



Louisiana Statewide COVID-19 Testing Plan

FORWARD

In February 2020 the World Health Organization officially named the novel coronavirus causing COVID-19, a global outbreak of respiratory disease, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Cases of COVID-19 are identified through laboratory testing for the virus, most often through the collection of a specimen with a nasopharyngeal or nasal swab. In Louisiana, testing for the virus began February 29, 2020 and on March 9, 2020, the first case of COVID-19 in the State was diagnosed. Since then, more than 38,500 cases and 2,600 deaths associated with COVID-19 have been identified in Louisiana. As of May 27, 2020, overall positivity in the State is 11.1% since the first case, reflecting 347,647 test results, though early in the outbreak daily percent positivity neared 97%. High rates of positivity and indications of community spread led Louisiana to issue an Executive Order for residents to stay at home. Businesses, schools and recreational sites closed in an effort to reduce further transmission.

On May 11, Governor John Bel Edwards announced that Louisiana would enter Phase 1 of the State's Roadmap to a Resilient Louisiana. As we prepared to enter Phase 1, we identified the need to significantly increase testing and contact tracing efforts. During the initial six weeks of the epidemic in Louisiana, there was adequate expansion of testing among hospital, reference and academic research laboratories. The state seeks to increase testing by 100,000 tests in May (added to the baseline of 100,000 tests seen in the month of April). While initial testing was focused in areas of high positivity, testing per capita was quite varied across all parishes (counties) of the state. The variability in early testing across parishes ranged from 0.1% to 9.52% per capita. In addition, due to the high rate of positivity and death occurring in African American populations, Louisiana is working to increase testing among African Americans as well as other vulnerable and/or minority populations.

Louisiana's testing plan:

- Features a multipronged approach to test vulnerable populations, including congregate settings (such as nursing homes and correctional facilities), communities with insufficient access to testing (such as African American and rural communities), and populations that require specialized approaches to testing (such as populations with special needs).
- Leverages in-state laboratory resources with coordinated regional mapping to reduce transport time for specimens, which in turn reduces turn-around times and improves specimen integrity, as well as supporting the state economy.
- Trains staff and personnel in congregate settings to provide comprehensive education in the use of personal protective equipment, infection control strategies, and guidance on cohorting positive patients in order to aggressively mitigate transmission among positive populations.
- Incorporates multiple specimen collection types to meet the needs of the population tested, providing compassionate protocols to sensitive populations.
- Features a flexible model in testing to accommodate the needs of different settings and varying resources in partner communities.
- Includes increased access to African American and other minority populations, rural communities with reduced access to testing, and to populations with special needs.

GOALS

In addition to overall increasing the amount of diagnostic testing occurring throughout the state of Louisiana, the following are the target metrics:

- 1) Increase baseline testing by 100,000 tests by end of May
- 2) Achieve monthly testing at 4% per capita
- 3) Achieve 2% per capita tested in all parishes by the end of May
- 4) Achieve state positivity of 10% or less as a state and regionally

POPULATIONS TESTED

Congregate populations

Louisiana has 270 nursing home and 8 skilled nursing facilities. The test plan is to test for the SARS COVID-19 virus, using Real-Time Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) analysis. All nursing home residents and staff will be tested as part of a statewide initiative to reduce the positivity in nursing home settings. Testing nursing homes is the first priority within congregate settings. It is estimated that this testing will take two weeks to accomplish and will be completed by the end of May. Test collection will be conducted using several models. The first collection model is one that features nursing homes collecting specimens, using the healthcare worker staff employed by the nursing homes. The second model is utilization of “Strike Teams” assembled by the Office of Public Health. Strike teams composition is described more completely in the following sections. The third model utilizes contracted, trained collectors.

Once the initial canvass of all nursing homes is completed, subsequent testing will follow on a weekly basis for all negative residents and staff for the month of June. Positive staff will quarantine for two weeks and will return to work utilizing CDC recommended essential healthcare worker precautions. From July through December, all negative staff will be tested weekly. These intervals and extension of testing will be adjusted as deemed necessary by the Office of Public Health Epidemiology experts to proactively mitigate transmission of infection. As CDC issues additional guidance on intervals of testing and serological testing, this protocol may change to a different model through the progression of the testing from May through December 2020.

