

RADx Underserved Populations (RADx-UP) Return to School Diagnostic Testing Approaches Initiative

September 9, 2021





Return to School

Executive Order on Supporting the Reopening and Continuing Operation of Schools and Early Childhood Education Providers

JANUARY 21, 2021 • PRESIDENTIAL ACTIONS



Classroom on Jan. 19, 2021, in Brooklyn Park, Minnesota. *Christine T. Nguyen/AP*



COVID-19 Weekly Cases per 100,000 Population by Age Group, United States



Jurisdiction

US

3/7/2020

8/28/2021



March 01, 2020 - August 28, 2021*

Cases

Deaths

Sex

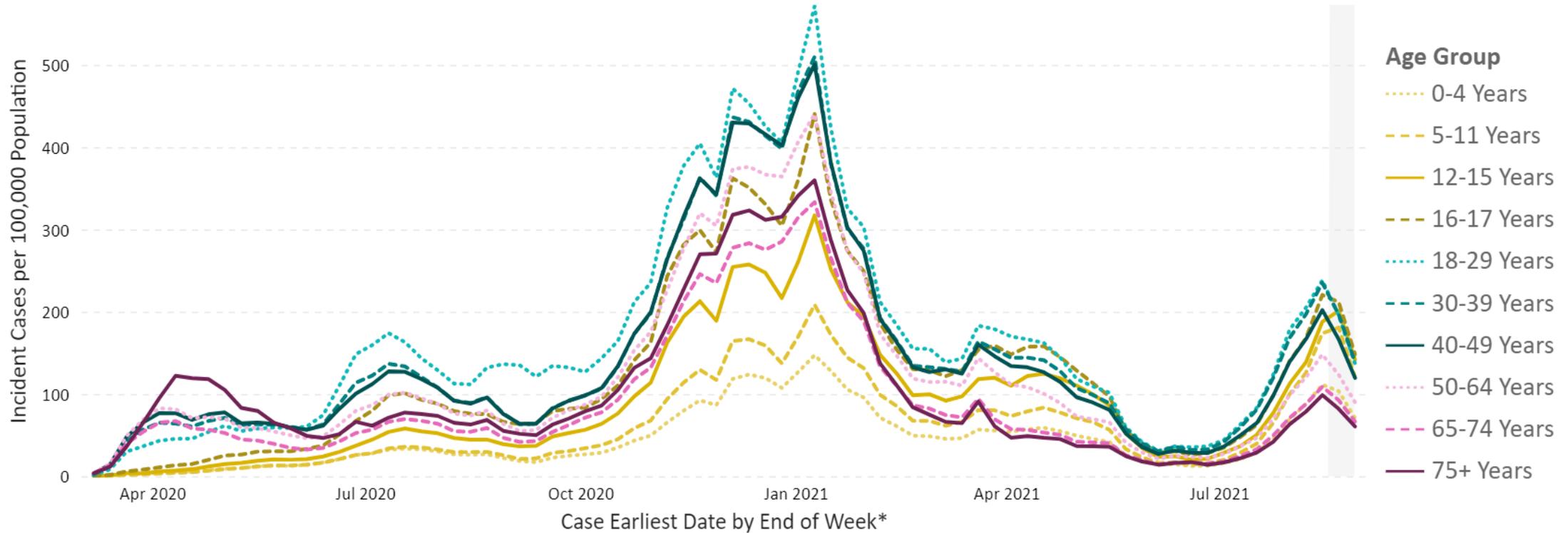
Age

Race/Ethnicity

Sex

Age

Race/Ethnicity



US: The most recent line level case record was reported during the week ending on Aug 28, 2021. Percentage of cases reporting age by date - 98.74%

US territories are included in case and death counts but not in population counts. Potential two-week delay in case reporting to CDC denoted by gray bars.

*Case Earliest Date is the earliest of the clinical date (related to illness or specimen collection and chosen by a defined hierarchy) and the Date Received by CDC.

Last Updated: Aug 29, 2021

Source: CDC COVID-19 Case Line-Level Data, 2019 US Census, HHS Protect; Visualization: Data, Analytics & Visualization Task Force and CDC CPR DEO Situational Awareness Public Health Science Team

RADx-Underserved Populations (RADx-UP)

Overarching Goals

- Enhance COVID-19 testing among **underserved and vulnerable populations** across the US
- Develop/create a **consortium of community-engaged research projects** designed to rapidly implement testing interventions
- **Strengthen the available data** on disparities in infection rates, disease progression and outcomes, and **identify strategies to reduce these disparities** in COVID-19 diagnostics

