

# OPENING UP THE US VIRGIN ISLANDS AGAIN



## HOW MUCH LABORATORY TESTING IS NEEDED?

The Federal Government and CDC have requested all States/Territories to increase current laboratory testing to mass testing levels, which have been set a minimum benchmark of 2% of the population per month. For the US Virgin Islands that is about 2000 tests per month or 67 per day.

The specific testing benchmark beyond 2% will likely vary considerably by state and dependent upon local disease burdens. The Harvard Global Health Institute has suggested two methods to assess whether testing is adequate. Their benchmark is based on how much testing would be needed for a state to test all infected people and contacts that at predicted burdens. A testing capacity to test all symptomatic people and their close contacts (contact-tracing) is critical to prevent epidemic transmission. The second benchmark that the Harvard Global Health Institute suggests is that communities that demonstrate positivity rates (total positives/total tests) of 10% or lower are likely testing adequately.

Based on these criteria, Harvard estimates that just nine States are near or exceeded the testing minimums. These tend to be less populous and less dense states including: Alaska, Hawaii, Montana, North Dakota, Oregon, Tennessee, Utah, West Virginia, and Wyoming. The Virgin Islands was not included in these models.

A more detailed summary of these finding is available from NPR ([link](#)).

*<https://www.npr.org/sections/health-shots/2020/05/07/851610771/u-s-coronavirus-testing-still-falls-short-hows-your-state-doing>*

## IS THE US VIRGIN ISLANDS CONDUCTING ENOUGH TESTING?

Yes according the Harvard benchmark of  $\leq 10\%$  positivity rates. The US Virgin Islands is doing extremely well and social distancing and other measures implemented have been extremely effective. The percent positive rate has steadily declined from 15.2% in March, to 3.4% in April, and in May is only been 0.6%.

The US Virgin Islands has previously relied on the CDC for overflow testing while local testing capacity and supplies have become more available. The Territory has made significant progress in building local capacity and had planned to transition to all local testing and no CDC send-out testing starting June 1. One month ago, CDC was conducting about 80% of all testing but



## TESTING AND RAPID RESPONSE FAQs

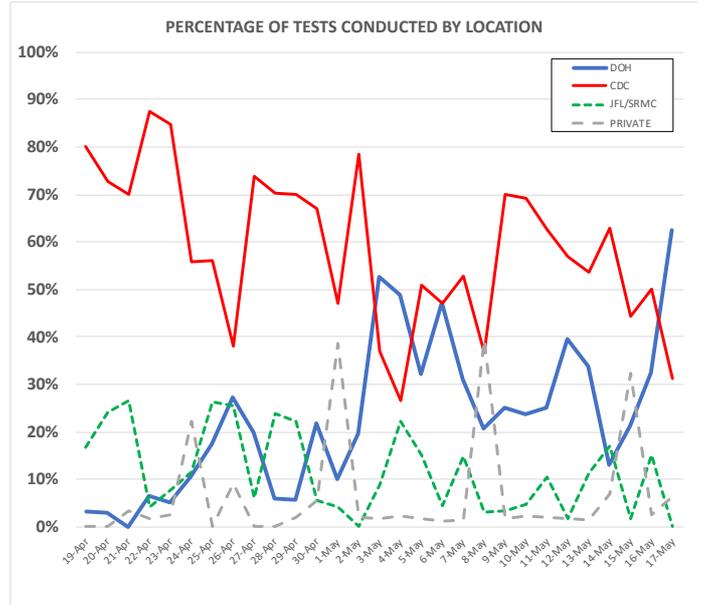
this has now been reduced to approximately 30%. The DOH has increased its own testing from about 3% of all tests a month ago to now approximately 60% (see table right). As of May 20<sup>th</sup>, 100% of testing is now performed on island.

The other benchmark that Harvard has suggested as sufficient testing is the ability to test all symptomatic cases and their contacts. The Department of Health, in collaboration with partners, has had the ability to test all symptomatic patients and their contacts since the beginning of local transmission. The majority of States, due to their size and burden, were unable to meet this goal and are increasing their testing to meet mass testing

benchmarks. Based on available models and predictions the DOH will continue to meet this benchmark and will further improve response capabilities by transitioning to all local testing.

The final mass testing benchmark set out by CDC and the Federal Government is for all States/Territories is monthly testing of at least 2% of the population. For USVI this is approximately 2000 tests per month. The number of tests conducted in April and May have been approximately 1500 and 1300, respectively. This is slightly below the CDC and Federal benchmark but is justifiable based on the Harvard criteria and the most robust predictive models available ([link](#) and [link](#)). The test per day target recommendations vary between the Federal Government, others models and guidance, and what is currently being conducted by about 10-20%.