The same interval testing will be recommended in the following congregate settings:

- Incarceration and state facilities
- Developmentally Disabled group homes
- Adult care residential facilities

Louisiana expects that the state may assist with some of these collections as well. To facilitate technical assistance to the congregate setting staff, the state has contracted external Strike Teams that will offer infection control consultation, sample collection and PPE education.

Community populations

Testing at the community level is designed to be flexible and responsive to the needs of populations with historically poor access to healthcare and mistrust of the medical community. The goal of community based testing is to meet Louisiana’s vulnerable populations in their own communities and to deliver testing resources in a way that removes many of the traditional access barriers such as transportation and medical insurance. Testing delivered at the community level is targeted toward parishes and zip codes with high positivity relative to total testing, areas where there has been little testing to date and areas where African Americans and other minority populations have had little or no testing access. This testing is data driven, using a 14-day rolling average of total testing, positivity rate, and testing rate relative to population. The specimen collections are performed by trained clinical staff, personnel including activated Louisiana National Guard soldiers, local Federally Qualified Health Centers (FQHCs) and safety net partners such as rural health clinics.

The state has an extensive network of FQHCs with 36 organizations operating 260 clinic sites across the state. These safety net partners have committed to increasing their testing within their clinics. A recent survey identified that the main rate limiting factor in increasing collection was the availability of collection kits. The State and the United States Department of Health & Human Services are working together to ensure that the FQHCs have sufficient collection kits for their testing needs.

Similarly, in some areas rural health clinics and other “free clinics” have partnered with the State to ensure low-income and rural citizens have access to no cost testing. Louisiana has 170 rural health clinic sites. While federal and state law ensures all private insurers provide first dollar coverage for COVID-19 testing and public insurance provides such testing at no cost, some facilities charge a nominal or other fee for an office visit. Many FQHCs, rural health and free clinics have stepped up to provide true no cost testing.

Much like mobile testing sites, there have been community partners such as hospital and outpatient ambulatory consortia, who have provided testing, and will continue to do so. These sites may be located in a commercial or drive-thru setting. These testing sites will continue to be supported and monitored by the State. In addition, the State will partner with existing community based organizations and funded partners to support staff time associated with community based testing efforts as determined by the Regional Medical Directors in each of Louisiana’s nine health regions. Finally, the State will facilitate delivery of in-home testing for contacts identified as part of Louisiana’s comprehensive contact tracing initiative.

Special Groups

Groups which require special collection provisions include the following:

- **Elderly at home**

Partner organizations who go into to the homes of elderly clients, as part of their normal business operations, will be utilized in facilitating in home collections of the elderly who have limited transportation. Saliva specimens will be utilized to reduce any trauma to the patients.

- **Mission and homeless shelters**

Much like the mobile testing operations, mobile units will be utilized in travelling to various missions and homeless shelters to bring testing to this transient population.

- **Migrant workers**

While migrant workers may not be comfortable with traditional collection sites, faith based communities will partner with the state to provide testing in a trusted setting. With several factory operations concentrated in a small area of our state, this population cannot be overlooked. Occupational outbreaks among migrant workers have been identified and some testing in these populations has already occurred.

Each of the nine regions will name a regional testing coordinator who will work directly with the Office of Public Health who will deploy testing teams, distribute specimen collection kits, monitor utilization of those kits, and monitor the processing of specimen delivered to the state lab. Each region will deploy a state and contracted community-based, mobile testing and congregate setting testing teams, as well as coordinate with private sector testing programs, such as those operated by CVS, Fresenius, Walgreens, and Walmart. All lab results, negative and positive, are required by rule to be reported to the Office of Public Health. Reporting takes place through an electronic lab system that includes point of care testing. The Office of Public Health reports laboratory results to the CDC daily.