September – November 2020

2021

Phase I

Phase II



Build infrastructure



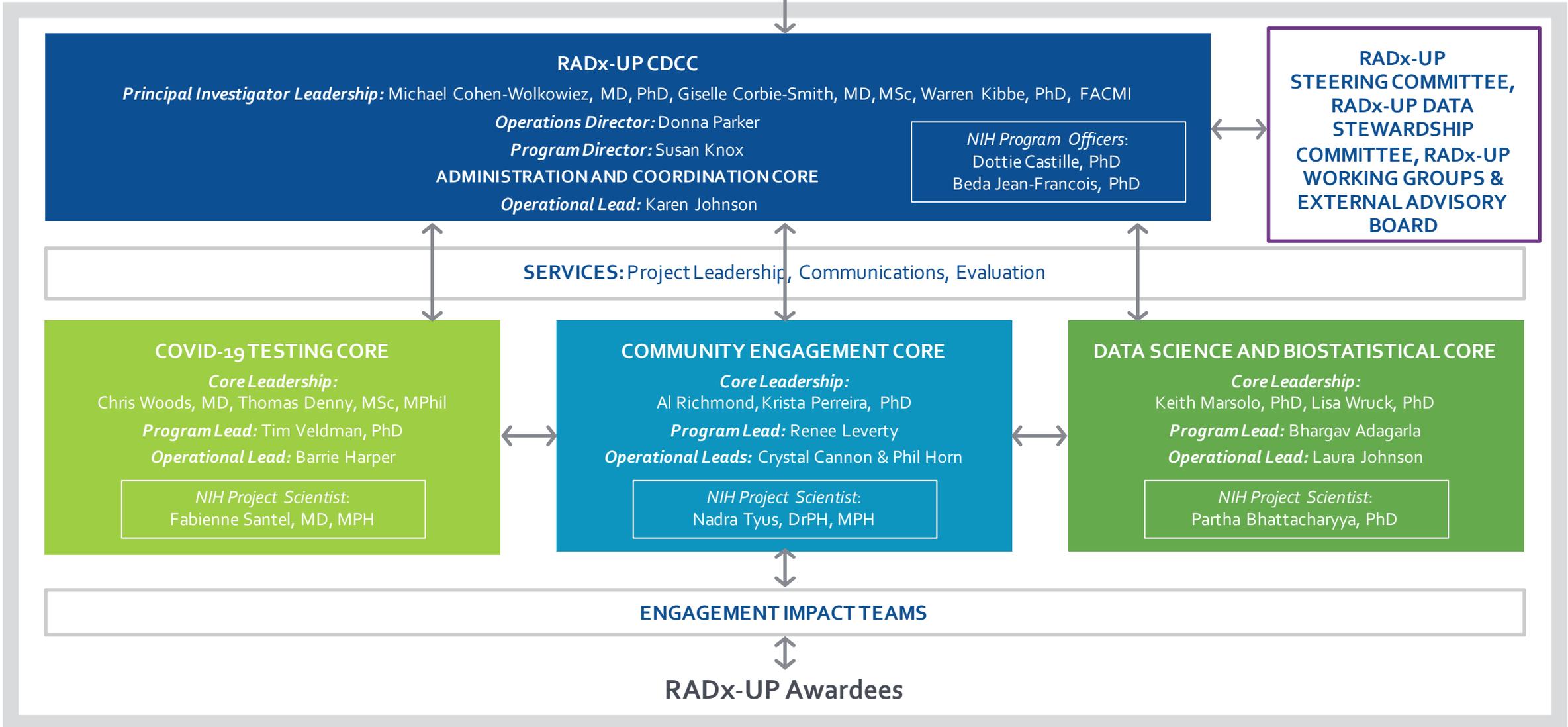
Rapidly implement testing, other capabilities



Integrate new advances



Expand studies/populations



Children and In-person school instruction

- Schools and school-supported programs are fundamental to child and adolescent development and well-being
- Academic instruction
- Social and emotional skills
- Safety
- Reliable nutrition and meals
- Physical/Occupational/Speech therapy
- Mental health services
- Health services
- Opportunities for physical activity

Critical to use science and data to guide decisions!



RADx-UP Return to School Diagnostic Testing Approaches

Goal

Develop and test COVID-19 diagnostic testing approaches to safely return children and staff to the in-person school setting in underserved and vulnerable communities.

Mechanism

Other Transaction Authority to provide flexibility for changing circumstances and funding of non-traditional partners

Approach

- Focus on children and adolescents below the age eligible for vaccination via Emergency Use Authorization (age 12+) and all school personnel
- Advance methods to integrate testing in return to or maintenance of in-person instruction
- Identify effective, scalable, and sustainable testing implementation strategies

Budget

\$50 million commitment from the OD congressional appropriation

Return to School Phase I

OTA-21-004

Program Information: ~\$33M awarded in Phase I; 8 sites

- Focus on children and adolescents below the age eligible for vaccination via Emergency Use Authorization (age 16) and all school personnel
- Advance methods to integrate testing in return to or maintenance of in-person instruction
- Identify effective, scalable, and sustainable testing implementation strategies, including in-school testing, in community pediatric primary care clinics, childcare centers, preschool, and school settings serving primarily underserved or disadvantaged children and their families.

Overview

- **Awarded 8 projects** in April FY21
- **Strategies for school-based settings** to combine frequent testing with proven safety measures to reduce the spread of COVID-19



Applications Awarded during Phase I

PI	Institution(s)	Project Title	Geographic Location
Coller	University of Wisconsin-Madison	Restarting Safe Education and Testing for Children with Medical Complexity	Madison, Wisconsin
Newland	Washington University in St. Louis	Assessing Testing Strategies for Safe Return to K-12 School in an Underserved Population	St. Louis, Missouri
Keener Mast	ICF, Inc.; Children's Mercy Hospital	Support for Safe Return to in-Person School: COVID-19 Testing, Learning and Consultation	Kansas City, Missouri
Zimmerman	Duke University	SARS-CoV-2 Screening and Diagnostic Testing for Return to K-12 Schools	Several counties, North Carolina
Gurnett	Washington University in St. Louis	Washington University Intellectual and Development Disability Research Center and Kennedy Krieger Institute Safe Return to School	Baltimore, Maryland
Ko	University of Washington	Using COVID-19 Testing and Risk Communication Strategies to Accelerate Students Return to School	Yakima Valley, Washington
Barlow	Johns Hopkins University	Re-Opening Schools SAFELY for Native American Youth	Arizona
Foxe	University of Rochester	COV-IDD: Testing to COVID-19 in children with Intellectual and Developmental Disabilities	Rochester, New York

Return to School Phase II

OTA-21-007

Program Information: ~\$23M awarded in Phase II; 8 sites

- Focus on children and adolescents below the age eligible for vaccination via Emergency Use Authorization (age 12) and all school personnel
- Advance methods to integrate testing in return to or maintenance of in-person instruction
- Identify effective, scalable, and sustainable testing implementation strategies, including in-school testing, in community pediatric primary care clinics, childcare centers, preschool, and school settings serving primarily underserved or disadvantaged children and their families.

