2020 Overarching Jurisdictional SARS-COV-2 Testing Strategy

Jurisdiction:	Alabama
Population Size:	

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

- a) In anticipation of the Alabama Department of Public Health (ADPH) accommodating anticipated increased demands for SARS-CoV-2 testing, the Bureau of Clinical Laboratories (BCL) surveyed testing laboratories throughout Alabama to determine SARS-CoV-2 testing volume, platforms, capacity and barriers in April 2020. Continuing capturing of this information is allowing the BCL to strategically determine specimen distribution based on available medium to high throughput testing platforms at the hospital, research, and commercial laboratories surveyed in efforts to achieve a minimum of 2% monthly testing of the state's population. Testing partnerships are being established with three commercial laboratories and one academic institution. The BCL has partnered with academic institutions to assist with formulating viral transport media, preparing collection kits, and specimen collection. Abbott ID NOW instruments have been distributed to 13 facilities throughout the state based on lack of testing as well as elevated positivity rates. The BCL also plans to hire additional staff and procure additional testing platforms and reagents. An additional 20 Abbott ID Now instruments will be ordered as soon as Abbott begins accepting orders. These additional testing instruments will be distributed across the state where most needed. The instruments will be relocated and moved as needed.
- b) Currently, ADPH is working with academic institutions and community groups to bring specimen collection opportunities to communities with a focus on vulnerable and at-risk populations. Partnerships are being developed with Housing Authorities, Historically Black Colleges and Universities, religious affiliations including rural churches and leaders, group homes with who have intellectual and physical disabilities, long term care facilities, industrial and manufacturing plants, homeless shelters, and Federally Qualified Health Care Centers to name a few. The department's approach has expanded beyond county health department specimen collection clinic sites to community settings that are more easily accessible, comfortable, and convenient. ADPH recently partnered with Alabama State University (ASU) to pilot a targeted screening for a local Housing Authority community with a vulnerable population. The clinics are held twice weekly within walking distance from the housing complex. ADPH is also working with Tuskegee University to expand testing capabilities in the Blackbelt counties, with an initial focus on Bullock, Macon and Lowndes counties. Through our partnership with Faith in Action Alabama, which has over 850 member congregations, church pastors are partnering with ADPH to reach their church members in order to share educational materials on COVID -19 and to encourage screening and testing for those needing it. These and other partners are assisting ADPH in identifying vulnerable communities including African American and Latino communities throughout the state where access to testing locations may present barriers to being tested. As communities are identified and testing locations secured, departmental staff are working closely with these partners at the local, regional and state level.

- c) ADPH will continue to partner with academic and commercial labs to develop expanded and sustainable testing strategies for both diagnostic and serologic. The BCL will consider implementing a serology test based on CDC's recommendation and in consultation with ADPH epidemiology staff.
- d) The BCL will continue to survey testing partners monthly by email to determine inventory and staffing and will host conference calls with partners to discuss continuity of operation plans.

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*	98,064	98,064							196,128
Serology									0
TOTAL	98,064	98,064	0	0	0	0	0	0	

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	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
ADPH	Drive-thru testing site	Bureau of Clinical Laboratories	500			Rural, minority, access to care
Private providers	Hospitals or clinical facility	Bureau of Clinical Laboratories	500			Hospitalized, Incarcerated, Long term care facilities, meets ADPH testing requirements
Private providers, hospitals, community drive-thru clinics	Commercial or private lab	Diatherix	5,000			Hospitalized, Incarcerated, Long term care facilities

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	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
Private providers, hospitals, community drive-thru clinics	Commercial or private lab	AEL	151			Hospitalized, Incarcerated, Long term care facilities
Private providers, hospitals, community drive-thru clinics	Commercial or private lab	Assurance	392			Hospitalized, Incarcerated, Long term care facilities
Private providers, hospitals, community drive-thru clinics	Commercial or private lab	Labcorp	500			Hospitalized, Incarcerated, Long term care facilities
Private providers, hospitals, community drive-thru clinics	Commercial or private lab	Quest	64			Hospitalized, Incarcerated, Long term care facilities
Walgreens	Drug store or pharmacy		4			Clients
Baptist Medical Centers	Hospitals or clinical facility		100			Patients
Childrens of Alabama	Hospitals or clinical facility		100			Pediatric patients

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	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
University of Alabama at Birmingham	Hospitals or clinical facility		200			Patients
Private providers, hospitals, community drive-thru clinics	Commercial or private lab	Synergy Laboratories	480			
Private providers, hospitals, community drive-thru clinics	Commercial or private lab	Core Diagnostic Laboratories	600			
Veterans Affairs Medical Center	Hospitals or clinical facility		96			Veterans
ApproXie Health Urgent Care	Hospitals or clinical facility		150			Tests for private providers, hospitals, community drive-thru clinics

