

# UTAH LEADS TOGETHER

## LARGE-SCALE TESTING



### THE PROBLEM

To date, all data regarding the number of individuals infected with COVID-19 are estimates so it is currently unknown how many Utahns have actually been infected. Until real, large-scale data concerning the prevalence of the virus is obtained, Utah faces the likely reality of significant and frequent economic disruption.

### THE SOLUTION

Restoring normalcy to social and economic life and understanding how far the virus has actually spread requires transitioning from aggressive social distancing measures to more nuanced and surgical interventions informed by a large-scale testing system. The Governor's Office of Management and Budget, the University of Utah, and ARUP have developed a methodology and operational plan to conduct large-scale, representative testing of Utahns. The testing will complement existing efforts from IHC, ARUP, TestUtah.com, the Healthy Together app, and many other providers in order to reinforce the state's reporting, tracking, and tracing program.

### DETAILS

To understand the need for large-scale, randomized testing, imagine an iceberg.

An iceberg can be viewed from two vantage points: above the water line and below the water line. The portion above the water line is visible and explicit. In the case of COVID-19 tools, above the water line includes those individuals identified through Utah's extensive contact tracing effort and who have completed the TestUtah survey or used the Healthy Utah Together mobile app and have been tested. These efforts have been critical to protecting public health and reactivating the Utah economy; however, they are not sufficient.

To help view the bigger part of the iceberg below the water line, the state needs a statewide, representative testing program that enables state leaders to understand infection prevalence among all Utahns. This effort includes identifying individuals who have overcome the virus and those who do not know they have the virus because they are asymptomatic.

*What questions will large-scale testing help answer?*

- What is the current rate of infection in Utah? How is it changing over time?
- What share of individuals with self-reported symptoms are infected?
- What is the distribution of symptoms experienced by COVID-19 infected individuals?
- What is the range of health outcomes experienced by COVID-19 infected individuals?
- How can we improve detection rates?

This field testing will occur in two phases. Phase I will provide baseline information about disease prevalence. The University of Utah will test approximately 12,500 people who are representative of the state's population in different locations around the state. Utahns will be tested for both the virus and virus antibodies (PCR/nose swab and IgG/serology). Using this information, state leaders will learn the rate of disease prevalence, range of symptoms and outcomes, and disease rates among underrepresented groups.

Phase II will provide ongoing information so the COVID-19 risk can be managed over time. This phase will dedicate roughly 5,000 samples per month above and beyond routine testing of symptomatic individuals to monitor prevalence and identify emerging hot spots or routes of new transmission. The state can then move quickly to isolate infected individuals, trace and test contacts, and conduct targeted interventions.

This information will guide state and local governments' response to the crisis, enabling targeted—rather than blunt—public health responses, while ensuring the level of infection does not overwhelm medical capacity, keeping Utah's economy functioning and helping us to learn to live with the virus.