Overview

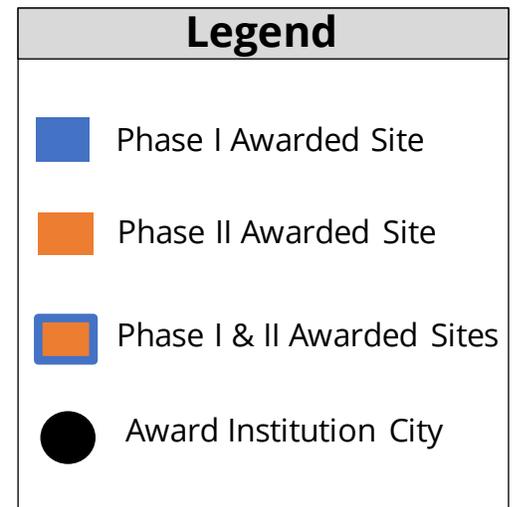
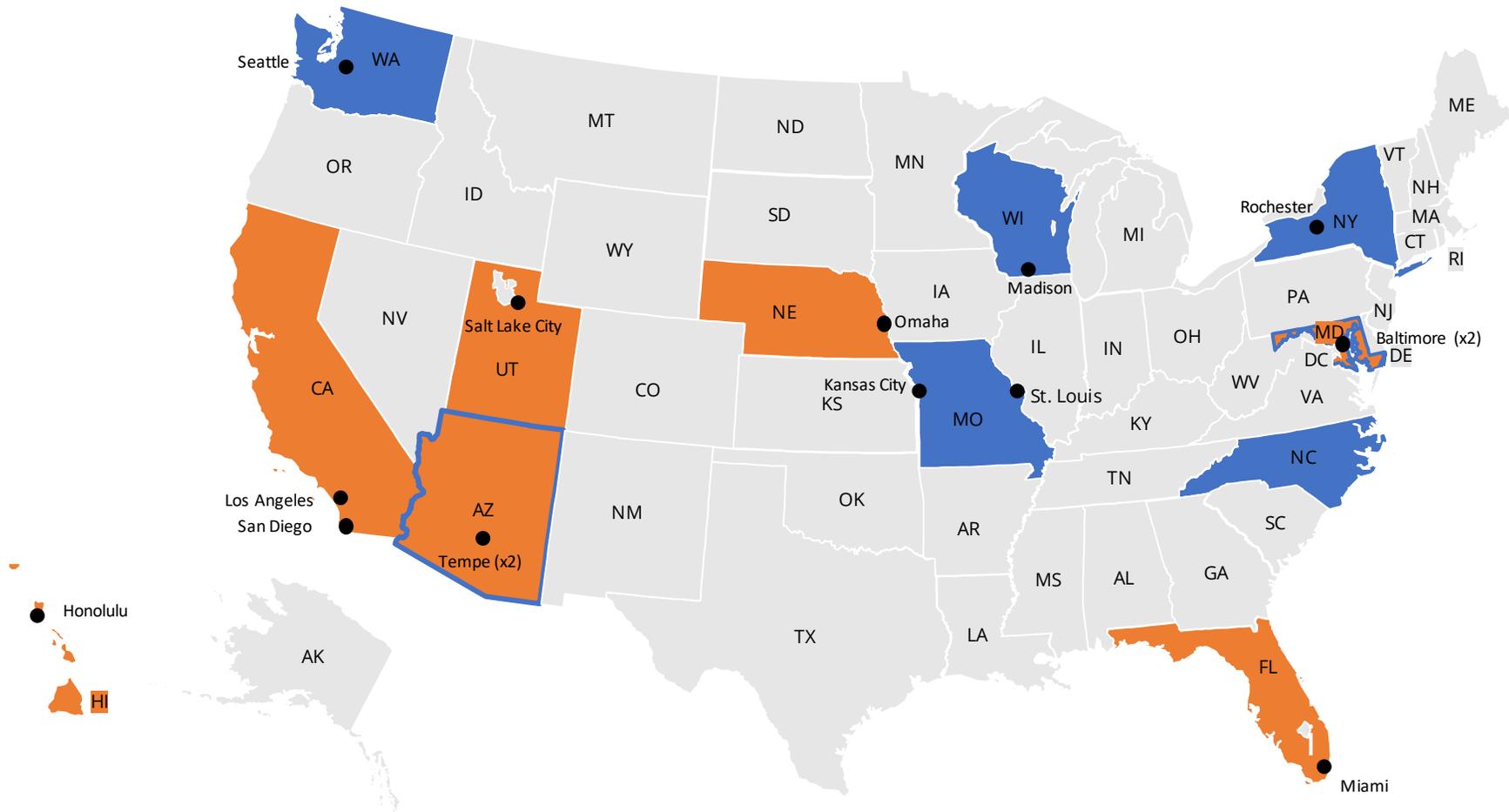
- **Awarded 8 projects** in June and July 2021
- **Strategies for school-based settings** to combine frequent testing with proven safety measures to reduce the spread of COVID-19



Applications Awarded during Phase II

PI	INSTITUTION	Project Title	GEOGRAPHIC LOCATION
Inkelas	University of California, Los Angeles	Impact of COVID-19 testing and mitigation on equitable return-to-school in the second largest US school district	Los Angeles, California
Lee	Arizona State University-Tempe Campus	Back to ECE Safely with SAGE: Reducing COVID-19 Transmission in Hispanic and Low-income Preschoolers	Phoenix, Arizona
Okihiro	University of Hawaii at Manoa	Empowering schools as community assets to mitigate the adverse impacts of COVID-19	Hawaiian Islands
Gwynn	University of Miami School of Medicine	Maximizing Child Health and Learning Potential: How to Promote A School Culture of Safety in the era of COVID-19	Miami, Florida
McCulloh	University of Nebraska Medical Center	Mobile Health-Targeted SARS-CoV-2 Testing and Community Interventions to Maximize Migrant Children's School Attendance During the COVID-19 Pandemic	Buffalo, Hall and Adams Counties, Nebraska
Kiene	San Diego State University	Communities Fighting COVID!: Returning Our Kids Back to School Safely	South San Diego County, California
Wu	University of Utah	SCALE-UP Counts: A health information technology approach to increasing COVID-19 testing in elementary and middle schools serving disadvantaged communities	Granite School District, Utah
Johnson	Johns Hopkins University, University of Maryland, Morgan State University	Social, ethical, and behavioral factors in the return to school among underserved communities in Maryland	Baltimore, Maryland