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) The Alabama Department of Public Health (ADPH) is meeting the target of testing 2% of the state population for May with the current statewide capacity of ADPH Bureau of Clinical Laboratories (BCL), academic, hospital and commercial laboratories. The BCL has expanded testing by incorporating use of the Hologic Panthers. The BCL will expand initially by procuring two Cepheid GeneXpert within the next few months with plans to acquire the Roche Cobas 6800, an additional Hologic Panther, two Thermo King Fishers, and two Applied Biosystems QuantStudio 5s by the end of 2020. The BCL will query the testing facilities during the monthly survey to determine planned expansion capacity. Testing partnerships have been established with three commercial laboratories and one academic institution, further expanding the capacity of the BCL to handle a surge in testing.
- b) Weekly analysis of reported tests is conducted to identify the statewide and county level percent of the population tested to identify geographic areas that are not meeting the 2% population tested monthly goal. Those areas will be prioritized for outreach and additional ADPH drive-thru testing sites. Populations and communities will also be prioritized using tools, such as the Social Vulnerability Index and Census data. ADPH will partner with community leaders, academic and religious community partners to facilitate outreach and training to expand testing capability and capacity in rural and underserved populations. Communication gaps in counties and communities not reached effectively will continue to be identified and solutions, including the development of multi-lingual tools for vulnerable populations with language barriers and implementing varied messaging deliveries. Mobile testing capacity will be established to facilitate testing access for areas with transportation barriers. Finally, a sustainable infrastructure to rapidly and effectively address outbreaks and ongoing transmission in congregate and healthcare settings will be established through augmenting existing Public Health District Healthcare Coalition, Emergency Preparedness and county health department resources through the addition of staff and supplies and the implementation of Disaster and Disease Outbreak Response Teams in each Public Health District.
- c) The BCL has partnered with academic institutions to assist with formulating viral transport media, preparing collection kits, and specimen collection. Barriers identified during the monthly survey will be addressed during the conference calls with partners. Partners will be able to discuss commonalities such as testing demands, accessibility to reagents and consumables, and electronic reporting to devise strategies to assist each other in overcoming these barriers and share innovative ideas. The BCL will continue to obtain available supplies, reagents, and test kits from the International Reagent Resource and order remaining materials. The ADPH Center for Emergency Preparedness (CEP) will provide logistical support to procurement, storage, inventory management and distribution of supplies and equipment for specimen collection, storage and staffing of ADPH-sponsored drive-thru testing clinics and mobile testing activities. The expansion of Emergency Preparedness teams and Healthcare Coalitions within the public health districts and the improvement of the information technology infrastructure will further expand the capacity to rapidly identify local supply-chain issues through information exchange and situational awareness, as well as the capability to rapidly transport high-priority specimens to the BCL or contracted laboratory. ADPH will address the challenges experienced

with onboarding new laboratories reporting electronically through offering expanded information technology support and funding the initiation of that capability with the laboratory information management systems used by the new laboratories.

- d) The Roche Cobas 6800 will be considered for serological testing after consultation with ADPH epidemiology staff for its best use in COVID-19 surveillance for Alabama. ADPH will continue to partner with academic and commercial labs to develop expanded and sustainable testing strategies for both diagnostic and serologic testing.
- e) ADPH plans to establish an organizational division to specifically address emerging and re-emerging infectious diseases that will provide the infrastructure long-term required to fully integrate epidemiology, information technology, data analysis and reporting, infection control guidance, healthcare facility and institutional outbreak investigation, and monitoring for "hotspots" to rapidly address and mitigate local community transmission before it becomes widespread. This division will include epidemiologists and disease intervention specialists based in the public health districts to more effectively implement and monitor testing, surveillance and mitigation activities at the community-level. By having these human resources in place, the capability to rapidly scale up and maintain an effective public health response and the capacity to conduct ongoing surveillance, outreach and prevention activities will be established.
- f) In accordance with the Code of Alabama, 1975 Section 41-16-23, and the declaration of Emergency from Governor Kay Ivey, the Alabama Department of Public Health requested and received approval to make critical emergency purchases without having to follow the normal procurement policies and procedures. ADPH may procure all necessary supplies, reagents, test kits, collection materials, and any other needed items to meet the demands of Covid-19 testing. The department currently has contracts with many vendors that can supply these items. However, the declaration of emergency allows the department to procure these items from any vendor that can supply the necessary items.

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	10	4	6	4	6			30
			FC	OR 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)		2	2	2	2				8
Volume of additional swabs needed to meet planned testing levels ⁺⁺			100,000						100,000
Volume of additional media (VTM, MTM, saline, etc.) needed to meet			100,000						100,000

BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
planned testing									
levels**									
Volume of additional reagents needed to meet planned testing levels, by testing unit and platform (i.e. 100K/day - Hologic panther; 100k/day - Thermofisher)		180/day - GeneXpert	180/day GeneXpert; 350/day Thermo	180/day GeneXpert; 350/day Thermo; 280/day Cobas; 250/day Hologic Panther	180/day GeneXpert; 700/day Thermo; 280/day Cobas; 250/day Hologic Panther	180/day GeneXpert; 700/day Thermo; 280/day Cobas; 250/day Hologic Panther	180/day GeneXpert; 700/day Thermo; 280/day Cobas; 250/day Hologic Panther	180/day GeneXpert; 700/day Thermo; 280/day Cobas; 250/day Hologic Panther	
			F	OR SEROLOGIC	TESTING				
Number of additional* equipment and devices to meet planned testing levels									0
Volume of additional reagents needed to meet planned testing levels, by testing unit and platform (i.e. 100K/day - Hologic panther;									

BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
100k/day -									
Thermofisher)									

^{*} 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.