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

Jurisdiction:	Texas
Population Size:	29 million

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

The State of Texas has expanded efforts to meet the federal expectation of testing two percent of the state's population per month, or 20,000 per day. The state goal is to achieve a testing volume of 30,000 tests per day for diagnostic testing as we enter flu season.

The overall goals of the testing strategy include:

- 1. Diagnose disease for isolation and tracing
- 2. Respond rapidly to disease outbreaks
- 3. Screen vulnerable populations
- 4. Create a network for continued surveillance and predictive modeling
- 5. Study and surveillance of the disease working with academic partners

In addition to testing being conducted at the request of traditional health care providers to provide patient care (~11,500 diagnostic tests per day), the state is focused on extending testing (an additional ~8,500 diagnostics tests per day) using mobile test units, expanded capacity and other strategies. Staffing of the mobile test units has been provided by the Texas Military Department, the Emergency Medical Task Force, and the Quick Reaction Force. The mobile units are focused on the following populations: rural communities (providing drive thru test sites where the community/county doesn't have sufficient access to testing, including the rural and frontier areas of the state); nursing homes (including executing the directive from the President and Governor that all long-term care facilities be tested on a regular basis and federal mandates to provide surveillance of nursing home populations); underserved areas in the state's urban centers focusing on minority populations; and "hot spot" responses as they occur (meat packing plants, county jails, etc.). There have been up to 64 mobile units activated with over 1,200 team members across the state and an additional 336 members serving in the state call center. The state is establishing contracts with private vendors for "local" test sites in order to retire the military mobile teams and replace their outreach with more permanent test capability/capacity. One of the contractors will be dedicated to provide testing teams for nursing home facilities across the state. The other three currently planned contractors will provide mobile testing across the state including in underserved areas. Testing also includes populations in state mental health facilities and residents of facilities for individuals with intellectual disabilities. Emergency Medical Task Force and Quick Reaction Force missions will continue.

Testing efforts are planned and executed through a collaboration of state health and human services and state emergency management agencies. Staff work together using a variety of state assets to support testing missions and accessing a vast network of contacts at the local level to ensure coordination of efforts across the state. Communication is managed with local elected officials and local public health to ensure local support for the testing. More recently, mobile test sites have been established in underserved areas of the state to focus on minority communities including in Beaumont, Dallas, El Paso, Houston, San Antonio, and the Lower Rio Grande Valley. These sites were established in coordination with local officials to ensure local buy-in and a focus in the right community locations accessible to minority populations. Local buy-in helps drive awareness and use of the sites.

The state is using a wide variety of test platforms to respond to the differing needs across diverse populations. Test platforms include the traditional high-volume RT-PCR test and low volume rapid response antigen test and PCR point-of-care tests. RT-PCR will support the majority of testing in the state while point-of care will be used for more rapid screening, particularly where these devices already exist in hospitals and other healthcare settings. The state will utilize existing instruments in laboratories around the state and will expand capacity by using new testing assays on existing equipment. These platforms exist in public laboratories, hospitals and through private companies. By diversifying equipment and assays used, the state will ensure capacity and will be less prone to shortages of reagents. Of note, Texas is using capacity in two university-based veterinary reference labs; however, the amount of testing in this facility is limited due to certain CLIA regulations. Because commercial testing is often limited by the demands of the entire country, the state has asked for flexibility in certain CLIA requirements in order to increase the volume of testing in these veterinary labs to help meet state goals. Relaxing CLIA requirements, which may require statutory changes, such as certain credentials and experience for supervision and staffing, could help the state to more effectively use these veterinary labs.

Furthermore, the state will pursue greater testing capacity through the purchase of additional PCR equipment and a partnership with a private entity. Through this additional capacity, the state will be able to reduce pressure on existing lab capacity to ensure that it is available as surge in the future. This will give the state designated surge capacity in certain university labs, hospitals and commercial labs. The state public health laboratory is also able to surge when needed to address demand.