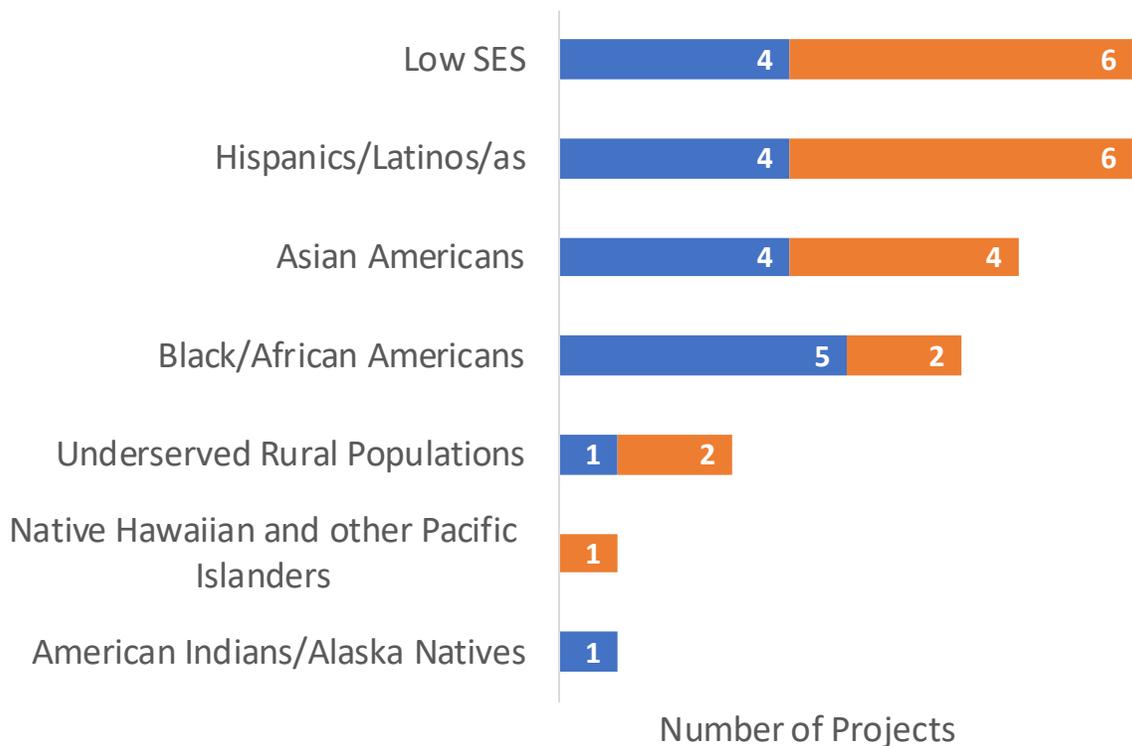
Geographic Distribution of Awarded Projects



