2020 Overarching Jurisdictional SARS-COV-2 Testing Strategy

Jurisdiction:	USVI
Population Size:	

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

OVERARCHING STRATEGY

a) How you will maximize the use of testing platforms (with an indication of which ones are high throughput), venues, and expanded workforce across your jurisdiction (e.g. public health labs, private, hospital, commercial, academic, etc.) to rapidly scale testing to accommodate an increased demand for SARS-CoV-2 tests, including utilizing point-of-care or other rapid result testing for local outbreaks?

The jurisdiction has been extremely successful in ability to identify and respond to all symptomatic cases due in part to the small size of the jurisdiction, and limited number of healthcare providers and laboratories. Prior to beginning re-opening, these activities were critical to eliminating all symptomatic cases for a period of three weeks.

The jurisdiction has experienced a recent surge in cases but remains confident it has the expected capacity and redundancy, under the current environment of available supply allocations, to continue to conduct testing on all symptomatic cases and contact tracing. A tiered approach to testing asymptomatic high-risk and vulnerable populations has been developed to utilize all additionally available tests. Asymptomatic testing has been restricted during surges in order to ensure adequate test supplies to maintain the capacity to test all symptomatic cases and contacts.

In order to accommodate the additional increased demand for SARS-CoV-2 tests the Virgin Islands will continue to maximize all available testing platforms and testing venues. For the months of July-December, the Territory has been assured an adequate supply of high-throughput Hologic Panther supplies and point of care Abbott ID Now tests. A monthly supply of 2,250 Hologic Panther tests and 4,800 Abbott ID Now tests are currently available to the Territory. When maximized, this allows testing to accommodate up to 6.7% of the population monthly. A total of 11 Abbott ID Now instruments are expected and will be distributed between the DOH, hospitals, FQHCs, and private clinics/laboratories.

A single high throughput Hologic Panther and Panther Fusion instrument is located on the island of St Croix and one Hologic Panther on the island of St Thomas. Point of Care Abbott ID Now instruments have been utilized at both hospitals and additional instruments are planned at the Department of Health, Federally Qualified Health Centers (FQHCs), and clinical laboratories throughout the Territory. The public health laboratory is also equipped with additional platforms to conduct CDC test, GeneXpert,

and Biofire tests. These additional tests will be used based upon supply availability and overflow needs. Private laboratories are also expected to increase capacity for GeneXpert and antigen testing.

b) Detail your approach to provide testing at non-traditional laboratory sites (e.g., retail sites, community centres, residential medical facilities, or pharmacies).

Dedicated drive-thru's have been available on each island for testing all symptomatic cases and contacts. These sites are managed by the Department of Health and residents schedule testing via hotline. These sites have been able to handle all case loads thus far and are actively scaling up operations as needed. Nearly all symptomatic individuals are tested using this process. In addition, both hospitals conduct testing for inpatients and those presenting to the ER. Additional testing capacity is also planned at the two FQHCs and a small number of clinical laboratories in the Territory.

To complement the fixed testing sites, the Department of Health has and will continue to work with EMS and others to conduct home visits and onsite collections. The Department of Health maintains a list of these sites (e.g. longterm care, senior living, prison) and will provide the resources to respond to cases and conduct testing and established frequencies. The Department of Health has mobile van clinics to conduct onsite facility specimen collections and testing for vulnerable and high-risk populations. Private partners and the the national guard have been approached to supplement these activities as needed.

c) Describe your strategy for serology testing, if applicable.

The Territory will maximize FDA approved high throughput serological testing by partnering with the two laboratories on island with the necessary equipment (i.e. Siemens and Abbott Architect) and assurances from the vendors of sufficient production supply. The DOH is purchasing testing from these vendors. The DOH also has automated serology testing equipment (i.e. Dynex DS2 machines) for surveillance testing.

The Department of Health Epidemiology Division will initially direct the use of serology tests. This is to begin using serological surveillance for specific at risk groups including healthcare workers. A preliminary evaluation of high-risk hospital personnel is expected in July. An evaluation of a large congregate living facility is also being planned for July. The Epidemiology Division is also planning periodic population serological surveys and the use of antibody testing in contact tracing.

Expanded serological testing will be contingent upon preliminary serological studies and increases in seroprevalence. Currently, the serological rate is expected to be low and the usefulness of these tests limited by their predictive values. Dependent upon rates found, these activities are planned to be expanded using a tiered approach to include all high-risk and vulnerable populations. If rates remain low in these groups widespread spread serological surveillance is likely not warranted. Private commercial laboratories and providers, have begun to have expanded access to serological tests, and are providing this service to the residents that request testing.

d) Describe how you will communicate, collaborate and coordinate with the broad testing community within your state to ensure alignment in approach and progress toward jurisdictional goals. Plan should include regular outreach to testing partners to monitor test kits, supply, and reagent inventory and staffing levels.

Due to the size of the Territory, and limited testing community, communication and coordination efforts have not posed a significant challenge. All providers have been providing daily reports and the DOH updates supply levels on a daily basis. A daily 5pm review of supplies is conducted by the DOH. The Territory has also been working diligently with providers to ensure efficient electric reporting to the DOH, NBS, and/or other reporting systems. The DOH is also providing verification/validation specimens, testing, quality and safety training to all providers upon request.

