



The BMJ

Cite this as: *BMJ* 2021;372:n408<http://dx.doi.org/10.1136/bmj.n408>

Published: 10 February 2021

## Covid-19: Children less likely to report fever, persistent cough, or appetite loss, large UK study finds

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Young people aged five to 17 with covid-19 are less likely to report fever, persistent cough, or appetite loss than adults, according to a UK study of more than a million people.

The latest findings from the ongoing React-1 study, which involves swab testing more than 150 000 randomly selected people in England each month, found that symptoms varied with age. Researchers examined swab tests and questionnaires from between June 2020 and January 2021 and found that children aged five to 17 were more likely to suffer from headaches, while muscle aches and appetite loss were most common in people aged 18-54. Chills were linked with testing positive across all ages.

The study—published as a preprint<sup>1</sup> paper—also found that around 60% of infected people did not report any symptoms in the week leading up to their positive test.

This comes after the UK Biobank SARS-CoV-2 Serology study found that around one in four people with evidence of past covid-19 infection were completely asymptomatic, while 40% did not have one of the three classic symptoms used to determine whether someone needs testing—fever, persistent dry cough, or loss of sense of taste or smell.<sup>2</sup>

Paul Elliott, director of the React programme at Imperial College London, said, “These new findings suggest many people with covid-19 won’t be getting tested—and therefore won’t be self-isolating—because their symptoms don’t match those used in current public health guidance to help identify infected people.

“I hope that our findings on the most informative symptoms mean that the testing programme can take advantage of the most up to date evidence, helping to identify more infected people.”

The researchers also looked at the symptoms associated with the new more transmissible variant (B.1.1.7) found in the UK. They reported that it became the dominant strain by January 2021 and was responsible for more than 80% of infections at that time compared with 16% in mid-November 2020. During this period, they found that those with the B.1.1.7 variant were less likely to report loss or change of taste or smell, but more likely to report cough.

The preprint authors concluded that more covid-19 cases in the community could be detected if additional symptoms such as chills, headache, appetite loss, and muscle aches were added to the UK testing criteria.

1 Elliott J, Whitaker M, Bodinier B, et al. Symptom reporting in over 1 million people: community detection of covid-19. <https://imperialcollegelondon.app.box.com/s/t2ycf6kr0myu5l50cb77ccbl165z8wai>

2 Mahase E. Covid-19: Four in 10 people with evidence of past infection had no classic symptoms, study finds. *BMJ* 2021;372:n321. doi: 10.1136/bmj.n321 pmid: 33536185

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