



## HERO School Testing: May – June 2021 Update

*published June 16, 2021*

The [Utah Health and Economic Recovery Outreach \(HERO\) Project](#) began in May 2020 as a collaborative statewide testing and analysis project to understand the community-based spread of Covid-19. The goal of the HERO Project is to collect and utilize high-quality local data to help inform decision-makers seeking to guide Utah’s citizens and economy through a safe return to normalcy. Beginning in March 2021, the project team is publishing update reports on community testing, impacts of Covid-19 on Utah businesses and consumers, school testing, work in long-term care facilities, and vaccine uptake, impact, and implications. This report focuses on the [HERO Project’s work in K-12 schools](#) and serves as an update to [previous reporting](#) on HERO Project testing and other projects in K-12 schools.

### Background on School Testing

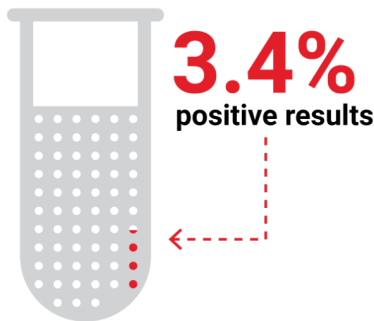
The HERO Project began school testing in October 2020 and has continued through May 2021, conducting tests for over 3,700 participants representing over 100 schools. The primary goal of school-based testing is to provide convenient access to Covid-19 testing to students, faculty, and staff to enhance safety in school communities by reducing transmission. By increasing testing, schools can better identify both symptomatic and asymptomatic cases, reducing the occurrence of school outbreaks that prevent in-person learning.

### Testing Results

In aggregate, between October 2020 and May 21, 2021, students had a higher rate of positive tests than did staff and teachers, but both groups were relatively low overall.