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*	1,700	1,700	2,250	7,000	7,000	7,000	7,000	7,000	40,650
Serology	0	0	1,800	1,800	1,800	1,800	1,800	1,800	10,800
TOTAL	1,700	1,700	4,050	8,800	8,800	8,800	8,800	8,800	

^{*}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)
DOH Public Health Laboratory	Public health lab		150		Symptomatic individuals and contact tracing.
DOH Public Health Laboratory	Public health lab		150		Symptomatic individuals and contact tracing. Backup testing if allocations for Hologic Panther change.
DOH Public Health Laboratory	Public health lab		100		Symptomatic individuals and contact tracing. Backup testing if allocations for Hologic change.

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)
DOH Public Health Laboratory	Public health lab		12		Symptomatic individuals and contact tracing. Rapid testing providing availability.
DOH Public Health Laboratory	Public health lab		24		Symptomatic individuals and contact tracing. Rapid testing providing availability.
DOH Public Health Laboratory	Public health lab			100	Surveillance at request of Epidemiology Division. Backup and verification of commercial testing.
Schneider Regional Medical Center	Hospitals or clinical facility		150		Symptomatic individuals and contact tracing.
Schneider Regional Medical Center	Commercial or private lab		24		Symptomatic person presenting to hospital. Symptomatic staff and visiting healthcare staff.
Juan Luis Medical Center	Commercial or private lab		24		Symptomatic person presenting to hospital. Symptomatic staff and visiting healthcare staff.
Clinical Laboratory Inc	Commercial or private lab		40		Symptomatic person presenting to private clinical lab.

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)
Clinical Laboratory Inc	Commercial or private lab			1,000	Private test requests and tests purchased by DOH. Test purchased by DOH for high risk healthcare, long-term care, and other upon request from Epidemiology Division.
Clinical Laboratory Inc	Commercial or private lab			1,500	Private test requests and tests purchased by DOH. Test purchased by DOH for high risk healthcare, long-term care, and other upon request from Epidemiology Division.
Clinical Laboratory Inc	Commercial or private lab		24		Private test requests and tests purchased by DOH. Test purchased by DOH for high risk healthcare, long-term care, and other upon request from Epidemiology Division.
Community Laboratory Inc	Commercial or private lab			1,000	Private test requests and tests purchased by DOH. Test purchased by DOH for high risk healthcare, long-term care, and other upon request from Epidemiology Division.+A9:L70A2:L70A1:L70B9A1:L70B1:L70A1:L70B1:L70
Community Laboratory Inc	Commercial or private lab		48		First Responders, Longterm Care, Senior Living, First Responders, Prison, Healthcare staff, Home health
DOH Communnicable Diseases Division	Commercial or private lab		48		First Responders, Longterm Care, Senior Living, First Responders, Prison, Healthcare staff, Home health
Pro Health	Commercial or private lab		100		Refinery Congregate Living (1470 beds)

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)
STX FQHC	Federally Qualified Health Center		24		First Responders, Longterm Care, Senior Living, First Responders, Prison, Healthcare staff, Home health
STT FQHC	Federally Qualified Health Center		24		First Responders, Longterm Care, Senior Living, First Responders, Prison, Healthcare staff, Home health
Other clinics/labs TBD	Commercial or private lab		48		First Responders, Longterm Care, Senior Living, First Responders, Prison, Healthcare staff, Home health

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.

DIRECT PHD EXPANSION

a) Describe how the health departments will directly expand testing capacity through their public health labs, contracts, partnerships, and other arrangements (e.g. adding testing capacity in local health departments, contracting with new labs, partnering with academic and community-based organizations, establishing drive-thru testing sites, etc.). Provide specifics about planned expansions of existing capacity, including procurement of new testing equipment or device platforms.

The Territory currently conducts early all testing of symptomatic cases and contacts using centralized high throughput Hologic Panther instruments on the islands of St Croix and St Thomas. The current supply allocation of 2,250 tests per month exceeds the 2% benchmark and are sufficient to maintain these abilities. No other laboratories beyond the Department of Health Territorial Public Health Laboratory are capable, or expected to be capable, of conducting PCR testing on island. The DOH laboratory has supplies and staffing available to conduct the CDC tests as overflow testing as needed. Manual extraction, MagNA Pure 24, and MagNA Pure compacts, and three ABI 7500 DX instruments are available for this testing. The DOH will be verifying the CDC Flu/COVID-19 test in July. Unfortunately, there are no other academic or private partners with the capacity to conduct this type of PCR testing.

The DOH has been working primarily with hospitals, FQHCs and private clinical laboratories to supply instruments and supplies to conduct Abbott ID Now testing. The monthly supply allocation of 4800 tests is expected through the end of the year. These tests are being used to augment the Hologic Panther symptomatic testing and to ensure all high-risk, vulnerable and congregate living populations have access to rapid point of care testing.