While the CDC and Federal Government have recommended a 2% benchmark it ignores the guidance of other models such as from Harvard. As discussed above, the current testing numbers in USVI are sufficient given the positivity rates because USVI ability to test all symptomatic individuals and contacts. More testing is not necessarily better testing when infection rates are low. This is also counterproductive to use limited resources and supplies to continue testing primarily negatives. In order to be best prepared, a phased strategy is needed to preserve limited resources and supplies, until more become available, and to have supplies to respond to increases. It is also important that tests are available for priority surveillance and groups with increased risk.

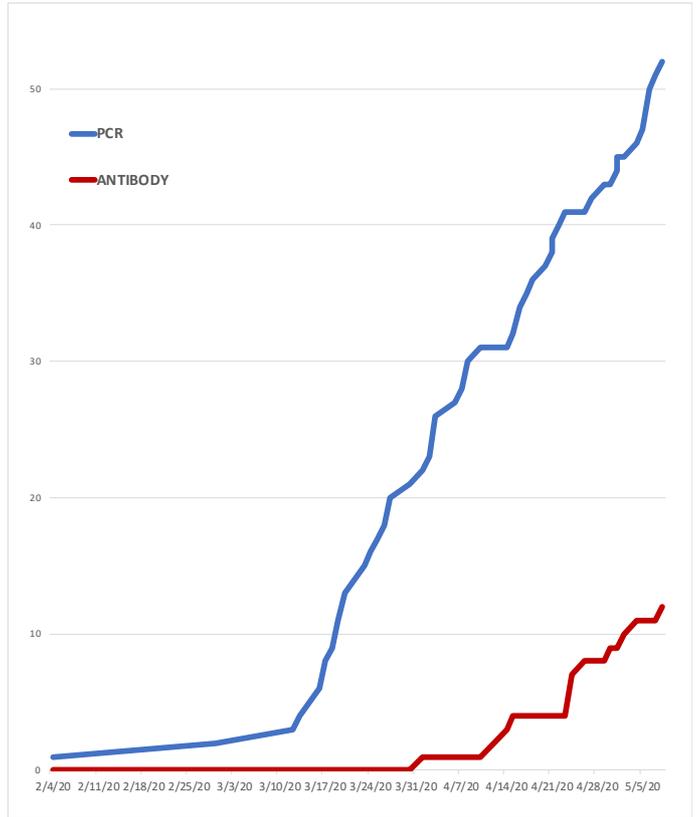




### WHAT TYPES OF TESTING IS AVAILABLE?

The number of FDA authorized tests and types of tests has quickly increased since the beginning of the epidemic in the USA (see figure right). There are two primary categories of tests, PCR/Molecular and Antibody. Each has specific use; however in general PCR/Molecular tests are used for symptomatic individuals and antibody tests are used to detect previous infections. The USVI has number of different types of tests and equipment platforms to identify the presence of the COVID-19 virus and antibodies.

PCR tests typically require specialized equipment and training. The CDC PCR test is only available at the Department of Health Territorial Public Health Laboratory. The DOH has also provided both hospitals with a rapid point of care test PCR type test (Abbott ID Now). Similar rapid tests may become available at private laboratories as equipment and supply availability improves.



On June 1st the Department of Health will transition from the CDC PCR test to another test that will allow for more efficient testing and the ability to test more symptomatic cases should they increase, using an automated instrument called the Hologic Panther. In addition, Schneider Regional Medical Centre will begin testing symptomatic cases from St Thomas and St John using the same instrument. The instrument is capable of testing up to 1000 specimens per day; however, the need is extremely unlikely.

The second type of test, the antibody test, is better suited for point of care and clinics. These tests are becoming more widely available and some clinics and labs already have these tests. As these tests become more widely available it is important that what they should be used for and not used for is clearly understood. A very good summary of the uses has been shared by the California Testing Task Force ([link](#)). A summary from this report is included here.

