2020 Overarching Jurisdictional SARS-COV-2 Testing Strategy

Jurisdiction:	Alabama
Population Size:	4,903,185

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 and again in June 2020. The current statewide testing capacity exceeds the ability to test 2% of the state population per month. Continuing to collect this information allows ADPH to strategically determine specimen distribution based on availability to high throughput testing platforms at the hospital, research, and commercial laboratories in the event of a surge in testing and to expand collaborative efforts to ensure barriers to testing are addressed. Testing partnerships are being formalized with four commercial laboratories and one academic institution to support a rapid expansion of testing. The BCL has partnered with academic institutions to assist with formulating viral transport media, preparing collection kits, and specimen collection. The ADPH is a partner with the University of Alabama at Birmingham (UAB) to provide every college student attending a public four-year and twoyear college an opportunity to be tested prior to reentry to campus. The ADPH is also partnering with the Area Health Education Centers to collect specimens in Alabama's rural and underserved communities that will be tested by UAB. Abbott ID NOW instruments have been distributed to 14 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 have been ordered. These additional testing instruments will be distributed across the state where most needed. The capacity for point of care (POC) testing to address local outbreaks will be expanded through the strategic placement of POC instruments in each health department, and mobile testing units will be purchased and will deploy with district strike teams to outbreak locations for POC testing.

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 residents 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 Federation, 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) The BCL with establish the capability to conduct serological antibody testing using the Roche Cobas e411 and 6000. ADPH will partner with at least one academic institution to collaborate on design, implementation, and analysis for seroprevalence surveillance implementation projects in two counties or communities and at least one special vulnerable population. The communities and vulnerable population(s) will be determined based on the latest data available during the planning phase.
- d) The BCL has recently implemented an automated electronic survey to routinely assess statewide testing capacity and platforms in use for both diagnostic and serologic testing. The survey, currently distributed monthly, also provides the opportunity for laboratories to indicate barriers to testing at full capacity and other concerns, such as availability of supplies, media and staffing. Additionally, the BCL will host conference calls with partners to discuss and update the overall state testing strategy, provide safety guidance and 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	98,064	98,064	98,064	98,064	98,064	98,064	784,512
Serology							500	500	1,000
TOTAL	98,064	98,064	98,064	98,064	98,064	98,064	98,564	98,564	

^{*}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)
ADPH	Drive-thru testing site	Bureau of Clinical Laboratories	300		Rural, minority, access to care
Private providers	Hospitals or clinical facility	Bureau of Clinical Laboratories	420		Hospitalized, Incarcerated, Long term care facilities, meets ADPH testing requirements
Hospitals, Long- term care facilities, Rehabilitation facilities,	Commercial or private lab	Diatherix	1,200	0	Hospitalized patients, People with limited access to care

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)
Outpatient clinics, Urgent care, community drive-thru clinics					
Private providers, hospitals, community drive-thru clinics	Commercial or private lab	American Esoteric Laboratories	500	280	Older adults, People with underlying conditions, People experiencing homelessness, Rural communities, People with limited access to care, Minority populations, Uninsured and Underinsured individuals, Hospitalized patients, Incarcerated populations, Food processing and manufacturing plants, Long term care residents
Public health department, Commercial or private labs, Drug store or pharmacy, Drivethru testing, Hospital or clinical provider, FQHC, Community-	Commercial or private lab	Assurance Scientific Laboratories	5,200	0	Older adults, People with underlying conditions, People experiencing homelessness, Rural communities, People with limited access to care, Minority populations, Uninsured and Underinsured individuals, Hospitalized patients, Incarcerated populations

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)
based, Employers return to work on site					
Private providers, hospitals, community drive-thru clinics	Commercial or private lab	Labcorp	2,000		Hospitalized, Incarcerated, Long term care facilities
Private providers, hospitals, community drive-thru clinics	Commercial or private lab	Quest	100		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	Specific at-risk populations targeted (list all)
University of Alabama at Birmingham	Hospitals or clinical facility		200		Patients
Hospitals, Long- term care facilities, Rehabilitation facilities, Outpatient clinics, Urgent care, community drive-thru clinics	Commercial or private lab	Synergy Laboratories	1,500	0	Older adults, Long term care facilities, People with underlying health conditions, Rural communities, People with limited access to care, Minority populations, Uninsured and under-insured individuals, Incarcerated populations, Hospitalized patients, Veteran homes
Private providers, hospitals, community drive-thru clinics	Commercial or private lab	Core Diagnostic Laboratories	600		
Veterans Affairs Medical Center	Hospitals or clinical facility		100		Veterans
ApproXie Health Urgent Care	Hospitals or clinical facility		150		Tests for private providers, hospitals, community drive-thru clinics

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)
Public health department, Hospital or clinical provider, FQHC, Community-based	Commercial or private lab	Golden Point Scientific Labs	1,500	0	People with underlying conditions, People experiencing homelessness, People with limited access to care, Minority populations, Uninsured and Underinsured individuals, Incarcerated populations, Long term care residents
Long-term care facilities	Commercial or private lab	Exceltox	40	0	Long term care residents
Hospitals, Rehabilitation facilities, Outpatient clinics, drive- thru clinics	Hospitals or clinical facility	Riverview Regional Medical Center	15	0	Older adults, Hospitalized patients, Patients with minor symptoms or exposures
Hospitals, Rehabilitation facilities, Long- term care facilities, Urgent Care, Outpatient clinics, drive- thru clinics	Commercial or private lab	Proteus Molecular and Clinical Lab, LLC	130	0	Older adults, Long-term care facility residents, People with underlying medical conditions, Rural communities, Minority populations,