Health Disparity and Vulnerable Populations

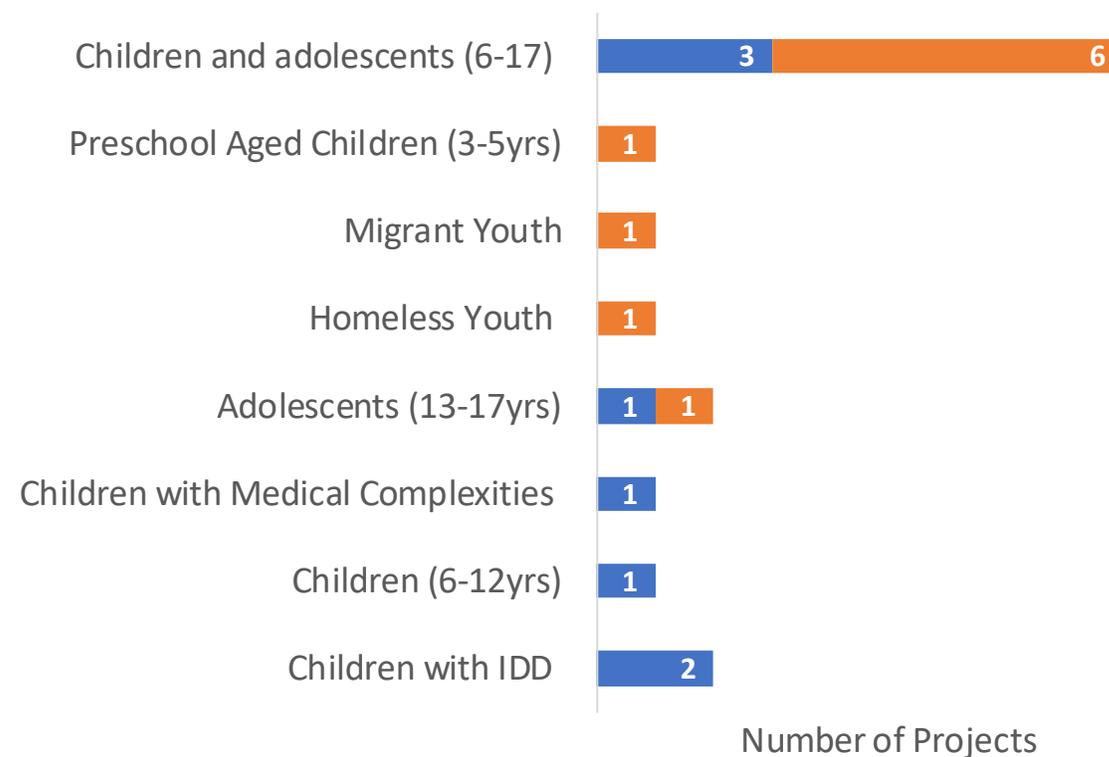
Populations with Health Disparities

■ Phase I Awards ■ Phase II Awards



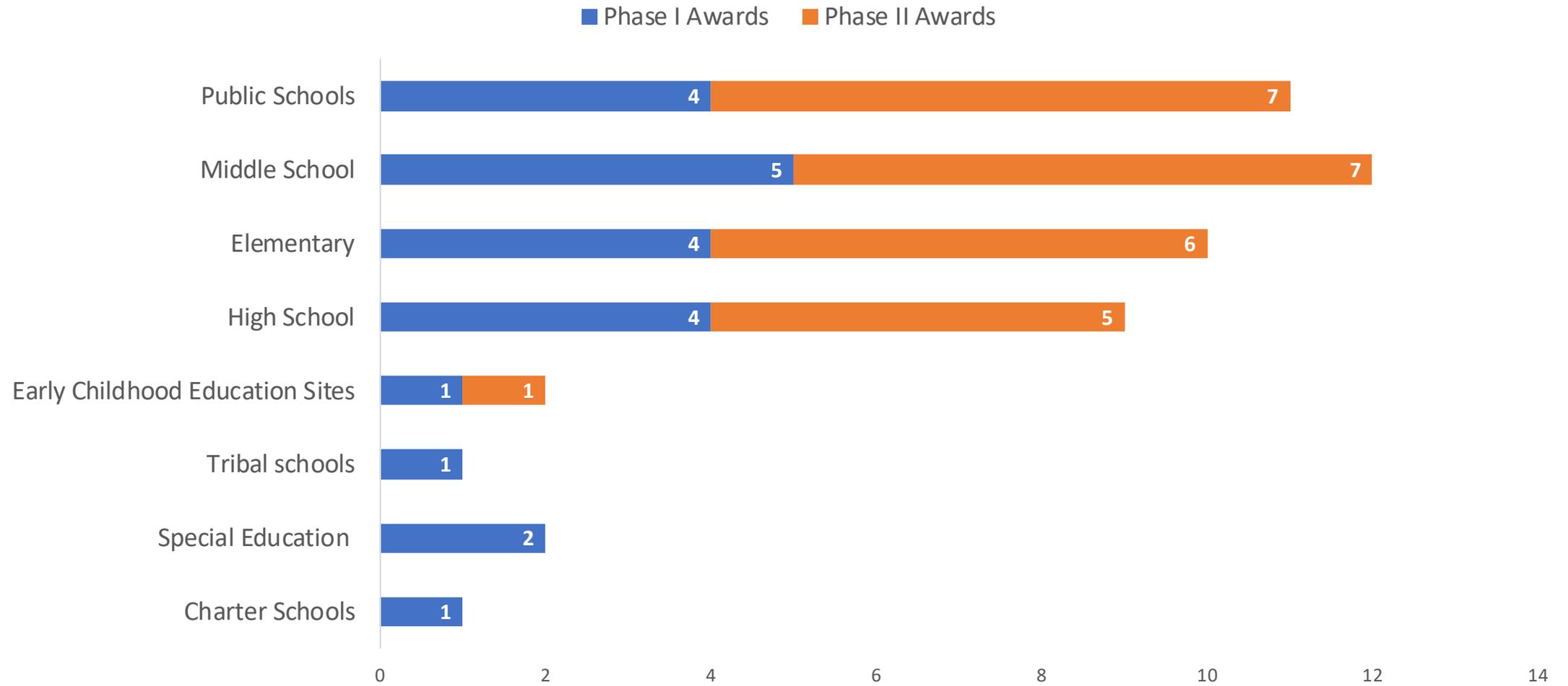
Vulnerable Populations

■ Phase I Awards ■ Phase II Awards



Note: There are projects working with multiple populations; the number of projects is not additive

Educational Settings



Note: There are projects working with multiple populations; the number of projects is not additive

Investigator Workshop

Goals

- Bring together RADx-UP Return to School Phase I and Phase II awardees/investigative teams and others conducting school-based research on COVID-19 diagnostic testing to learn from each other and define the current state of their research projects supporting the safe return of children to in-person school



- Videocast and slides will be posted on RADx-UP website

nichd.nih.gov/about/meetings/2021/080921

RADx-UP Return to School Phase I and II Workshop

August 9, 2021 (1:30-5:00 p.m. ET)

Sponsor/Co-Sponsor

Rapid Acceleration of Diagnostics Underserved Populations (RADxSM-UP) Initiative, Office of the NIH Director, NIH

Location

Zoom webinar; registration is free but required

Purpose

NIH launched the Safe Return to School Diagnostic Testing Initiative as part of the RADxSM-UP initiative. The Return to School initiative addresses the needs of children with unequal access to COVID testing, as well as those facing barriers to attending school remotely. This includes children who lack access to computers and internet connectivity or who may not have family members available to help with virtual learning. Without in-person schooling, many children will miss out on school-based meals, speech or occupational therapy, and afterschool programs. Loss of such services disproportionately affects minorities, socially and economically disadvantaged children, children with disabilities and those with medical complexities.

Federal Resources Supporting School COVID-19 Screening Testing

Information for State Health and Education Agencies

These resources are available to state and local health and education agencies, and can be engaged in complementary ways as part of school screening programs.

Operation Expanded Testing (ET)

Operation ET, funded by the Department of Health and Human Services (HHS) and Department of Defense (DoD), expands national COVID-19 testing capacity and offers testing for K-8 schools and vulnerable populations.