<b>COVID-19 Serology Testing Guidelines for Use</b>	
<b>Yes</b>	<ul style="list-style-type: none"> <li>✓ Epidemiologic studies to determine prevalence of COVID-19 in a community (serologic survey)</li> </ul>
<b>Maybe</b>	<ul style="list-style-type: none"> <li>✓ Identify potential convalescent plasma donors</li> <li>✓ Identify false negative COVID-19 viral RNA results</li> <li>✓ Evaluate individuals with prior COVID-19 symptoms who could not be tested at the time they were ill</li> </ul>
<b>DO NOT USE COVID-19 SEROLOGY</b>	
<b>No</b>	<ul style="list-style-type: none"> <li>▪ Sole basis to diagnose or exclude COVID-19</li> <li>▪ Screen for asymptomatic shedders</li> <li>▪ Determine COVID-19 immunity</li> <li>▪ Guide PPE use or infection control measures</li> <li>▪ Return to congregant setting</li> <li>▪ Make decisions about employment, i.e. return-to-work, hiring, duty assignment, etc.</li> </ul>



In short, the antibody test should not be used to make a diagnosis for symptomatic individuals because most patients won't have sufficient antibodies until 4-14 days after infection. These tests should only be used for public surveillance, to understand the percentage of persons previously infected, and as an indicator of previous infection for individuals. Antibody testing will require a blood sample in contrast to the swabs used in PCR testing.

### SHOULD AND WILL TESTING BE INCREASED IN THE TERRITORY?

Certainly. The Territory has done extremely well in having all symptomatic persons and their contacts free of charge. The Department of Health has also been successful in setting up safe and efficient testing sites for symptomatic individuals and contacts. Preparations have also been made to add additional sites for symptomatic testing if cases increase.

However, now that serological testing is becoming more available it is important that testing of asymptomatic cases and additional testing for public health surveillance is performed. As recently required and funded by the CDC, the DOH will begin to ensure that sentinel surveillance sites for screening asymptomatic cases and contacts are established.

Initially, the DOH will conduct surveillance to understand asymptomatic transmission among contacts of positive cases, asymptomatic transmission among high risk persons (e.g. healthcare, home healthcare, first responders), and confirm the true prevalence of COVID-19 in the Territory.

The rate of asymptomatic transmission remains unknown and estimates have varied widely. Sixty nine cases have been detected in the Territory to date but some models suggest that the true number could be much higher. It is important to understand what that true number is in order to understand the risk for further epidemic transmission.

Ultimately, antibody testing should not only be available for public health surveillance, symptomatic persons and their contacts, and high risk group but ultimately for anyone who wants to be tested in the Territory. The DOH is working closely with clinical laboratories and providers who want to provide point of care testing in order to expand the availability of testing to private providers. This has to be a phased approach dependent upon the true prevalence in the Territory and availability of testing supplies.

The DOH is in the process of initially purchasing 10,000 antibody tests for public health surveillance. Private providers have also begun procuring antibody tests. While it is completely understandable and justifiable that every resident should have the right to know if they have had COVID-19 it is not prudent to prevent testing to the highest risk groups because of limited availability of testing supplies. It is also not a judicious use of limited supplies or costs to conduct a high number of tests if there are very low rates of infection and vast majority of tests will be negative. Please refer to FAQ on phased approach to testing.



### WHAT IS THE PLANNED PHASED APPROACH FOR TESTING?

The Territory is planning for a tiered approach to testing. The progression of expanded testing is dependent upon the increased availability of supplies nationwide and increased testing capacity. The testing phases are summarized following:

Phase 1 is already being conducted and remains the number one priority for the Territory.

#### **Phase 1: SYMPTOMATIC CASES AND CONTACTS**

All symptomatic cases and contacts in the Territory using PCR type tests. Additional testing sites will be expanded if cases increase significantly within the Territory. This will also be expanded to include those undergoing surgical procedures and persons admitted into high risk groups such as nursing homes.

Phase 2 will begin to be conducted starting after June 1<sup>st</sup>.

#### **Phase 2: ASYMPTOMATIC SURVEILLANCE**

Public health surveillance to understand the true prevalence in the Territory and contacts of positive cases. Surveillance of sentinel groups will also be expanded (e.g., health care workers, skilled nursing facility workers, hospital workers, other first responders).

Phase 3 is planned as antibody tests become more available in order to expand surveillance among at risk groups. Moving to Phase 3 testing will be dependent upon the availability of testing supplies and the results of Phase 2 sentinel surveillance.

#### **Phase 3: EXPANDED ASYMPTOMATIC TESTING**

Testing for additional higher risk groups will be expanded as testing supplies and private commercial testing capacity increases. There are two private laboratories in the Territory that have equipment and are expecting the necessary supplies to expand testing to a greater number of patients. These groups are expected to include >65 years of age, persons with high risk chronic diseases or immune disorders, additional public health safety personnel.

Phase 4 is planned as antibody tests become more available in order to expand surveillance community wide. Moving to Phase 3 testing will be dependent upon the availability of testing supplies and the results of Phase 2 sentinel surveillance.