DIAGNOSTIC TESTING

Population Counts

Type of Testing	# of people to be Tested
Congregate	114,276
Community	254,610
Special Groups*	40,000
Total	408,886

*Data on this population still being gathered.

Census of the facilities was obtained for both residents and staff. Initial testing has shown that asymptomatic healthcare workers are often positive for COVID-19. As this is of great concern in transmission of disease, Louisiana intends to test all individuals in congregate settings.

Congregate Settings Populations

Congregate Setting	Number of Residents	Number of Staff	Total
Nursing Homes	25,405	25,597	51,002
Incarcerated Facilities	43,449	5,000	48,449
Group Homes for the Developmentally Disabled	4,053	900	4,953
Adult Care Facilities	5,900	3,972	9,872
Grand Total	78,807	35,469	114,276

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Epidemiological guidance is to retest negative patients at regular intervals in a congregate setting where positive cases have been identified and the opportunity for disease spread is great. While intervals may be adjusted based on positivity of the settings, for planning purposes the following testing intervals were established for all congregate setting testing:

Month	Trip	Day	Test
May- Initial	1	Initial= Day 0	All residents & staff
June- Weekly follow-up	2	Day 14	Positive (post quarantine) and negative residents and staff
	3	Day 21	Negative residents and staff
	4	Day 28	Positive (post quarantine) and negative residents and staff
	5	Day 35	Negative residents and staff
July- Dec Weekly follow-up for negative staff	6-32	Weekly follow-up	Negative staff

The algorithm model assumed an initial 15% positivity, with each subsequent week having lower positivity rates (14%, 13%, 12%, 11%) until August which then continues with a 5% positivity rate until December 2020. The resulting tests will be required for this regiment:

Congregate Setting	# Facilities	# Individuals To Test	# Total Tests for Regiment May-Dec
Nursing Homes & Skilled Nursing Facilities	8	51,002	897,934
Incarceration Facilities	128	48,449	348,200
Developmentally Disabled Group Homes	511	4953	45,725
Assisted Living Facilities	157	9872	148,626
Grand Total	1066	114,276	1,440,485

Community Settings

Community Setting	# Facilities	# Individuals To Test	# Total Tests projected
Community Based Fixed & Mobile	27+	179,250	179,250
FQHCs	260 sites	75,360	75,360
Contracted Regional Partners*	N/A	-	-
Grand Total		254,610	254,610

Special Groups

Elderly at home, mission and homeless shelters, and migrant workers continue to be identified as groups in need of increased testing. Partners such as the Council on Aging, home health providers and faith based community organizations will assist with testing these populations. The total test collections are anticipated to be 269,000 tests from May-December.

MONTH BY MONTH TEST COLLECTIONS

TESTS MONTH TO MONTH									
Collection Type	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Nursing Homes & Specialized Nursing Facilities (SNF)	49836	158608	107759	85903	101842	81876	81076	101342	768242
Incarcerated	500	15500	20500	20500	15000	5000	1000	1000	79000
Group Homes	0	3000	1000	1000	0	0	0	0	5000
Adult Care Residential Facilities	18538	65081	38063	31503	39462	31570	31570	39462	295249
State Facilities	3000	1000	750	250	0	0	0	0	5000
Elderly	0	35000	35000	35000	35000	35000	35000	35000	245000
Homeless Shelters	1000	2000	2000	2000	2000	2000	2000	2000	15000
Migrant Workers	500	1500	1500	1500	1000	1000	1000	1000	9000
Community Based Testing Sites	26250	63000	15000	15000	15000	15000	15000	15000	179250
Federally Qualified Health Centers (FQHCs)	9100	18200	8010	8010	8010	8010	8010	8010	75360
Contact Tracing	1000	2000	4000	8000	8000	10000	10000	10000	53000
Surveillance/Asymptomatic	0	0	0	3000	5000	5000	5000	3000	21000
Grand Total	109,724	364,889	233,582	211,666	230,314	194,456	189,656	215,814	1,750,101
GRAND TOTAL	1,750,101								

Using the testing algorithm and estimated retesting, the above chart estimates the composite of testing needed for the Louisiana Test Plan from May-December 2020.

