

Fewer than 1 in 5 university students had COVID-19 by end of autumn term

The COVID-19 [university seroprevalence study](#) was carried out among the student population in England. It was conducted between 2 to 11 December 2020 at 5 universities across the country, which had reported COVID-19 outbreaks during the autumn term. The study found that, overall, 17.8% of 17 to 25 year old students had antibodies from prior COVID-19 infection.

Despite a rise in laboratory confirmed COVID-19 cases amongst university-aged groups in England between September to November – and a large number of reported COVID-19 outbreaks in university halls of residence – PHE's study suggests there was not widespread transmission of the virus across the wider student population. The study also shows that a substantial proportion of students were still susceptible to COVID-19 infection in December 2020.

The proportion of university students with antibodies to COVID-19 was highest amongst younger students, most likely to represent first-year undergraduates and particularly those living in university halls of residence.

Students aged 17 to 19 years had 4.1 times greater odds of being seropositive than 23 to 25 year olds. In halls of residence, which had reported high case rates of COVID-19 infection during the autumn term, an estimated 49% of students were found to have antibodies, highlighting the extent of spread within these specific settings when cases rates were high. Overall, those living in halls of residence had 2.9 times greater odds of testing seropositive than those living in other accommodation types.

Lead investigator Gayatri Amirthalingam, a Consultant Medical Epidemiologist at PHE, said:

This study gives the first evidence of the extent of spread of COVID-19 infection amongst university students in England during the autumn term. Fewer than 1 in 5 students had evidence of previous COVID-19 infection by December 2020, indicating that the majority of students were still susceptible by the end of the autumn term. However, almost half of students living in halls of residence with high numbers of reported cases were found to have COVID-19 antibodies.

The study shows that it remains as important as ever that students continue to follow the rules of hands, face, space and latest university guidance.

We are grateful to the universities and students that participated in this study and to the university staff who supported this important work.

The extent of COVID-19 antibody positivity in students living in university halls of residence that experienced high rates of COVID-19 highlights the need for early identification and isolation of suspected cases, and the rapid implementation of infection control measures to interrupt the spread of the virus.

Professor Viv Bennett, Chief Nurse and COVID-19 lead for Children and Young People at PHE, said:

This study shows most students are likely to still be susceptible to COVID-19 infection and even without developing symptoms could pass the virus on to others.

This highlights the importance of regular rapid testing so students can self-isolate quickly and prevent the spread of the virus. Students can help protect each other and their wider contacts by getting tested regularly.