The DOH laboratory is already well equipped with multiple platforms and high throughput equipment and is unlikely to procure additional instruments but will transition between existing platforms (Hologic, PCR, GeneXpert, Biofire) based on supply availabilities. Private providers will add additional testing as supply levels change and several are equipped with the GeneXpert and additional laboratories are actively adding antigen testing.

b) How testing needs of vulnerable and at-risk populations will be prioritized, including the elderly, disabled, those living in congregate settings including nursing homes and prisons, racial and ethnic minorities, healthcare workers, and among persons experiencing homelessness.

The Territory has been fortunate that there has been sufficient testing capacity available to test all symptomatic persons and their contacts, which includes vulnerable at-risk populations. Persons over 65 are the second highest group behind 30-49 being tested. The DOH maintains a list of vulnerable and atrisk populations and their total number per group. These groups will be tested at fixed frequencies based upon their priority and availability of testing supplies. This testing is paused when surge testing necessitates the conservation of testing supplies. These populations are expected to be primarily screened using Abbott ID Now testing of which there is a monthly supply of 4800 tests through at least the end of the year. The DOH is coordinating with those venues to ensure the regular testing of vulnerable and at-risk populations.

The DOH in partnership with EMS has been conducting at home visits and onsite visits to ensure that these important populations are tested. The DOH has mobile van clinics one each island and personnel to conduct this type of testing. The DOH has begun discussions with the National Guard to augment these activities as necessary.

c) How barriers to efficient testing will be identified and overcome, including those related to underutilization of available assets and supply-chain difficulties, and considerations with end-to-end logistics of testing (from sample collection to reporting to public health and CDC).

Supply levels are monitored daily by the DOH so that any challenges can be addressed quickly. The size of the Territory and limited number of providers is advantageous to minimizing logistical challenges; however, the geographical isolation and availability of supplies will always present a unique challenge for the jurisdiction. The DOH will continue to work with CDC, HHS, and FEMA to ensure that the Territory is able to maintain those supplies and maintain the successes achieved thus far.

Electronic reporting and web portals are one particular area that the DOH has been working with providers to improve efficiency. All providers receiving testing supplies are expected to provide electric reporting and the DOH is providing support to those entities that require additional assistance. Those testing entities conducting the majority of testing are all capable of HL7 reporting.

d) Describe the strategy for serology testing through the public health labs, if applicable, including specific platforms intended to be used.

In an effort of expediency the DOH will rely primarily upon two local clinical laboratories to conduct public health surveillance activities requiring serological testing. The DOH has worked with these

providers to provide control specimens and to verify these FDA test platforms. The DOH is purchasing testing from these providers as directed by the DOH Epidemiology Division.

In addition, the DOH Public Health laboratory will develop local capacity using existing instrumentation once FDA approved ELISA format tests become available. The DOH laboratory has two automated Dynex DS2 instruments, each capable of testing two 96-well plates of specimens concurrently every 2-3 hours.

e) Describe the health department's plan for resource utilization and how the jurisdiction will manage testing and alignment with SARS-COV-2 community mitigation policies, including sentinel surveillance for vulnerable populations.

The testing plan presented here is developed in alignment with a broader USVI Surveillance and Testing Surge Plan for Coronavirus Disease. It is critical that the Territory maintains the capacity to test every symptomatic individuals and their contacts. This testing is being conducted on Hologic Panther platforms.

Additional sentinel surveillance for vulnerable, high risk and congregate living populations will be conducted with Abbott ID Now testing supplies. A list of these populations and their population numbers is managed by the DOH. The DOH is determining the frequency of testing for these populations based on the availability of supplies. These groups include a long-term care home, refinery congregate living, first responders, persons over 65 and/or with co-morbidities, etc. Additional serological surveillance and monitoring is planned for these populations as seroprevalence rates increase in the jurisdiction.

f) Describe the health department's plan to expedite and streamline procurement, hiring, and onboarding of new staff. Should include planned steps and ability for the jurisdiction to acquire supplies, reagents, test kit, collection materials required for expanding testing indicated in table #2 (below)

The Virgin Islands government has expedited procurement and on-boarding procedures for COVID related activities. The DOH laboratory is near maximum capacity but actively recruiting additional personnel to assist in management, administrative and support functions. It is critical that additional testing capacity be expanded beyond the public health laboratory to include not only the two hospitals but the FQHCs and private clinical laboratories. These are expected to expand as supplies become more readily available. In the interim, the DOH is supplying additional entities with Abbott ID Now instruments and testing supplies.

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	2	0	0	0	0	0	0	2
	<u> </u>			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	0	0	2 Abbott ID Now	0	0	0	0	0

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**			2,250	2,250	2,250	2,250	2,250	2,250	13,500
Volume of additional media (VTM, MTM, saline, etc.) needed to meet planned testing levels**			2,250	2,250	2,250	2,250	2,250	2,250	13,500

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)			Hologic 2500 per month; 1200 Abbott ID NOW						
Number of additional* equipment and devices to meet planned testing levels	0	0	0	0	0	0	0	0	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)		Serology Tests 1800							

^{*} 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.