THE ABC SCIENCE COLLABORATIVE

What Science Says About Using a Focused 'Test-to-Stay' Approach to Keep Students and Staff in School

WHAT DID THE ABC SCIENCE COLLABORATIVE STUDY?

Researchers studied whether a focused "test-to-stay" approach can serve as a safe alternative to quarantine for students and staff who were close contacts with an individual(s) with COVID-19. The study looked at the number of in-school transmissions and the number of in-person learning days that were saved by the "test-to-stay" approach. The test-to-stay approach allowed asymptomatic close contacts to remain in school as opposed to quarantining at home, as long as repeated SARS-CoV-2 (the virus that causes COVID-19) testing remained negative.

WHY DID THE ABC COLLABORATIVE STUDY "TEST-TO-STAY"?

Since the start of the 2021-2022 school year, quarantine of close contacts has challenged in-person learning and school staffing and operations.

The Centers for Disease Control and Prevention has endorsed a "test-to-stay" approach that requires testing of anyone within three feet of a COVID-19 infected person at school, even if both parties are masked. As schools anticipate facing the highly transmissible omicron variant, this widespread approach may overwhelm resource-limited schools and result in many logistical hurdles.

The ABC Science Collaborative partnered with the N.C. Department of Health and Human Services to study the safety and effectiveness of a focused "test-to-stay" approach that **only requires testing if at least one of the exposed or positive individuals is unmasked.**

WHO PARTICIPATED IN THE ABC SCIENCE "TEST-TO-STAY" STUDY?

Schools and school districts were eligible to participate if they had a universal masking policy and approval from the board of education and local health department. Five North Carolina school districts and one charter school participated in the initial pilot study.

Individuals at participating schools were eligible if they were identified as a close contact by the local health department and were required to quarantine following an in-school SARS-CoV-2 exposure. These individuals could participate in the "test-to-stay" research study if they were asymptomatic and consented to participate in the research study. Close contacts were given the option to quarantine according to local policies.

5 school districts

1 charter school

WHEN DID THE STUDY TAKE PLACE?

The study is ongoing. Preliminary analysis includes data collected from individuals who enrolled in the study between Oct. 18 and Nov. 29, 2021, following a close contact exposure that occurred between Oct. 18 and Nov. 24, 2021.

WHAT HAPPENED DURING THE "TEST-TO-STAY" STUDY?