LABORATORY CAPACITY

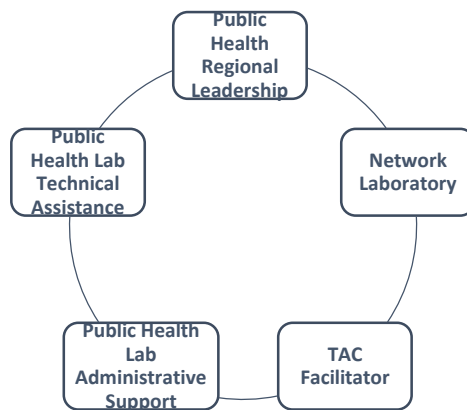
The state formed a Testing Action Collaborative comprised of multi-sector stakeholders statewide to design a collaborative testing model. Testing was parsed into three categories:

- 1) **Intrinsic** testing that is currently occurring in hospitals and community laboratories and is supporting the medical operations, healthcare workers and first responders in the community
- 2) In state reference laboratories, labeled as “**network**” who have higher throughput capacity, ensure turn-around times of 24-48 hours from receipt of specimens and can provide customer training, support and outreach, as well as courier services. This includes the state public health lab. The plan is to utilize these laboratories to test the congregate setting samples.
- 3) Out of state **commercial** laboratories who have even higher throughput capacity, but are not able to prioritize specific samples or offer the rapid turn-around times that local labs can. These labs will continue to test the mobile testing and FQHC samples. Commercial laboratories are able to accommodate the volume of testing as driven by the collection kits they provide.

The laboratory testing plan provides a regionalized approach and prioritizes laboratory testing within the communities where they are located, when possible. This regionalized approach allows for shorter transports (and thus shorter turn-around-times for testing); better specimen integrity during transport; and a more long-term infrastructure for continued testing which also supports the local economy. While the network laboratories are continually increasing their capacity, the current data which follows was used for planning purposes.

To manage the multiple network laboratories, the state created a hub and spoke model to give each regional leadership team and network laboratory a support framework. Facilitation arose out of the Testing Action Collaborative and was enhanced with laboratory technical masters to form multi-specialty assistance to transition from the current testing process of using the state lab, to using a private lab, complete with their own processes, paperwork and reporting. See the visual below to represent the support network provided to each public health region and laboratory.

Network Testing Support Model



Network Laboratory Testing

Network Lab	Daily Viral Testing Capacity RT-PCR	Test Plan Capacity May-June = 45 days	Test Plan Capacity (Jul-Dec) =184
Stone Clinical Laboratories, LLC	8,000	360,000	1,472,000
Tulane University Health Sciences Center	100	4,500	18,400
Louisiana State University- Health Science Center- Shreveport: Emerging Viral Threat Laboratory	1,200	54,000	220,800
Omega Diagnostics, LLC	1,000	45,000	184,000
Premier Laboratory Services	3,000	135,000	552,000
Louisiana Office of Public Health Laboratory	1,000	45,000	184,000
Curative Incorporated	2,000	90,000	368,000
Quest Diagnostics Incorporated	3,000	135,000	552,000
State Network Labs Capacity Totals	19,300	868,500	3,551,200

Emergency contracts provide for testing. These daily capacity values are dependent on the laboratories’ ability to procure the required supplies and reagents. This has been an ongoing challenge for all laboratories.

Out of State Laboratory Testing

Curative Incorporated is an out of state laboratory that provides a kit for oral fluid RT-PCR testing. The kit is self-collected with observation by a trained healthcare worker and sample is shipped out of state to be testing within 24 hours of receipt. This vendor has the capacity to provide large volume testing. A purchase order has been secured to provide these kits, which include shipment and analysis.