- Total Funding: \$650 million
- Eligibility: K-8 schools and vulnerable populations
- Program Duration: May 26, 2021-November 25, 2021
- Program Summary: Three federally funded regional contractors will provide testing materials and supplies, staff, and results reporting at no cost to recipients.



[West Hub: PerkinElmer](#)

John Hicks, Arvind Kothandaraman - together@perkinelmer.com

[Midwest Hub: Battelle](#)

Beverly Roberts - robertsbd@battelle.org

[Northeast and South Hubs: Eurofins](#)

Sean Plotner - seanplotner@eurofinsus.com

CDC Epidemiology and Laboratory Capacity (ELC) Reopening Schools Award

The CDC-funded ELC Reopening Schools award increases resources for COVID-19 screening testing to help schools provide safe, in person learning.

- Total Funding: \$10 Billion
- Eligibility: K-12 Schools in current ELC jurisdictions
- Program Duration: April 2021-July 2022
- Program Summary: Federal funding for school testing provided to 64 current ELC recipients.

For questions, please email elc@cdc.gov. More information is available [here](#).

Increasing Community Access to Testing (ICATT)



ICATT, funded by HHS, provides COVID-19 testing resources and support to underserved school districts.

- Total Funding: \$255 million
- Eligibility: Underserved K-12 schools and school districts as determined by the Social Vulnerability Index, Pandemic Vulnerability Index, and US Census School District Child Poverty
- Program Duration: May 2021-September 2021
- Program Summary: Federally funded contractors will provide testing materials, supplies and services including sample delivery, results reporting, and public health consultation at no cost.

For questions, contact ICATT@hhs.gov. More information is available [here](#).



Pls: Allison Barlow, Laura Hammitt, Emily E. Haroz

OT2 HD107543-01

Restarting Safe Education & Testing (ReSET) for Children with Medical Complexity



Priorities for a Safe Return to School for Children with Complex Health Needs

Children with complex health needs have serious medical conditions and often rely on medical devices or people to help them with daily activities.

Safe in-person school attendance can be hard because these children are at higher risk of severe COVID-19, their daily care can include high-risk procedures, and physical distancing and mask adherence can be difficult.

The unique circumstances facing children with complex health needs require extra attention to support safe in-person school attendance.

In Spring 2021, 460 Wisconsin families, school staff, and clinicians sent us over 1,100 ideas on how to help these children attend school during the pandemic. The top 10 ideas shown below were prioritized by a team of 35 experts representing families, schools, clinicians and policymakers across Wisconsin.

As a central principle, the safety of children with complex health needs requires the safety of all children and staff at school. **Families of children with complex health needs should be supported to make the best decision for their child** with their health care providers and school staff when considering the risks of COVID-19.

460

families,
school staff,
& clinicians
submitted
ideas

1,100+

ideas were
received

35

experts reviewed &
prioritized the ideas

IN FIRST WEEK

- >1000 views
- >650 unique users in 4 countries
- >200 downloads

CURRENT RESOURCES

- Top 10 consensus priorities
- “1-pager”
- Family FAQ guide
- Healthcare provider template letter
- Social Media content
- *More on the way*

PRIORITY SUMMARY

- Universal masks, vaccination, school testing
- Respiratory protection plans for staff
- Single use medical equipment
- Safety plans within IEPs, flexible curriculum
- Staff education on CMC, nurse available
- Healthcare team partner, transportation plan

Community Response to our Work

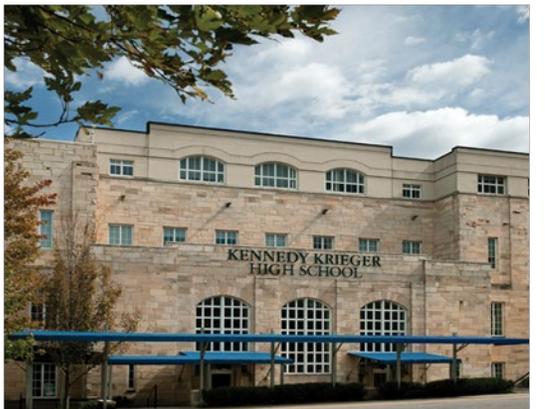
"I just personally want to say thank you to the entire ABC Science Collaborative Team. For over a year, you all have put in tireless hours for the people and schools in NC. Through your work, [School Name] has been open for 3 weeks successfully and has implemented all the health and safety protocols we learned through working with the ABC Science Collaborative team. While, I know it is a day-by-day effort, and staying diligent with the safety protocols, I know schools can open for students. Please know we value the partnership and will support any of your efforts and initiatives."

"Our daughters will return to school in-person in August. Only two of our four daughters are old enough to be vaccinated...we will continue to practice the 3W's as we re-introduce ourselves back into in-person everything. Thanks again for everything y'all are doing in the COVID world. You have no idea how much families like mine appreciate and value your work. It's literally keeping us safe, healthy and alive! Stay well!"

**Pls: Kanecia Zimmerman &
Danny Benjamin – OT2HD107559**

Qualitative Investigation: Main Findings

School Personnel Perspectives	Parent/Caregiver Perspectives
<p><u>Suggestions for Return to In-School Learning</u></p> <ul style="list-style-type: none"><li>• Schools need clear and consistent COVID-19 protocols<li>• Healthcare professionals should make contact with affected families<li>• Schools should develop plans for keeping students who test positive engaged during the quarantine period	<p><u>Facilitators for Return to In-School Learning</u></p> <ul style="list-style-type: none"><li>• Providing school-based testing influences some parental/caregiver decisions<li>• School personnel should be notified of students' test results because of the exposure risk<li>• Teachers should prepare take-home materials and care packages for students who are diagnosed with COVID-19 <p><u>Barriers for Return to In-School Learning</u></p> <ul style="list-style-type: none"><li>• Decisions about returning to in-school learning were rarely impacted by experiences with stigma or discrimination prior to the pandemic<li>• Concern about adherence to safety procedures by parents/caregivers, students, and schools<li>• The potential for exposure for children and their families



Pls: Christina Gurnett, Jason Newland & Luther Kalb – OT2HD107556



URMC / Mary Cariola Center Partnership



Transforming lives of people with disabilities

Mary Cariola Center (**MCC**) serves moderate-to-severe IDD children (**N=425**) via a large professional support staff (**N=450**). 70% of MCC students live in poverty, and 33% are from under-represented minority backgrounds. 100% are on federal food assistance programs.