## students

2,440 students tested



## staff & teachers

1,263 staff & teachers tested



# 104

participating  
schools



# 6,161

PCR tests



# 3,703

participating students  
& school staff

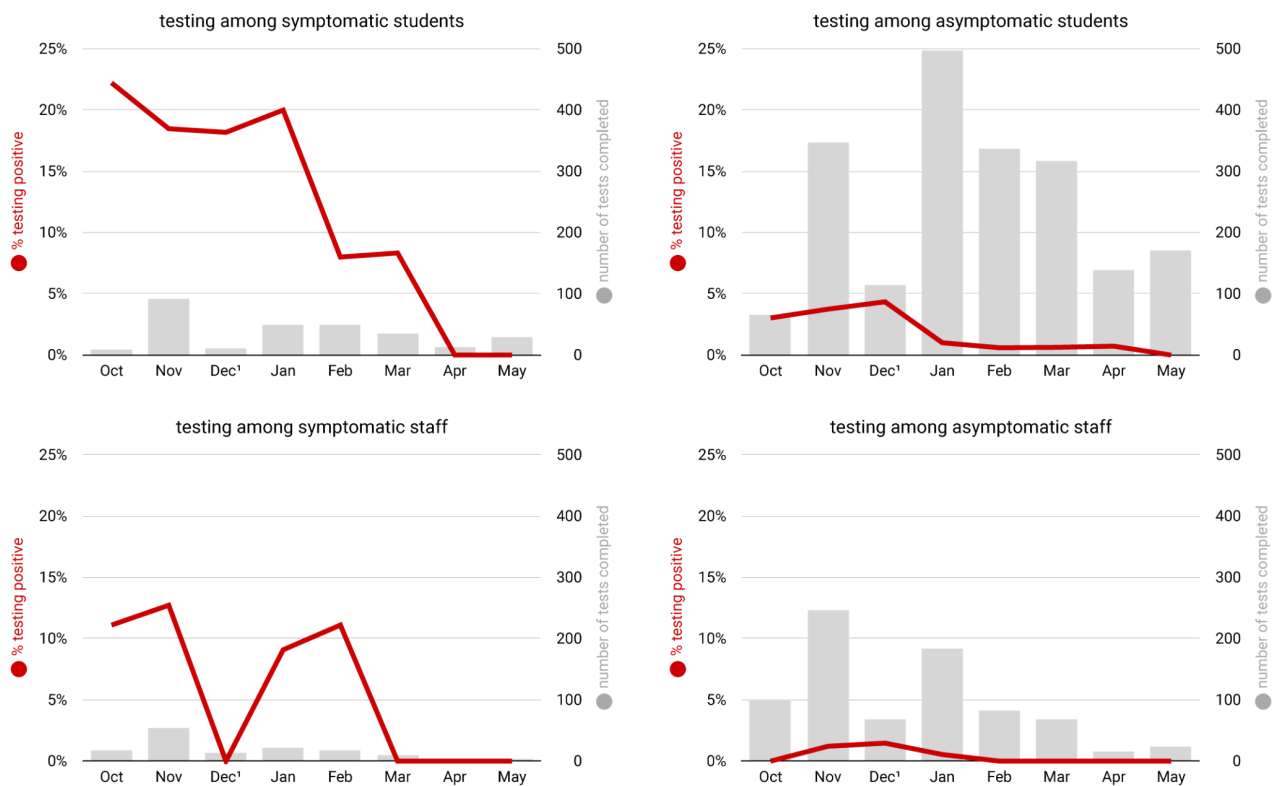
## May 2021 Testing Results

In the month of May, the HERO Project performed 227 tests on both students and staff, with students receiving nearly 90% of the tests. No staff members or students tested positive during this reporting period, the first such period in the eight months of HERO Project testing in K-12 schools.

## Rates of Infection Across Time

Regular school-based testing has taken place every month since October. Positivity rates have generally decreased since from winter months into Spring 2021. This applies for both students and staff, and for those with and without symptoms, as shown in the figure below.

### HERO Project K-12 testing results



<sup>1</sup> December testing included only the first two weeks due to Winter Break, decreasing the sample size as compared to other months.

## Additional School-Based Projects and Findings

### Surveying High School Students

In a March-April 2021 collaboration with Granite School District, Salt Lake City School District, and an additional high school in the area, the HERO team surveyed high school students about the impact of the pandemic and their behaviors related to it. At the time of the survey, all area high schools were offering in-person learning, though this had only recently begun in Salt Lake City School District. Over 1500 students—approximately 6% of the total student body in these schools—completed the survey.

Respondents included more than 25% that self-identified as something other than white. At the time of the survey, 23% of respondents reported that they currently attended school remotely. This varied by district, including 53% in remote learning in Salt Lake City School District compared to 18% in Granite. In general, results did not indicate substantial differences between districts in measures of the pandemic's impact or reported behaviors in respondents. Overall, the burden of Covid-19 was substantial. 11% of respondents reported having tested positive for Covid-19 and 26% reported that at least one household member had tested positive. 40% of respondents reported having to quarantine after exposure at least once, including 39% of these respondents reporting that quarantine was due to a school-related exposure. Notably, the origin of quarantines differed across schools. Only 8% of students from Salt Lake City School District reported a school quarantine, as compared with more than 40% for respondents from the other schools.

Additionally, many student respondents had found ways to stay engaged in activities despite the pandemic. 38% reported participating in athletics and 46% in another extracurricular activity. 73% reported having recently attended a casual gathering with friends and family and 40% reported having recently attended an organized large group event. For those attending school in person, more than 80% used a personal car for transportation. Nearly 100% of respondents reported that they and members of their school community always wore masks while in school.

### Analysis of Covid-19 Testing Policy

Along with colleagues from the Utah Department of Health, United States Public Health Service, and Utah State Board of Education, the HERO team recently completed an evaluation of two statewide testing policies for schools: [Test to Stay](#) and [Test to Play](#). The results of this analysis were published in [an article](#) in MMWR, the CDC public health journal, alongside [this visual abstract](#), and discussed in the [New York Times](#).

