Respiratory Viruses*, investigators could detect SARS-CoV-2 in the exhaled breaths and coughs of individuals with COVID-19.

For the study, researchers analyzed exhalations by two different methods during 20 normal breaths, 10 airway opening breaths (which involves deep inhalation followed by relaxed exhalation), and 3 coughs.

Detection of SARS-CoV-2 RNA by PCR in aerosols was possible in 10 out of 25 participants. The presence of virus RNA in aerosol was mainly found in cough samples (8 samples), but also in normal breaths (4 samples) and in airway opening breaths (3 samples).

“Our data confirm findings from other researchers, that SARS-CoV-2 can be detected in aerosol particles