

# ELC ENHANCING DETECTION: UTAH TESTING PLAN

## 2020 Overarching Jurisdictional SARS-COV-2 Testing Strategy

Jurisdiction:	Utah
Population Size:	3.2 million (average)

### 1. Describe the overarching testing strategy in your state or jurisdiction.

A) Since mid-March, the public health laboratory, the laboratory for the largest hospital system in the state (Intermountain Healthcare Central Laboratory {IHC}), and ARUP, a national commercial laboratory located in the state, have met three days a week to discuss instrumentation, testing platforms, and plans to expand capacity. Through these efforts and those of other high-throughput laboratories in the state, we have a state capacity to perform up to 9,000 tests per day. IHC and the University of Utah Health System are using point of care (POC) tests to aid in pre-operative settings and clinics. The State has dispensed the Abbott ID Now POC machines to rural hospitals, jails, state prisons, clinics that serve the homeless population, and local health departments. The state issued a solicitation to contract with additional sample collection and lab partners. We have narrowed the selections to several high-quality testing partners that can provide significant additional capacity and satisfy geographical needs for population testing.

B) The state has partnered with federally qualified health centers (FQHCs) to stand up drive thru clinics in rural and underserved areas in an effort to expand testing to rural Utah. The state supplies them with collection kits and the tests are performed at the state public health laboratory. On June 30, 2020, the state issued a standing order for pharmacies to be able to collect samples and process POC tests.

C) The state has contracted with the University of Utah to do a large randomized sample of individuals across Utah. Approximately 12,000 individuals will receive a diagnostic test and a serology test during the first phase of this process. The state plans to use information from this survey to determine the rate of active infection and previous exposure to COVID-19. In addition, UPHL is looking at monitoring seroprevalence at the temporal and geographical level using dry bloodspots collected during newborn screening.

D) The state posts its testing guidelines on its main coronavirus webpage:

[https://coronavirus-download.utah.gov/Health/UDOH%20HAN%20COVID\\_04142020\\_Statewide\\_Guidance%20\(1\).pdf](https://coronavirus-download.utah.gov/Health/UDOH%20HAN%20COVID_04142020_Statewide_Guidance%20(1).pdf)

The state sends a weekly survey to major testing partners asking them to provide a range on the approximate number of days supply of collection kits they have available for sample collection.

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The state also convenes on a weekly basis a group of sample collection partners to review best practices for site set up, staffing, and other pressing issues. For example, last week, the group discussed how they were changing testing hours and using chilled vests to help staff deal with the rising temperatures.

In addition, the state regularly convenes the large healthcare systems, the hospital association, the medical association, and other key partners to discuss testing guidelines, priorities, and potential changes to current practices. For example, last week, the group discussed coverage for first responders that had a high risk exposure and the best way to incorporate testing for this group into the statewide practices.

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**Table #1a: Number of individuals planned to be tested, by month**

BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
Diagnostics*	100,000	100,000	120,000	120,000	120,000	120,000	120,000	120,000	920,000
Serology	5,000	5,000	6,000	6,000	6,000	6,000	6,000	6,000	46,000
<b>TOTAL</b>	<b>105,000</b>	<b>105,000</b>	<b>126,000</b>	<b>126,000</b>	<b>126,000</b>	<b>126,000</b>	<b>126,000</b>	<b>126,000</b>	

\*Each jurisdiction is expected to expand testing to reach a minimum of 2% of the jurisdictional population.