Texas will also explore pooled testing as an option to be utilized in the future. At this time, the positivity rate in the state is high and would limit any benefit of pooled testing. However, pooling may be an effective strategy for the state in certain populations and certain situations, such as nursing homes, assisted living facilities and/or detention facilities. The state will work with labs to validate this methodology and ensure processes and procedures are in place to support the testing strategy.

The state goal for serology testing is to complete ~1 million tests within one year using the high-volume ELISA test protocol. The state will work with universities to gain strategic insight into COVID-19 through

serological testing. The goal of the seroprevalence survey is to learn about the total number of people that have been infected, track how infections progress through the population over time, plan for future health needs, and understand risk factors for disease, such as age, location, or underlying health conditions. Plans are being made for a statewide approach to serological testing, with preliminary plans involving 3 different projects:

- Estimate the prevalence of SARS-CoV-2 antibody positive status across all regions of Texas
- Estimate the prevalence of SARS-CoV-2 antibody positive status in a vulnerable population, with a focus on FQHCs
- Estimate the prevalence of SARS-CoV-2 antibody positive status in children and their parents, utilizing academic clinic settings

The state is also moving forward plans to monitor seroconversion of health care workers in select hospitals across Texas as well as other opportunities to monitor the antibody status across various Texas populations.

The testing priorities for the State of Texas have been coordinated by the Governor's Task Force to Open Texas. Representatives of the Department of State Health Services (DSHS), the Texas Division of Emergency Management (TDEM), Federal Emergency Management Agency (FEMA), Texas Military Department (TMD), and the Governor's Supply Chain Strike Force have collaborated on test strategy, metrics, and execution. The team monitors the tests per day and ensures adequate PPE and testing supplies are available. Likewise, the team monitors the lab data being reported and communicates directly with testing laboratories regarding test capacity, lab data quality, and test turnaround time. This work has been leveraged with federal resources and has been a highly successful model for Texas for the past three months.

All entities in the state performing testing including laboratories and hospitals are required to submit test results to DSHS. While preferred electronically, the state accepts these test results in a variety of formats. The information is collected in the DSHS NEDSS system and is available to local public health and DSHS regional offices for case identification and investigation. The information from the system is used for reporting to the Centers for Disease Control and Prevention, informing case investigations, analyzing trends including effective use of laboratory testing capacity as well as inputs for contact tracing. The state intends to also use Enhanced ELC funding to strengthen these laboratory and disease investigation reporting systems.

Contact tracing plays a vital role in the testing strategy and is a core function of public health. The state is creating an enhanced contact tracing system. Contact tracing is voluntary for the individual and does not include smart phone applications or location tracking. The system will utilize the existing contact tracing workforce within the state and local health departments and will leverage resources from state

schools of public health and other agencies to mobilize a workforce of contact tracers. As Texas opens and individuals return to work, it is imperative that public health authorities identify not only those who are ill with COVID-19, but also those individuals who have come in contact with a person who is ill. Contact tracing allows public health authorities to identify individuals who are also ill and who may not realize their symptoms are COVID-19 related, and others who are not symptomatic but need to be educated on how to monitor for symptoms and isolate if symptoms occur. Testing identifies individuals who need to isolate. Individuals identified through contact tracing who have been exposed should be tested. This system ensure that we continue to search out the disease and work to contain it. The Enhanced ELC funding will support Texas' access to this important component of public health follow-up.

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*	600,000	600,000	600,000	600,000	900,000	900,000	900,000	900,000	6,000,000
Serology	40,000	55,000	55,000	105,000	210,000	220,000	190,000	200,000	1,075,000
TOTAL	640,000	655,000	655,000	705,000	1,110,000	1,120,000	1,090,000	1,100,000	

<sup>\*</sup>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)
State of Texas Mobile Test Unit	Drive-thru testing site	Commercial/Reference Labs	11,500		Provide mobile test services to rural communities and nursing homes and respond to hot spots, including meat packing plants and prisons
State of Texas Mobile Test Unit	Drive-thru testing site	Univ. Texas Medical Branch	1,000		Provide mobile test services to rural communities and nursing homes and respond to hot spots
State of Texas Mobile Test Unit	Drive-thru testing site	Univ. Texas Southwestern	1,000		Provide mobile test services to rural communities and nursing homes and respond to hot spots