Collectively in these programs, over 60,000 students were tested at least once using rapid antigen testing including nearly 1900 who tested positive. As a result of Test to Play, **95%** of the more than 11,000 scheduled high school winter events were able to be completed. Using Test to Stay, 13 schools were able to continue in-person learning involving testing for nearly 14,000 students. These testing events saved over **100,000 days** of in person instruction. Overall, this analysis demonstrated that implementation of school-based testing strategies was feasible, sustainable, effective in identifying and isolating cases, all contributing to the persistence of in-person learning and extracurricular activities.

### Next Steps

Alongside the end of the academic year, the HERO Project concluded its work in K-12 schools. A final summary report will describe the broad takeaways of this work, and final projects will be discussed in additional HERO reporting and elsewhere. Moving forward, the HERO Project will focus on a number of priorities including working with decision-makers to plan for continued safety in opening schools this fall.

# Acknowledgments

Leading the HERO Project are Stephen C. Alder, PhD; Adam Looney, PhD; and Matt Samore, MD. The project is funded by the State of Utah in coordination with the Governor's Office of Management and Budget and the Utah Department of Health.

Senior advisors to the project are Taylor Randall, MBA, PhD; Natalie Gochnour, MS; and Michael Good, MD. The Project team includes Andrew T. Pavia, MD; Julio Delgado, MD, MS; Adam Hersh, MD; Krow Ampofo, MD; and Tom Greene, PhD. The following teams and centers supported the project:

## **Center for Clinical & Translational Science Study Design and Biostatistics Center**

Brian Orleans, MS  
Gentry Carter  
Angela Presson, PhD  
Chong Zhang, MS  
Jian Ying, PhD  
Chelsea Allen, PhD  
Andrew Redd, PhD  
Molly Mcfadden, MS  
Ben Brintz, PhD  
Tyler Bardsley, MS  
Yue Zhang, PhD  
Jincheng Shen, PhD

## **Division of Epidemiology**

Kristina Stratford, PMP, CCRP  
Tavis Huber  
Molly Leecaster, PhD  
Candace Haroldsen, BS  
Xiangyang Ye, PhD

## **Marriner S. Eccles Institute for Economics and Quantitative Analysis**

Nathan Seegert, PhD  
Mac Gaulin, PhD  
MJ Yang, PhD

## **University of Utah Health Clinical Operations**

Michael Bronson, JD, MBA  
Nikki Gilmore, MSN, RN  
Christina Butterfield, MSN, RN  
David Ence, MHSA

## **Survey Design and Measurement Core**

Morgan Millar, PhD

## **Utah HERO Project Team**

Alicen Bringard, MPA  
Elizabeth Rabon, MA  
Jill Stephenson, MPA  
Soumava Basu, PhD  
Jeanette Nelson, PhD  
Christopher "Kit" Fry  
Jonathan Frehner  
Jamon Winegar  
Devin Ostler  
Annie Smith  
Hannah Crane  
Braden Card  
Maddison Dillon  
Cassie Cowdell

The Church of Jesus Christ of Latter-Day Saints generously contributed the use of their parking lots and buildings to support mobile testing for this project. In addition, we thank the HERO Project's field team that has staffed and supported countless testing events across the state. We also appreciate the support of the National Center for Advancing Translational Sciences of the National Institutes of Health under Award Number UL1TR002538. HERO school testing work could not have happened without the support of the Utah Department of Health; Salt Lake County Health Department; Granite, Salt Lake City, and Davis School Districts; McGillis School; and Rowland Hall School.

This report was developed by the Sorenson Impact Center at the University of Utah's David Eccles School of Business in partnership with the HERO Project leadership. Sorenson Impact works with public, nonprofit, and private sector stakeholders to develop, structure, and mobilize capital for innovative and data-driven approaches to difficult social and public health challenges. This report was created by Austin Hendrickson and Allison Nicholson and designed by Alicia Pangman.

For more information about this report, contact [Elizabeth Rabon](#), Associate Director of Administration for the Health & Development Initiative at the University of Utah.