TOTAL CAPACITY NEEDED versus AVAILABLE

Test Setting	CAPACITY NEED PROJECTED			CAPACITY AVAILABLE
	# Tests May/June 2020	# Tests Jul-Dec 2020	Total Testing	Lab Testing Available
Congregate Settings	315,063	837,428	1,152,491	3,551,200 in-state
Community Settings	116,550	138,060	254,610	
Special Groups	40,000	229,000	269,000	
Total	471,613	1,204,488	1,676,101	

Contracting to allow for the following testing by month with partner and network laboratories:

PROJECTED TESTS MONTH TO MONTH									
Collection Type	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
STONE	29947	98599	60992	50279	61413	49133	49133	61413	460909
OMEGA	12118	42536	27033	22371	28024	22419	22419	28024	204944
TULANE	1000	2000	2000	2000	2000	2000	2000	2000	15000
PREMIER	0	36000	36000	36000	36000	36000	36000	36000	252000
LSUHS	21809	76554	49547	41006	51367	41094	41094	51367	373838
OPH LAB	13500	16000	21000	18000	20500	20800	30000	30000	159800
CURATIVE	0	15000	20000	23000	20000	10000	6000	6000	100000
Grand Total	78374	286689	216572	192656	214304	181446	181646	214804	1566491
GRAND TOTAL	1,566,491								

CONTACT TRACING

Testing across all populations is the critical first step to Louisiana’s contact tracing system. This system is activated when the Office of Public Health’s Infectious Disease Epidemiology receives a positive test result through electronic laboratory reporting. Louisiana rules require that all COVID-19 related laboratory values, both PCR and serology and both reactive and non-reactive be reported swiftly to the state. The Department has upgraded its electronic laboratory reporting system recently to expand electronic reporting capacity beyond large laboratories to include point of care testing taking place in clinics across the state to ensure the state receives the largest proportion of SARS-COV-2 tests possible. Any positive results received by the Department are routed to the state’s customer relationship management (CRM) system, and a trained contact tracer will reach out to the identified case to gather information about their clinical history, provide guidance, and generate a list of everyone the case has been in close proximity to for the 2 days prior to developing symptoms and all subsequent days until the individual isolated. Those people who have come into contact with the case during the presumed period of infectiousness are called contacts. The CRM system is also used to direct contact tracers to engage with close contacts using motivational interviewing techniques to determine whether there was a likely exposure. For any contact who is currently asymptomatic and ambulatory, they will be provided guidance to quarantine for 14 days. For any contact who is experiencing symptoms of COVID-19 - even if those symptoms are mild - the call center team member will enter an order for an at-home test to be performed. The call center team member will also conduct a short needs assessment to determine the contact’s housing stability, food security, and other social determinants of health measures.

This testing plan projects laboratory testing of 53,000 contacts traced to positive individuals.

In order to implement a contact tracing system, a data collection and workflow automation CRM platform is being integrated; call center staffing solution is being implemented to provide up to 400-700 qualified staff to conduct contact tracing; support services are being coordinated that will allow for linkage to community services that can address

important needs of those who are isolated or quarantined at home; and a means to deploy on-demand testing to contacts that have been identified as needing COVID-19 testing is being developed.

A Contact Tracing Action Collaborative (CTAC) has been established to address the infrastructure needs for implementing a comprehensive, statewide case investigation/contact tracing program. Participation includes experts across the Office of Public Health from Infectious Disease Epidemiology, Bureau of Health Informatics, the Testing Action Collaborative, and the Office of Technology Services. External participation includes hospital systems, both private and public, and other epidemiology professionals from institutions of higher education. Work to date has included an evaluation of available technology platforms and features as well as identifying Louisiana-based call centers. Several partnerships have been engaged to assist with all aspects of the process and to ensure robust, evidence based practices. Lastly, emergency response resources have been leveraged to provide telephonic resource coordination for contacts and cases identified through contact tracing. These resource coordinators will manage caseloads specific to their region of the state, and follow up as needed throughout individuals' recommended quarantine or self-isolation periods.