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily Daily diagnostic serologic through-put through-put		Specific at-risk populations targeted (list all)
State of Texas Mobile Test Unit	Drive-thru testing site	Univ. Texas Rio Grande Valley	1,500		Provide mobile test services to rural communities and nursing homes and respond to hot spots
State of Texas Mobile Test Unit	Drive-thru testing site	Christus Spohn Health	500		Provide mobile test services to rural communities and nursing homes and respond to hot spots
State of Texas Mobile Test Unit	Drive-thru testing site	Baylor/Scott & White	600		Provide mobile test services to rural communities and nursing homes and respond to hot spots
Traditional Health Care Providers	Hospitals or clinical facility	Commercial/Reference Labs	10,400		Provide traditional patient care and tests for healthcare and other front line workers (police, fire, etc.)
Traditional Health Care Providers	Hospitals or clinical facility	UT Medical Branch	2,000		Provide traditional patient care and tests for healthcare and other front line workers (police, fire, etc.)
Traditional Health Care Providers	Hospitals or clinical facility	Baylor/Scott & White	1,400		Provide traditional patient care and tests for healthcare and other front line workers (police, fire, etc.)
Traditional Health Care Providers	Hospitals or clinical facility	Methodist Hospital	500		Provide traditional patient care and tests for healthcare and other front line workers (police, fire, etc.)

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)
Traditional Health Care Providers	Hospitals or clinical facility	Memorial Hermann Consolidated Lab Services	800		Provide traditional patient care and tests for healthcare and other front line workers (police, fire, etc.)
State of Texas Mobile Test Unit	Public health lab	Dept of State Health Services - Austin	800		Provide mobile test services to rural communities and nursing homes and respond to hot spots  Austin, Texas
Local Health Dept.	Public health lab	Tarrant County Public Health Dept. North Texas Regional Laboratory	125		Serving the community, nursing facilities and other public health testing priorities in the areas around Fort Worth, Texas
Local Health Dept.	Public health lab	San Antonio Metro Health District Laboratory Services	72		Serving the community, nursing facilities and other public health testing priorities in the areas around San Antonio, Texas
Local Health Dept.	Public health lab	Public Health Laboratory of East Texas (PHLET)	50		Serving the community, nursing facilities and other public health testing priorities in the areas around Tyler, Texas

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)
		The University of Texas Health Science Center at Tyler			
Local Health Dept.	Hospitals or clinical facility	Corpus Christi-Nueces County Public Health District Laboratory	150		Serving the community, nursing facilities and other public health testing priorities in the areas around Corpus Christi, Texas
Local Health Dept.	Hospitals or clinical facility	Dallas County Department of Health and Human Services	160		Serving the community, nursing facilities and other public health testing priorities in the areas around Dallas, Texas
Local Health Dept.	Public health lab	DSHS/ South Texas Laboratory	80		Serving the community, nursing facilities and other public health testing priorities in the areas around Harlingen Texas
Local Health Dept.	Public health lab	El Paso Dept of Public Health Lab	72		Serving the community, nursing facilities and other public health testing

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)
					priorities in the areas around El Paso, Texas
Local Health Dept.	Public health lab	Houston Health Department Lab	300		Serving the community, nursing facilities and other public health testing priorities in the areas around Houston, Texas
Local Health Dept.	Public health lab	City of Laredo Health Department Laboratory	100		Serving the community, nursing facilities and other public health testing priorities in the areas around Laredo, Texas
Local Health Dept.	Public health lab	Texas Tech University BT Response Laboratory	400		Serving the community, nursing facilities and other public health testing priorities in the areas around Lubbock, Texas
Serology Testing					
State of Texas Serology Testing	Hospitals or clinical facility	Baylor/Scott & White Network			Serving the community, nursing facilities and other public health testing priorities in the areas around Central Texas
State of Texas Serology Testing	Hospitals or clinical facility	Texas Health Resources Network			Serving the community, nursing facilities and other public health testing

