

Parent-collected nose swabs are as good as nurse-collected nose swabs at detecting respiratory infections in children

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Nose swab samples collected by parents are as good as those collected by nurses at detecting respiratory infections in children, according to a

study by researchers at the University of Bristol published in the journal *Microbiology Spectrum* today [10 November].

Respiratory tract infections in children, such as coughs, colds and flu, and more recently, COVID-19, are some of the most common illnesses treated in [primary care](#).

The study, which was conducted before the COVID-19 pandemic, compared the quality and performance of parent-collected nose and saliva swab samples with nurse-collected samples. Over 300 [parents](#) and 485 children aged around five years in the United Kingdom's Bristol area took part.

Both parent-collected and nurse-collected samples were sent to a clinical testing laboratory for the detection of over 40 common respiratory pathogens. While parent-collected nose swabs performed well compared to those collected by nurses (91.6 percent inter-rater agreement for viral infections and 91.4 percent inter-rater agreement for bacterial infections), parent-collected saliva swabs did not perform as well (69 percent and 78.1 percent for viral and bacterial infections respectively).

Dr. Claire Woodall, Research Associate in Primary Care Infectious Diseases Epidemiology at the Centre for Academic Primary Care and lead author of the study, said, "If a parent is worried about collecting a nose swab from their child for laboratory analysis of coronavirus or any other common respiratory pathogen—my response would be that they should have the confidence to do so. In fact, our study showed that parents collected a higher number of human cells on the nose swabs compared to the nurses, which suggests that children are more tolerant of a parent performing the swabbing technique."

Alastair Hay, a GP and Professor of Primary Care Research at the Centre for Academic Primary Care at the University of Bristol who

supervised the study, said, "Our study shows that it is possible for parents to collect good quality [nose](#) swab samples from children. Given the widespread use of nasal swabbing throughout the COVID-19 pandemic, this study has highlighted the suitability, benefits and convenience of parent-collected swabs for subsequent identification of respiratory microbes."

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More information: Claire A. Woodall et al, Prospective Study of the Performance of Parent-Collected Nasal and Saliva Swab Samples, Compared with Nurse-Collected Swab Samples, for the Molecular Detection of Respiratory Microorganisms, *Microbiology Spectrum* (2021). [DOI: 10.1128/spectrum.00164-21](https://doi.org/10.1128/spectrum.00164-21)

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