The Mobile Testing Unit

We will staff, equip and deploy a customized, disability-enabled, mobile unit to bring testing directly to the MCC community for optimal testing flexibility. A new van has been procured and we are working with Marketing to design a wrap similar to the UR Vision Van.





Project Goals

- Determine the **best COVID-19 testing strategy** to limit COVID-19 transmission in middle and high schools
 - Provide easy access to free saliva-based testing to all of the school community (staff, students, household members)
 - Staff and students in some middle and high schools will be offered weekly testing
- Partner with our community in listening sessions to **better understand COVID-19 testing, vaccinations and in-person school**

What COVID-19 testing strategy is best for our schools?

YOUR INPUT NEEDED

Discussions for _____ of students in the _____ School District

- Session times and dates available in **summer**
- Receive a \$20 e-gift card for participation
- To sign up for a session, follow the link below

» <http://bit.ly/safereturn2school>

Key Themes

- Lead with caring
- Go beyond testing and engage community
- Improved equity and systems change should be a priority
- Clarity, transparency, and simplicity is key in all aspects of communication
 - Clarify what is meant by “safe”
- Visuals help
- Engaging students requires a unique approach



- Parent coaching
- Short straw
- Vivid imagery



Impact of COVID-19 Testing and Mitigation on Equitable Return-to-School in the Second Largest U.S. School District

Testing program measures



Los Angeles Unified COVID-19 Dashboard

Results Overview: 7/8/2021

Test and Vaccine Capacity - District-Wide

2,190,408 Total Tests w/valid results
 30,390 Tests w/results, last 7 day
 21,432 Test Capacity, next 7 days
 49,886 Total vaccines given
 382 Vaccines given, last 7 days
 0 Vaccine capacity, next 7 days

Result Summary - District-Wide

0.14% Positive Test Rate, last 7 days
 66 Number of cases, last 7 days
 0 School-associated Cases, last 7 days
 82,757 Daily passes, last 7 days

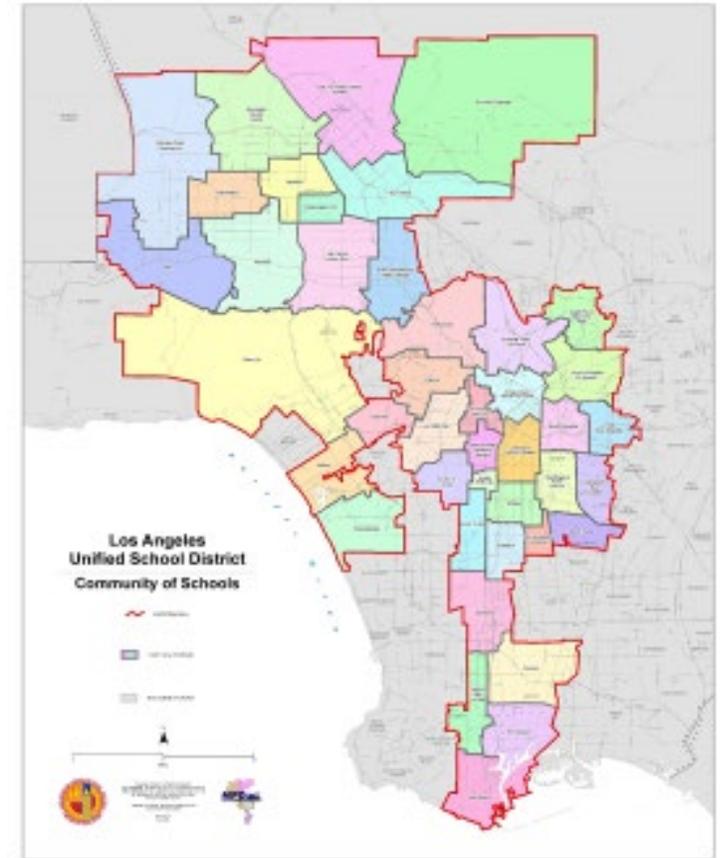
Community Case Rates

LA County Testing
 LAUSD Testing



Person Type	No reported symptoms or exposures		Reported symptoms or exposures	
	Number of tests, last 7 days	Positive test rate, last 7 days	Number of tests, last 7 days	Positive test rate, last 7 days
Community Members - Adults	4,960	0.40%	17	0.00%
Community Members - Children	257	0.39%	0	0.00%
Staff reporting to worksite	7,450	0.11%	21	0.00%
Staff Working Remotely	122	0.00%	0	0.00%
Student	17,542	0.07%	21	0.00%
Adult Ed	23	0.00%	0	0.00%
Early Ed	40	2.50%	0	0.00%
Elementary	901	0.22%	4	0.00%
Total	30,331	0.14%	59	0.00%

- Tests Overview
- Tests Weekly/Daily
- Testing Capacity Utilization
- Daily Health Pass
- Community Engagement
- LAUSD Vaccination
- Daily Pass Report
- Testing Report
- People Tested
- Vaccination Report



Investigator Workshop – Main Takeaways

- Testing in schools is feasible and can be implemented with strong community/school support and continual engagement/outreach



Mitigation

- Mitigation strategies enable low positive tests and low secondary transmission
- Asymptomatic testing is challenging because of misconception, distrust, quarantine concerns, and confidence in other mitigation strategies
- Access to testing after exposures increases testing uptake