Name of testing entity	<b>Testing venue</b> (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)
					priorities in the areas around North Texas
State of Texas Serology Testing	Hospitals or clinical facility	Ascension Hospital Network			Serving the community, nursing facilities and other public health testing priorities in the areas around Central Texas
State of Texas Serology Testing	Other	UT Rio Grande Valley			Serving the community, nursing facilities and other public health testing priorities in the areas around South Texas
State of Texas Serology Testing	Hospitals or clinical facility	UT System - Houston/ Galveston			Serving the community, nursing facilities and other public health testing priorities in the areas around Southeast Texas
State of Texas Serology Testing	Hospitals or clinical facility	Christus Hospital Network			Serving the community, nursing facilities and other public health testing priorities in the areas around South Texas
State of Texas Serology Testing	Hospitals or clinical facility	Texas Tech University			Serving the community, nursing facilities and other public health testing priorities in the areas around Panhandle (Amarillo) Texas

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)
State of Texas Serology Testing	Hospitals or clinical facility	University Medical Center			Serving the community, nursing facilities and other public health testing priorities in the areas around Panhandle (Lubbock) Texas
State of Texas Serology Testing	Hospitals or clinical facility	Hendrick Health System			Serving the community, nursing facilities and other public health testing priorities in the areas around West Texas (Abilene)
Department of State Health Services	Public health lab	Austin - Department of State Health Services			Serving the community, nursing facilities and other public health testing priorities statewide
Dallas County Health and Human Services	Public health lab	Dallas County Department of Health and Human Services			Serving the community, nursing facilities and other public health testing priorities in the Dallas area
Department of State Health Services	Public health lab	Harlingen - Department of State Health Services			Serving the community, nursing facilities and other public health testing priorities in South Texas
Tarrant County Public Health	Public health lab	Fort Worth - Tarrant County Public Health			Serving the community, nursing facilities and other public health testing priorities in the Fort Worth area

# 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) Public health labs in Texas will use existing equipment and purchase additional equipment to expand capacity as part of the overall state testing strategy detailed in Tab 1. Overarching Strategy. Currently, seven out of ten public health labs have the Hologic Panther platform that is currently used for other public health testing. The May 2020 emergency use authorization of the Hologic Aptima™ SARS-CoV-2 Assay for this platform will allow these machines to be used for COVID-19 testing. The use of these machines will increase public health testing capacity by up to 4,000 tests per day.

The public health labs that do not have the Hologic equipment plan to diversify their testing platforms to minimize issues related to limited reagent availability. The purchase of the ThermoFisher Kingfisher extraction platform for the public health lab in Laredo will increase testing capacity there by 50 percent, up to 4,000 tests per month total. New equipment for the labs in Lubbock and Tyler will increase testing throughput from 100 per day to 650 per day and from 50 per day to 500 per day, respectively. Lubbock will purchase automated extraction equipment, Qiagen EZ1, and a liquid handler to increase testing capacity. Likewise, Tyler also plans to purchase an automated extractor, and is considering the ThermoFisher Kingfisher or Perkin Elmer Chemagic, and a liquid handler to increase their laboratory capacity. Tarrant County also plans to purchase the ThermoFisher Kingfisher to provide more diversity in their extraction platforms to better ensure constant testing capacity as vendors experience limitations in their manufacturing supply chains.

In addition to expanded public health lab capacity, the state intends to contract with a third-party to increase lab capacity by up to 5,000 tests per day for at least one-year. The Abbott Alinity platform is of interest for this lab capacity; however, the state is also considering ThermoFisher ABI 7500 RT-PCR and KingFisher extraction equipment. The third-party entity would leverage its ability to bill insurance to offset some of the costs to operate the laboratory. The state would ensure the ability to access this laboratory capacity over a multi-year period to ensure it is available for any resurgence or other outbreak situations.

(b) Testing priorities have been set by the Governor's Strike Force to Open Texas. High priority is given to symptomatic healthcare facility workers, workers in congregate living settings, and first responders. High priority is also given to symptomatic residents in long-term care facilities or other congregate living settings, including prisons and shelters.

