



RESEARCH SUMMARY

KEEPING CHILDREN SAFE IN SCHOOL

Lessons learned from
the COVID-19 Pandemic

This publication supplement is a collaborative effort between Pediatrics, The ABC Science Collaborative and the RADx-UP Coordination and Data Collection Center. It is a collective effort of 109 authors, including eight community members, across 16 RADx-UP Return to School institutions, and shares what we have learned about reach, access, and effectiveness of COVID-19 testing in school settings.

The body of work focuses on COVID-19 testing programs in underserved K-12 schools and preschools. It includes an introduction and 13 additional papers on topics such as COVID-19 testing of underserved populations, COVID-19 testing for young children, delivering health messages to parents and guardians of K-12 students, at-home and school-based screening testing, school attendance and test recommendations for children with medical complexity, testing enrollment in schools, testing preferences of students and school staff, and more.

The information below details the titles and publications included in the 2023 supplement and lessons learned.



1 Evidence for the Safe Return to School with COVID-19 Testing

Community involvement and collaboration with school partners were key to improving and sustaining the health of school-aged children during the COVID-19 pandemic, according to findings by RADx@-UP school projects.

2 Building School-Academic Partnerships to Implement COVID-19 Testing in Underserved Populations

Collaborations between academic centers and schools helped increase COVID-19 testing in vulnerable children and children with medical complexities using approaches that met the unique needs of these populations.

3 Acceptability and Feasibility of Saliva-Delivered Polymerase Chain Reaction Coronavirus 2019 Tests for Young Children

Saliva sampling for COVID-19 at preschools is a well-received strategy for safely returning and keeping 4- and 5-year-olds in school. Alternate testing strategies may be needed to keep younger children in school.

4 Preliminary Reach of an Information Technology Approach to Support COVID-19 Testing in K-12 Schools

Text messaging and health navigation by telephone are feasible ways to reach a diverse population of parents and guardians of K-12 students to provide health screening messages and offer access to at-home COVID-19 testing.

5 At-Home vs. Onsite COVID-19 School-Based Testing: A Randomized Non-Inferiority Trial

Researchers studied at-home and on-site COVID-19 testing participation and adherence among students and staff at three middle schools that primarily serve Latinx students; the study found that school-based at-home testing is an acceptable strategy for consistent participation in screening testing and may reduce in-school and community COVID-19 transmission.

6 School Attendance Decisions for Children with Medical Complexity During COVID-19

1 in 5 children with medical complexity did not attend school at the end of the 2020-2021 academic year. Family perceptions of school safety policies and messages that encourage attendance may help to address this disparity.

7 Recommendations for SARS-CoV-2 Testing in Children With Disabilities and Medical Complexity

In three studies of COVID-19 testing of children with disabilities and medical complexity, researchers found that special consideration of this vulnerable population is essential to keep them safe and minimize disruption of school services; integration of health care activities in schools, access to in-home and in-school testing, flexible sample collection, and building school and academic partnerships are helpful for preparing schools for future surges or pandemics.

8 A Multi-Study Synthesis of Facilitators and Barriers to SARS-CoV-2 Testing Enrollment in School Settings

School-based infectious disease testing programs can improve enrollment and participation by optimizing the convenience of testing in school settings, supporting students and staff who test positive for infection, appealing to participants' desire to contribute to safer school environments, and making testing enrollment clear and accessible.

9 A COVID-19 Testing Preference Study in Schools

Self-collected COVID-19 testing at school is feasible for K-12 students and staff, though different age groups may prefer different testing methods; acceptance of both anterior nasal and saliva specimen collection was high.

10 Reflections from School Communities in Underserved Populations on Childhood COVID-19 Vaccination

Schools provide a unique context for understanding family and culture-based concerns about vaccines, particularly in underserved communities; developing careful, culturally sensitive strategies that address parent and child concerns is critical to reducing health inequities related to COVID-19 vaccination.

11 Collection of National Institutes of Health Common Data Elements in Pre-Kindergarten through 12th Grade Populations Who Are Underserved: Challenges and Recommendations

Early collaboration with underrepresented populations during the study design process may improve interest and participation in Common Data Element collection efforts and may help address ongoing mistrust issues related to health research data collection in marginalized communities.

12 Utilization and Impact of Symptomatic and Exposure SARS-CoV-2 Testing in K-12 Schools

School-based COVID-19 testing can decrease missed days of school and increase in-person learning time, particularly for groups who have limited access to testing; access to testing could help schools boost infection prevention strategies when outbreaks occur and assist with timely access to treatment strategies.

13 Lessons Learned from the COVID-19 Pandemic in K-12 Education

In a future pandemic, public health experts and school districts can apply the lessons learned from COVID-19 and prioritize in-person education without increasing viral spread.

14 In-Person Instruction and Educational Outcomes of K-8 Students during the COVID-19 Pandemic

During the 2020-2021 school year, increased time spent in-person by a school district was associated with an increased proportion of students achieving grade-level end-of-grade proficiency in both mathematics and reading among K-8 grade students in North Carolina.



About The ABC Science Collaborative

The ABC Science Collaborative is a program that pairs scientists and physicians with school and community leaders, as well as community organizations, to help understand the most current information about COVID-19 and the implications of the pandemic on the well-being of children, their families, and the communities they are a part of. The program helps school leaders make informed decisions using data from their own communities. The ultimate goal of the program is to keep teachers, children, and their local communities healthy, both now and in the future. Learn more at abcsciencecollaborative.org.

About RADx[®]

RADx[®] Underserved Populations (RADx-UP) represents a significant investment by the National Institutes of Health to address the COVID-19 pandemic and health equity in underserved populations. The RADx-UP consortium is a network of more than 137 community-engaged research project teams and mini-grant recipients across all 50 states, and U.S. territories and Tribal Nations. Each project is based at an academic institution and relies on the active partnership of community organizations and leaders. Learn more at RADx-UP.org.

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