Access to reliable information

- Need to disseminate information and results
- Communities need access to scientists and science



Unknowns

- Impact of other respiratory viruses
- Impact of delta variant
- Vaccine uptake and vaccine hesitancy
- Children with IDD remain a highly significant population for testing in the school setting



COVID-19 Guidance for Safe Schools



COVID-19 Guidance for Safe Schools

[Home](#) / [Critical Updates on COVID-19](#) / [COVID-19 Interim Guidance](#) / [COVID-19 Guidance for Safe Schools](#)

[f](#) [t](#) [p](#) [in](#) [e](#) [r](#)

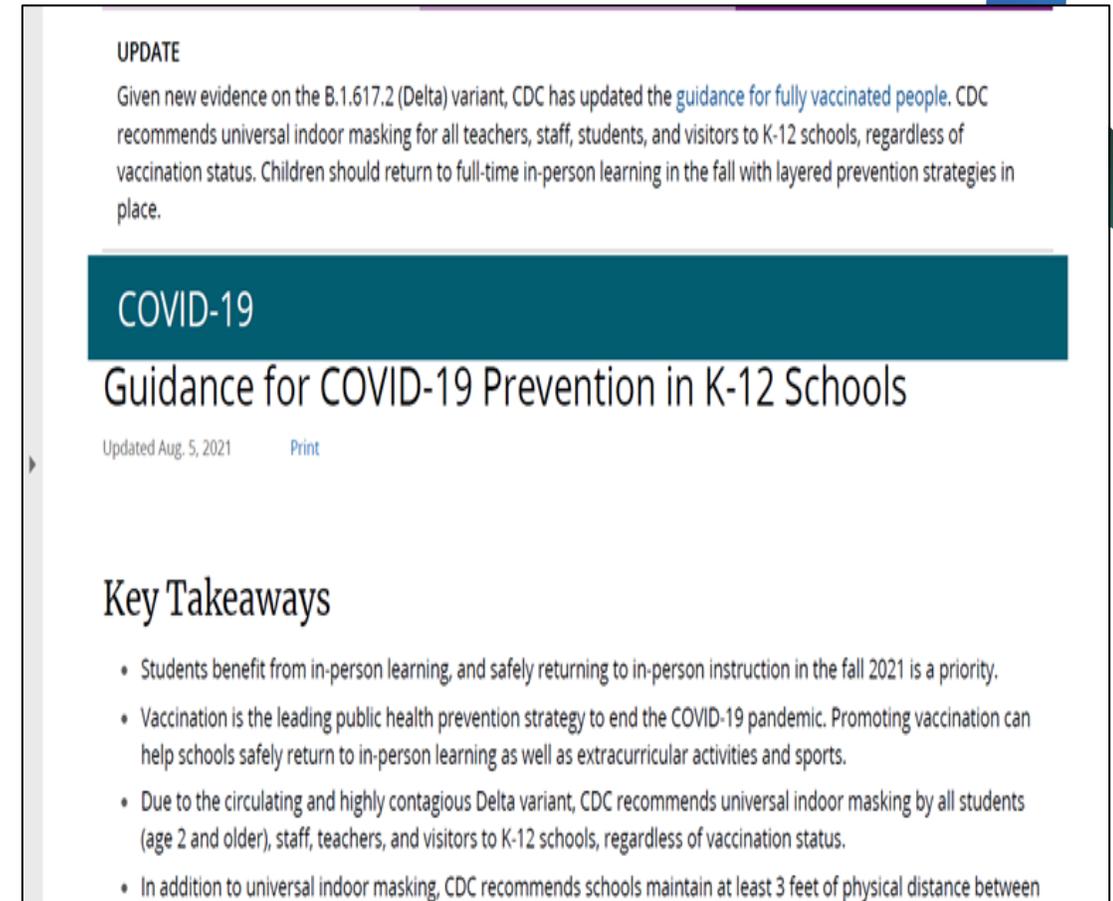
The AAP strongly advocates that all policy considerations for school plans should start with the goal of keeping students safe and physically present in school.

Purpose and Key Principles

The purpose of this guidance is to continue to support communities, local leadership in education and public health, and pediatricians collaborating with schools in creating policies for safe schools during the COVID-19 pandemic that foster the overall health of children, adolescents, educators, staff, and communities and are based on available evidence. As the next school year begins, there needs to be a continued focus on keeping students safe, since not all students will have the opportunity or be eligible to be vaccinated before the start of the next school year. Since the beginning of this pandemic, new information has emerged to guide safe in-person learning. Remote learning highlighted inequities in education, was detrimental to the educational attainment of students of all ages, and exacerbated

[Purpose and Key Principles](#)

[Special Considerations for School Health During the COVID-19 Pandemic](#)



UPDATE

Given new evidence on the B.1.617.2 (Delta) variant, CDC has updated the [guidance for fully vaccinated people](#). CDC recommends universal indoor masking for all teachers, staff, students, and visitors to K-12 schools, regardless of vaccination status. Children should return to full-time in-person learning in the fall with layered prevention strategies in place.

COVID-19

Guidance for COVID-19 Prevention in K-12 Schools

Updated Aug. 5, 2021 [Print](#)

Key Takeaways

- Students benefit from in-person learning, and safely returning to in-person instruction in the fall 2021 is a priority.
- Vaccination is the leading public health prevention strategy to end the COVID-19 pandemic. Promoting vaccination can help schools safely return to in-person learning as well as extracurricular activities and sports.
- Due to the circulating and highly contagious Delta variant, CDC recommends universal indoor masking by all students (age 2 and older), staff, teachers, and visitors to K-12 schools, regardless of vaccination status.
- In addition to universal indoor masking, CDC recommends schools maintain at least 3 feet of physical distance between

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NIH National Institutes of Health
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Acknowledgements

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CDCC Team

RADx-UP WG

Investigators, Schools,
Communities, Teachers,
Caregivers and Children



Questions?