Priority is given to sentinel surveillance of asymptomatic residents and staff in congregate settings, asymptomatic healthcare personnel, and asymptomatic general populations.

With these testing priorities set at the highest level, Texas public health departments and labs will participate in these clinical testing strategies and sentinel surveillance programs that address vulnerable populations throughout Texas. Testing of the entire prison population and all nursing home residents is complete in Texas, in line with these priorities. Further testing plans will include people in other health care facilities, federally qualified health centers and hospital emergency departments, which include vulnerable populations.

(c) Primary barriers to testing include specimen collection supplies, reagents and laboratory capacity. In addition to supplies provided by the federal government, Texas has worked to procure swabs and VTM to support testing strategies. Likewise, as reagent supplies become available and more plentiful, the state will continue purchasing these items; however, available reagents do not always work on the PCR or extraction equipment that is being used. Texas requests the continuing support of the federal government as implied in the chart below and as stated in phone calls to ensure that the state has adequate testing supplies to meet its goals through December 2020.

Lab capacity will be addressed by items described in (a).

Texas has also set up a system to manage end-to-end mobile testing utilizing a web-based platform to collect patient information, track specimens to the lab, and return results to the patients through a portal. The results are also reported to the state health department for case reporting and investigations and tracking laboratory utilization.

(d) Public health labs will enhance the serologic testing strategy described in Tab 1. Overarching Strategy. Initially, at least four public health labs intend to implement serologic testing. The labs plan to leverage existing equipment to implement serology testing; therefore, the serologic test chosen for implementation will depend on consistent availability of reagents for those platforms. The DSHS Austin lab has leveraged an existing platform, EVOLIS, to implement serologic testing. The DSHS Harlingen lab had planned to use its existing Chembio reader for serology testing; however, the FDA recently revoked Chembio's FDA EUA authorization for its serology test, so a new test will be explored for implementation. The Dallas County lab plans to use its EVOLIS to implement a more automated serology testing and Tarrant County has plans to bring up a manual test. The other public health labs will initially focus on increasing PCR testing capacity and then will investigate the feasibility of performing serology as many hospital and private sector labs have the equipment and ability to support serology testing across the state as indicated in the Overarching Strategy tab. The number of serologic tests has not been provided in the table below because the total amount of testing that will occur will be determined by each laboratory director based on their evaluation of the different available tests and their decision as to which one to implement. The state's serology capacity will augment the capacity being put in place in the private sector.

13

Texas' serology strategy does not rely solely on public health labs. The state has procured serological tests, to include:

Abbott SARS-CoV-2 IgG Assay (https://www.fda.gov/media/137384/download), which utilizes the ARCHITECT i1000SR and i2000SR systems

Roche Elecsys Anti-SARS-CoV-2 serology test: (https://www.fda.gov/media/137602/download), which runs on the Cobas e411, e601, 3602, or 3801 instruments

These tests can be run on instruments that are present in many labs across Texas. The state will leverage partnerships with universities, hospitals and the private sector on plans to monitor statewide seroprevalence, with preliminary plans involving three different projects.

- 1. Estimate the prevalence of SARS-CoV-2 antibody positive status across Texas
- Texas is a big state (29 million, extrapolated from the 2010 census); Texas is a diverse state both ethnically (40% Hispanic white, 13% black or African American, 5% Asian) and geographically.
- We seek to estimate the prevalence of antibody positive status in nearly all of Texas's 254 counties.
- K-5 elementary school teachers and HEB grocery store clerks were chosen as study groups, because these groups represent differences in the spectrum of risk of prior exposure; teachers being a little lower and grocery store clerks being higher. Participation is voluntary.
- Up to 250,000 people will be enrolled under this program and each person will be tested twice (500,000 tests).
- 2. Estimate the prevalence of SARS-CoV-2 antibody positive status in a vulnerable population
- Texas has 73 FQHCs in ~300 locations that serve 1,328,406 million patients and 4,980,499 patient visits annually.
- Patients at the FQHCs tend to have a lower income, education attainment level and higher burden of the social determinants of health.
- Up to 100,000 people will be enrolled under this program and each person will be tested once. Participation is voluntary.
- 3. Estimate the prevalence of SARS-CoV-2 antibody positive status in children
- COVID-19 is not common in children, and early indications are that children are infected at the same rate as adults, but often to not exhibit symptoms.
- The child-child transmission characteristics may be different from adult-adult transmission characteristics, highlighting the importance of antibody prevalence studies in this population.