**Table #1b: Planned expansion of testing jurisdiction-wide**

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through-put	Daily serologic through-put	Specific at-risk populations targeted (list all)
Utah Public Health Laboratory	Public health lab		1,500	200	Nursing homes, prisons, the homeless, health care workers, critical infrastructure, intermediate care facilities, first responders
Intermountain Healthcare	Hospitals or clinical facility		2,500	0	Hospitalized, pre-operative, hotspots in vulnerable areas.
ARUP	Commercial or private lab		2,000	200	Hospitalized, pre-operative, hotspots in vulnerable areas.
Timpanogos Regional Hospital	Hospitals or clinical facility		2,500	0	Contract tracing

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Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through-put	Daily serologic through-put	Specific at-risk populations targeted (list all)
Salt Lake County Jail	Other		24	0	Offenders
Utah County Jail	Other		24	0	Offenders
Fourth Street Clinic	Community-based		48	0	Homeless
Hope Clinic	Community-based		24	0	Homeless
State Prison System	Other		48	0	Offenders
Blue Mountain Hospital	Hospitals or clinical facility		24	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.
Kane County Hospital	Hospitals or clinical facility		24	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.
Castleview Hospital	Hospitals or clinical facility		24	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.
Ashley Valley Hospital	Hospitals or clinical facility		24	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.
Central Valley Medical Center	Hospitals or clinical facility		24	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.

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Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through-put	Daily serologic through-put	Specific at-risk populations targeted (list all)
Gunnison Valley Hospital	Hospitals or clinical facility		24	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.
Moab Regional Hospital	Hospitals or clinical facility		24	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.
Uintah Basin Hospital	Hospitals or clinical facility		24	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.
Beaver Valley Hospital	Hospitals or clinical facility		24	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.
Milford Valley Hospital	Hospitals or clinical facility		24	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.
San Juan Health System	Hospitals or clinical facility		24	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.
Utah Navajo Health System	Hospitals or clinical facility		24	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.
Tanner Clinic	Hospitals or clinical facility		24	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.
SoftCell Bio	Commercial or private lab		500	0	
Other POC Testing	Community-based		500	0	Rural area, Hospitalized, pre-operative, hotspots in vulnerable areas.

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## 2020 Direct Expansion of SARS-COV-2 Testing by Health Departments

### **2. Describe your public health department's direct impact on testing expansion in your jurisdiction.**

A) As described in greater detail below, the public health laboratory will expand capacity by bringing a second automated extraction machine online and by purchasing additional PCR machines.

The state will issue a request for proposals that will allow the state to reserve testing capacity at a number of large, private labs operating in the state. Two RFP's addressing sampling and testing were released May 29 and June 5, with the hope to have a contract in place by July 15. It is anticipated this RFP process will allow the state to reserve between 1,500 and 5,000 tests per day in testing capacity.

B) The state's goal of expanding diagnostic COVID-19 testing is to protect vulnerable populations, prevent spread of disease in congregate living settings, actively identify cases who might not have otherwise sought testing, and contribute to employers' efforts to create a safe work environment. This testing helps control the spread of COVID-19 by prioritizing testing of individuals who work with vulnerable populations (e.g., nursing home staff), those at high risk for severe disease (e.g., hospitalized patients), and those who are most likely to have been exposed (e.g., close contacts to a known case).

The top priority for the state is the testing of symptomatic individuals. However, when the state has sufficient testing capacity, including testing supplies and personal protective equipment (PPE), the following is a rank-ordered list of the state's priorities for asymptomatic testing.

1. Protect Vulnerable Populations
2. Allow Hospitals to Get Back to Work while Keeping Healthcare Workers Safe
3. Slow the Spread with Proactive Contact Tracing
4. Understand the True Spread of the Disease through Randomized Testing
5. Support Critical Infrastructure
6. Help Businesses Reopen

C) The public health laboratory monitors on a weekly basis the number of swabs/transport media that are available to the state for sample collection. Although additional swabs and media from FEMA has been helpful, the format and quality of these supplies has been highly variable. To address this problem, the state has entered into contracts with local companies to ensure a steady supply of swabs and transport media are available. The laboratory also has a standing order with Thermofisher for extraction

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and PCR supplies. This inventory is monitored daily. When supplies are low or not available, we will reach out to the IRR. The laboratory works with in-house and department level resources to ensure that test are reported each day to the proper provider and CDC.