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)
Hospitals, drive- thru clinics	Hospitals or clinical facility	Northeast Alabama Regional Medical Center	60	0	People with limited access to care, Minority populations, Uninsured or Under-insured individuals, Hospitalized patients
Lyster Army Health Clinic	Hospitals or clinical facility		40	0	Outpatients
Hospitals, Long- term care facilities, Outpatient clinics	Commercial or private lab	LabFirst Department of Pathology	1,000	0	Pre-procedure hospital patients
Hospitals, Outpatient clinics, Urgent care, drive-thru clinics	Hospitals or clinical facility	UAB Fungal Reference Lab	150	0	Older adults, People with underlying conditions, People with limited access to care, Minority populations, Uninsured or Under-insured individuals, Hospitalized patients
Cullman Regional Medical Center	Drive-thru testing site	Cullman Regionial Medical center	25		Rural communities, Hospitalized 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	Specific at-risk populations targeted (list all)
Public health department, Hospital or clinical provider, FQHC, Community-based	Commercial or private lab	Integrity Laboratories	200	0	Older adults, Long-term care facility residents, People with underlying medical conditions, People experiencing homelessness, Rural communities, People with limited access to care, Minority populations, Uninsured or under-insured individuals, Incarcerated Populations, Hospitalized patients, Food processing and manufacturing plants, Other congregate living locations
Auburn Pediatric and Adult Medicine	Hospitals or clinical facility		25	0	Outpatients
Hospitals, Long- term care facilities, Rehabilitation facilities, Outpatient clinics, Urgent care, Third party laboratories	Commercial or private lab	Access Medical Laboratories	20	30	

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)
Bibb Medical Center	Hospitals or clinical facility		20	5	
By contract	Commercial or private lab	ARUP Laboratories	40	20	
Athens Limestone Hospital	Hospitals or clinical facility		30	0	
Hospitals, Long- term care facilities, Rehabilitation facilities, Outpatient clinics, Urgent care	Commercial or private lab	AIT Laboratories	18	40	
Hospitals, Outpatient clinics, Urgent care	Commercial or private lab	Warde Medical Laboratory	38	40	
Shelby Baptist Medical Center	Hospitals or clinical facility		35	0	

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)
Hospitals, Long- term care facilities, Outpatient clinics	Hospitals or clinical facility	Whitfield Regional Hospital	72	72	
Marshall Medical Center South	Hospitals or clinical facility		25	0	
Long-term care facilities, Rehabilitation facilities, Outpatient clinics, Urgent care	Commercial or private lab	Madison Core Laboratories	900	0	
Public health department, Hospital or clinical provider, FQHC, Community-based, detention centers and jails	Commercial or private lab	PathGroup	500	50	Older adults, Long-term care facility residents, People with underlying medical conditions, People experiencing homelessness, Rural communities, People with limited access to care, Minority populations, Uninsured or under-insured individuals, Incarcerated Populations, Hospitalized patients, Other congregate

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)
					living locations, Migrant farmer communities

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 currently exceeding the target of testing 2% of the state population 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 continues to expand capacity by procurement of two Cepheid GeneXperts. One has been received, and the other is anticipated to arrive soon. There are 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 and are in the process of being formalized with four commercial laboratories and one academic institution, further expanding the capacity of the BCL to handle a surge in testing. Testing capacity at the local level will be expanded by the strategic placement of two point of care (POC) instruments in each Alabama public health district. Eventually, at least one POC instrument will be placed in each county health department.

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 GIS analysis of testing sites and testing coverage, the Social Vulnerability Index and Census data to identify areas that require more proactive and targeted outreach. 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. Additionally, ADPH will work with the Business Council of Alabama and Department of Agriculture and Industry to identify high-risk employment settings, including meat processing and large manufacturers to ensure that testing is available in the surrounding areas, and external and internal stakeholders that work with congregate settings such as homeless shelters and correctional facilities. ADPH is working with the Alabama Nursing Home Association on the implementation of a baseline testing plan for largescale, statewide testing of residents and employees in long-term care facilities. ADPH will assist in funding initial large-scale laboratory testing performed at long-term care facilities. To facilitate testing, ADPH will also provide the specimen collection kits needed to obtain specimens for testing and will make specimen collection kits available to various facilities. 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 Coalitions, Emergency Preparedness and county health department resources through the addition of staff and supplies and the implementation of district strike teams in each Public Health District. The procurement of mobile testing units will further expand the capability to provide testing to communities that have

limited access to care and actively provide outreach vulnerable populations that experience barriers to testing access.

- c) The BCL has partnered with academic institutions to assist with formulating viral transport media, preparing collection kits, and specimen collection. Barriers identified from survey data 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 BCL with establish the capability to conduct serological antibody testing using the Roche Cobas e411 and 6000. ADPH will partner with at least one academic institution to collaborate on design, implementation, and analysis for seroprevalence surveillance implementation projects in two counties or communities and at least one special vulnerable population. The communities and vulnerable population(s) will be determined based on the latest data available during the planning phase.
- 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. The emergency purchasing authorization is currently available through February 2021. ADPH will routinely

assess and work to improve the ability to procure required items through the normal procurement policies and procedures in anticipation of the emergency purchasing authorization expiration.

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	0	6	4	8	6	6	30
				FOR DIAGNO	STIC 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

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*+*			100,000						100,000
Volume of additional media (VTM, MTM, saline, etc.) needed to meet planned testing levels**			100,000						100,000

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 - Thermofish er)		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		
Number of	FOR SEROLOGIC TESTING									
additional* equipment and devices to meet planned testing levels				1					1	

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							200/day	200/day	
and							Cobas	Cobas	
platform									
(i.e.									
100K/day -									
Hologic									
panther;									
100k/day -									
Thermofish									
er)									

^{*} 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.