SURVEILLANCE

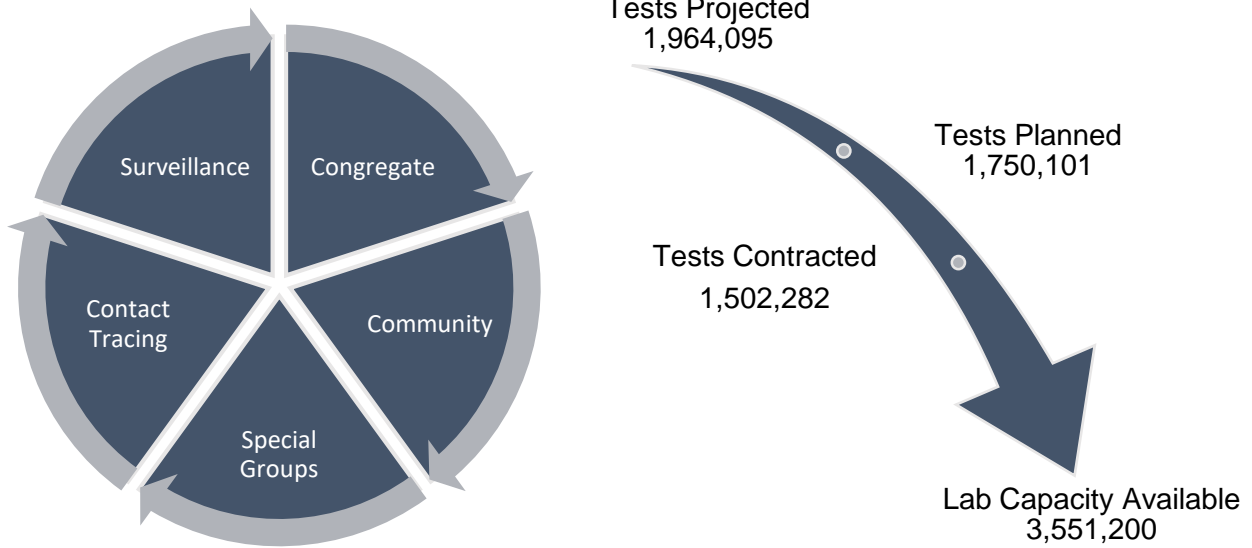
The State will operate a sentinel surveillance system which includes diagnostic and serologic testing for both sentinel and vulnerable populations. This system includes diagnostic testing for at least two school-based health clinics in each of the nine health regions of the state which will test at least 500 students and staff at each site each month; at least two nursing homes in each of the nine health regions of the state which will test at least 250 residents and staff at each site each month; and at least two other congregate settings in each of the nine health regions of the state which will test at least 100 residents and staff at each site each month. Additionally, the state will test these same populations at least once with serologic tests to monitor seroprevalence, and this may be repeated every one to two months after.

This testing plan projects 21,000 diagnostic tests and 50,000 serology tests.

Network laboratories are actively validating for serological testing. This testing is also anticipated to be integral to the testing strategies and policies to provide test results as a component of returning the workforce to their work.

SUMMARY

Louisiana's state test plan includes multiple channels of access to broadly test individuals for COVID-19 virus. By engaging partnerships, providing ready access, ensuring sensitivity in the collection process, and distributing testing throughout the state in regional testing laboratories, a network of robust diagnostic information will provide the information needed to make critical decisions to reopen the state and restart the economy amid this pandemic.



Multiple projections have been presented to demonstrate the state’s objective and expansive review of available avenues for testing. The target is to test as large a percentage of the population as possible, as quickly, as conveniently, and as cost-effectively as possible. In order to be strategic and effective, the census of various vulnerable populations was identified to result in 3 major groups of people to be tested first: congregate settings, community testing, and groups that need special operations to achieve testing. From that census, a planning algorithm was incorporated that projects the number tests needed to achieve that testing goal. While the projections were based on a “worst case scenario” of tests needed, planning was developed to identify testing partners and timelines. Those planning volumes were then contracted to network laboratories. While excess capacity and contracting is available, the plan is launched and the work is underway with the resources identified. While May and June are focused on testing, contact tracing and surveillance will be the foundation moving forward as we work to return our residents to work and prevent reinfection.