D) The public health laboratory will begin serology testing in June of 2020. The planned use is to help epidemiology determine the serological status of the community through planned investigations as well as assisting with resolving discrepant results, e.g. a patient is positive one day and negative a few days later. Is this a false positive, was the infection cleared in between tests, etc? Supplies are needed, not instrumentation. We also plan to do population-based screening, which will allow for deployment of targeted testing efforts throughout the state. The lab already uses an automated Dynex Agility platform for serology which will allow processing of up to 600 specimens per run.

E) Beginning May 20, 2020, 12 National Guard teams began testing staff at long term care facilities across the state. All 350 intermediate care facilities (ICFs), nursing facilities, and assisted living facilities will be provided the opportunity to test their staff. The National Guard teams will perform this testing through August 7, and has been requested through September 7. They will conduct testing at the most vulnerable facilities multiple times during this period and will test staff at all facilities at least once. During this time, these teams will have collected approximately 40,000 samples from facility staff. In addition, Utah Department of Health infection control experts will help facilities improve their processes to help reduce the possibility of transmission within the facilities. The Utah Department of Health will also be establishing up to 7 mobile sample collection teams to carry on the work after the National Guard is relieved. These teams will continue on with point prevalence testing in long-term care facilities, and also be available to deploy to collect samples from priority areas of need, based on geography, population, or setting. Additionally, we will coordinate sample collection sites under state contract to ensure priority needs are met, and will work with all collection partners statewide, to ensure adequate geographic coverage of testing resources. We will partner closely with local health departments to ensure testing capacity is appropriately balanced with contact tracing capacity.

F) The laboratory works closely with state purchasing to ensure that supplies and contracts are prioritized and expedited. Staff will be hired in the months of June and July 2020 to allow for expansion of testing at the public health laboratory. The limiting factor at the laboratory currently is the number of staff followed closely by instrumentation. Specifically, we plan to purchase two additional ABI 7500 Fast DX. In order to increase UPHL testing capacity we will concentrate efforts to implement ETOR by December 2020 or earlier. This implementation will decrease workload in specimen receiving, increase data accuracy, allow for better coordination of mobile collections and quicker result reporting to facilities for implementing interventions.

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**Table #2: Planned expansion of testing driven by public health departments**

BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
Number of additional* staff to meet planned testing levels	0	0	31	0	0	0	0	0	31
FOR DIAGNOSTIC TESTING									
How many additional* testing equipment/ devices are needed to meet planned testing levels? (provide an estimated number, and include platform details in narrative above)	0	2	0	0	0	0	0	0	2



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BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
Volume of additional swabs needed to meet planned testing levels <sup>++</sup>	0	0	0	0	0	0	0	0	0
Volume of additional media (VTM, MTM, saline, etc.) needed to meet planned testing levels <sup>++</sup>	0	0	0	0	0	0	0	0	0

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BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
Volume of additional reagents needed to meet planned testing levels, by testing unit and platform (i.e. 100K/day - Hologic panther; 100k/day - Thermofisher)	0	0	1000/day - Thermofisher	1000/day - Thermofisher	1000/day - Thermofisher	1000/day - Thermofisher	1000/day - Thermofisher	1000/day - Thermofisher	
FOR SEROLOGIC TESTING									
Number of additional* equipment and devices to meet planned testing levels	0	0	0	0	0	0	0	0	0

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Volume of additional reagents needed to meet planned testing levels, by testing unit and platform (i.e. 100K/day - Hologic panther; 100k/day - Thermofisher)	558/day - EuroImmun	558/day - EuroImmun	558/day - EuroImmun	558/day - EuroImmun ; PerkinElmer COV-Sars DBS Kit	558/day - EuroImmun ; PerkinElmer COV-Sars DBS Kit	558/day - EuroImmun ; PerkinElmer COV-Sars DBS Kit	558/day - EuroImmun ; PerkinElmer COV-Sars DBS Kit	558/day - EuroImmun ; PerkinElmer COV-Sars DBS Kit	

\* Report new monthly additions only, not cumulative levels

++ For May and June, only include needs beyond the supplies provided by FEMA. Report new monthly additions only, not cumulative levels.