#### **Phase 4: COMMUNITY-WIDE ASYMPTOMATIC TESTING**

Community-wide asymptomatic testing will be dependent upon the supply availability for the Territory and justification that there is significant community-wide transmission. If necessitated, it is expected that this will be available, if warranted, to all residents before the start of the next school year.



### WHEN CAN I GET TESTED?

All persons who have symptoms or recently came in contact with someone that was positive can be tested now! Please call the Department of Health on St Croix (712-6299) or St Thomas (776-1519) to schedule testing. Alternatively, you may also contact your private provider to inquire if they can provide testing. The Department of Health will provide an update on their website of private providers that also currently offer testing. The number of private providers that can provide testing is expected to increase in the coming months.

The Department of Health will contact and be working directly with providers for Phase 2 asymptomatic priority testing. When testing supplies become available, and the testing is necessitated, the Department of Health will be advertising and providing additional instructions for the start of Phase 3 testing. The same announcements will be made for Phase 4 testing. In addition, The Department of Health will provide an update on their website of private providers that also currently offer testing. The number of private providers that can provide testing is expected to increase in the coming months.

### WHO WILL CONDUCT THE TESTING?

Starting June 1<sup>st</sup> the DOH will begin working with Schneider Regional Medical Centre to conduct all testing for symptomatic individuals and contacts on island. Scheduling of that testing will be conducted by the DOH and performed at existing testing sites. Should cases increase additional testing sites will be announced for symptomatic cases and their contacts. The hospitals will coordinate immediate point of care testing directly for patients undergoing surgery and symptomatic patients requiring hospitalization.

The Department of Health has identified two private commercial laboratories with the necessary equipment and expected supplies for large scale antibody testing. For Phase 2 and Phase 3 asymptomatic priority testing. The DOH will provide instructions for the locations of that testing. The same announcements will be made for Phase 4 testing.

In addition, The Department of Health will provide an update on their website of private providers that also currently offer testing. The number of private providers that can provide testing is expected to increase in the coming months.

### HOW OFTEN SHOULD SOMEONE GET TESTED?

Anyone who is symptomatic needs to get tested and should contact the DOH immediately. It remains unclear how long someone once infected a first time will remain protected from subsequent infections. Repeated testing for someone who is not ill is not recommended due to the limited availability of testing supplies and uncertainty if an antibody positive test result provides protective immunity. A positive antibody test could provide false reassurance. Antibody testing is also not recommended if community transmission is low. The DOH is monitoring community transmission and will make an announcement if and when expanded antibody testing is warranted.



### WHAT ARE THE CHALLENGES FOR EXPANDING TESTING IN THE TERRITORY?

The nation is currently facing a shortage of testing supplies as manufacturers increase production. This has been improving and is expected to improve further over the coming months. However, it has been extremely challenging for all States/Territories to obtain the necessary supplies to effectively test all symptomatic patients and their contacts to mitigate transmission as we have done here in the US Virgin Islands. Maintaining this capacity remains challenging as the Federal Government determines the allocation of these supplies nationwide.

In order to avoid a shutdown in testing due to a lack of supplies, as has happened elsewhere nationwide, it is recommended that States/Territories have multiple tests and equipment to maintain testing if specific supplies become in short supply. It is a time-consuming, costly and difficult to add additional equipment and manage supplies for using a large number of tests and/or equipment. It is also time consuming to train personnel and maintain testing on multiple platforms. Fortunately, the Department of Health has equipment to run COVID-19 testing on at least four instruments. The Department of Health has also been able to obtain supplies needed for at least three types of testing and will add additional tests as they become available.

The unpredictable nature of the pandemic also poses a unique challenge. The peak number of cases per 100,000 persons has varied considerably by state. The Northeast has experienced extremely high rates over 1,000 cases per 100,000. Less populous states/territories may range from as low as 21 up into the 100's per 100,000. Planning for the worst case scenario and having the ability to ramp up testing during a surge has been a challenge. The US Virgin Islands has been well prepared but obtaining the supplies necessary to ramp up testing, if necessary, to hundreds or a thousand a day has only recently been received. Fortunately, the territory was one of the few jurisdictions that has been able to do testing for every single symptomatic case and their contacts. Although not anticipated, should the Territory experience a sustained surge in cases quickly obtaining the necessary supplies to keep up with the demand could prove challenging. The DOH would likely have to begin sending out some testing. Testing supplies are only allocated by the Federal Government as warranted. Sufficient supplies for testing are only now becoming available for most States.