- Pediatric departments and clinics within the state's health science centers could partner for this component, using a combination of well-child visits and high-risk child clinic visits.
- Up to 100,000 children with one or two parent(s) each will be enrolled under this program and each parent-child pair will be tested twice (400,000 tests). Participation is voluntary and will include all appropriate informed consent.

The state is also looking to use Abbott reagents it has purchased to monitor the seroprevalence and seroconversion of health care workers in hospitals around the state as well as to monitor positive antibody development in certain populations in select urban areas of the state.

(e) As indicated in Tab 1. Overarching Strategy for SARS-CoV-2 testing statewide, the state has a plan for ensuring testing is aligned with the priorities, which includes surveillance for vulnerable and at-risk populations. The enhanced testing capacity at the public health labs will augment the state's ability to rapidly employ mitigation approaches in localized areas of increased positive cases.

Texas has defined the testing priorities for the state as mentioned in (b) above. The priorities closely align with CDC's guidance. In coordination with the Texas Department of Emergency Management, testing of vulnerable populations is occurring in a rapid and systematic manner. Using existing capabilities, Texas stood up mobile testing teams (MTTs) and Quick Response Force (QRFs) to test in nursing homes. Additionally, the Texas Department of Criminal Justice has established coordinated response teams to test all state prisons staff and inmates. Based on the volume of specimens, these groups route the specimens to dedicated labs daily.

(f) The state will use Epidemiology and Laboratory Capacity funding as well as funding from the Paycheck Protection Program to support expanded testing capacity. Texas implemented emergency procedures, which allow for streamlined procurement during disasters. These purchasing procedures are currently being used to acquire various, reagents, testing kits and other test collection supplies.

DSHS will utilize existing contracts to assist in rapidly allocating funding to jurisdictions across the state to allow for prompt expenditure of the funding to support new staff and purchase of equipment and supplies to support increased testing. DSHS has previously successfully on-boarded new staff and purchased equipment and supplies for their two labs during previous outbreak responses such as the 2009 H1N1 Pandemic and the 2016 Zika outbreak in the United States. The state has mechanisms in place to obtain collection supplies to support the testing goals detailed in Tab 1. Overarching Strategy.

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		4	5						9
				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)		0	9	18					27

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++		61,600	115,000	105,000	105,000	110,000	95,000	105,000	696,600
Volume of additional media (VTM, MTM, saline, etc.) needed to meet planned testing levels*+		61,600	115,000	105,000	105,000	110,000	95,000	105,000	696,600

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)		2,000/day Hologic Panter; 400/day Qiagen EZ1; 400/day Thermofish er Kingfisher	4,000/day Hologic Panter; 400/day Qiagen EZ1; 1200/day Thermofish er Kingfisher	4,000/day Hologic Panter; 400/day Qiagen EZ1; 1200/day Thermofish er Kingfisher; 2,000/day ThermoFish er	4,000/day Hologic Panter; 400/day Qiagen EZ1; 1200/day Thermofish er Kingfisher; 2,000/day ThermoFish er	4,000/day Hologic Panter; 400/day Qiagen EZ1; 1200/day Thermofish er Kingfisher; 2,000/day ThermoFish er	4,000/day Hologic Panter; 400/day Qiagen EZ1; 1200/day Thermofish er Kingfisher; 2,000/day ThermoFish er	4,000/day Hologic Panter; 400/day Qiagen EZ1; 1200/day Thermofish er Kingfisher; 2,000/day ThermoFish er	
				FOR SEROLO	GIC TESTING				
Number of additional* equipment and devices to meet planned testing levels									0

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)									

<sup>\*</sup> Report new monthly additions only, not cumulative levels

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