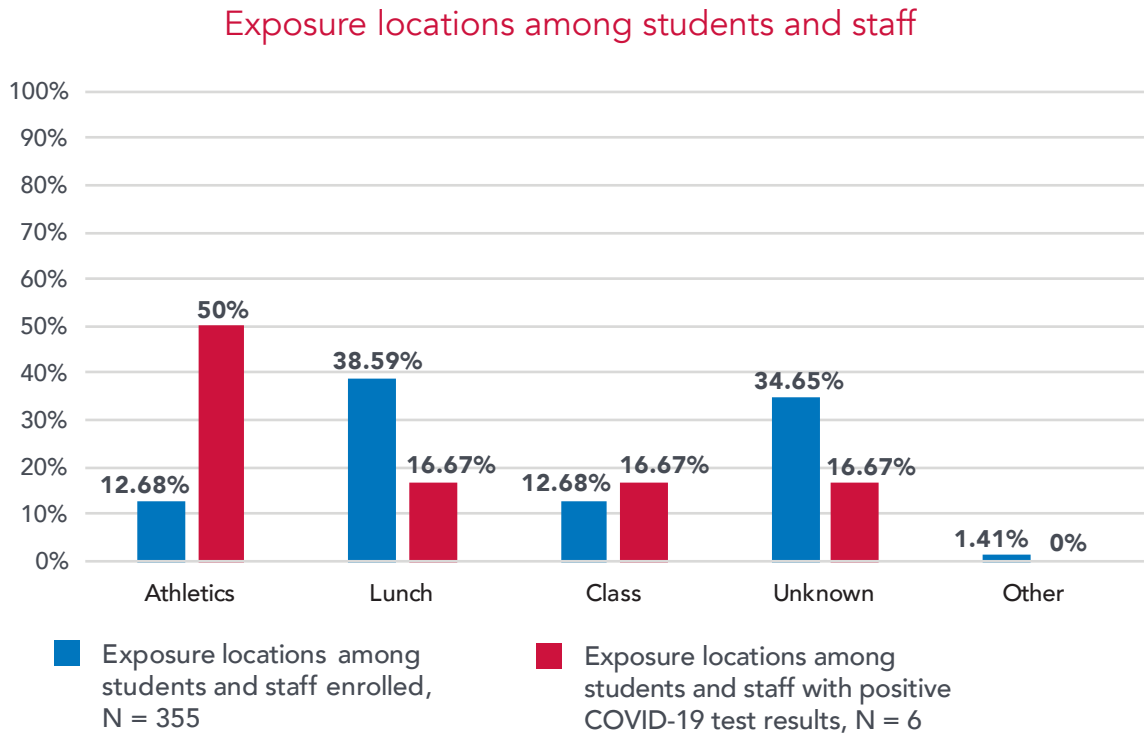
Participants in the study were given a SARS-CoV-2 rapid test at school when they were identified as a close contact and every other day up to four times during the first seven days after the known exposure. Participants remained in school if they tested negative and were asymptomatic. A positive test or the development of symptoms on any day after exposure required isolation according to local and state public health guidelines.

WHAT DID RESEARCHERS LEARN ABOUT THE SAFETY OF TEST-TO-STAY?

In schools with universal masking, use of "test-to-stay" did not result in increased transmission of SARS-CoV-2 within schools. Data from past studies have found about a 1% within-school transmission rate of SARS-CoV-2 in schools with universal masking during the alpha variant and 2-3% during the delta variant. The "test-to-stay" study found a within-school transmission rate of approximately 2%. No cases of within-school transmission from a study participant to another student or staff member occurred. Nearly all exposures involved an unmasked positive case (92%) and an unmasked close contact (92%), with about 96% occurring indoors.

Study duration	**6 weeks**
Participants who completed the 14-day follow-up period	**367**
Test performed	**883**
Number of positive tests	**6**
Number of within-school transmission from a study participant to other individual	**0**
Within-school transmission rate	**1.7%**

Most exposures occurred during lunch (39%), while only 13% of exposures occurred during athletics; however, athletic exposures accounted for 50% of all individuals with positive tests.



WHAT DID RESEARCHERS LEARN ABOUT "TEST-TO-STAY" AS AN APPROACH TO REDUCE STUDENT ABSENCES FROM SCHOOL DUE TO IN-SCHOOL EXPOSURE TO COVID-19?

"Test-to-stay" substantially reduced student absences from school after in-school exposure to COVID-19. **1,628 in-person school days were saved** with only 136 days of quarantine required compared to the expected number of 1,764 days.

WHAT DOES THIS MEAN FOR SCHOOL COMMUNITIES?

In K-12 school communities with universal masking, a focused "test-to-stay" approach effectively reduces absences from school after brief, unmasked, in-school exposures to COVID-19 and does not result in increased within-school transmission of SARS-CoV-2.

Along with other proven safety measures, such as vaccination and rapid identification and contact tracing, a focused "test-to-stay" approach can be part of a comprehensive plan to increase in-person learning.

WHO FUNDED THIS RESEARCH?

This research was funded in part by the Rapid Acceleration of Diagnostics (RADx) Underserved Populations (RADx-UP); National Institutes of Health; the Trial Innovation Network, which is an innovative collaboration addressing critical roadblocks in clinical research and accelerating the translation of novel interventions into life-saving therapies; and the National Institute of Child Health and Human Development (NICHD).

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