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

Jurisdiction:	Philadelphia
Population Size:	1,584,000

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

The Philadelphia Department of Public Health (PDPH) is committed to continued rapid detection and containment of SARS-CoV-2. There are currently over 50 testing sites in Philadelphia, including sites run by health systems, health centers, pharmacies and urgent cares. Since March 2020, PDPH has been working with healthcare partners throughout Philadelphia to increase testing capacity, accessibility, and speed of reporting. Expanded testing efforts have been planned through June 2020, with components in varying stages of execution, to reach a goal of 150,000 tests performed each month by testing sites across the city. PDPH's short-term testing expansion strategy focuses on maximizing its own laboratory capacity, implementation of rapid testing platforms at testing sites, continuation of testing partnerships with Federally Qualified Health Centers (FQHCs) and long-term care facilities, and development of new community-based testing programs in coordination with partner organizations like urgent care centers and retail pharmacies.

Philadelphia's Public Health Laboratory (PHL) currently operates one Abbott m2000, a high throughput RT-PCR system capable of testing up to 470 patient samples in a 24-hour period. Contingent upon receipt of testing supplies, PHL can also detect SARS-CoV-2 using Hologic's Panther, another high throughput machine with the capacity to run up to 700 tests in 4 hours. Additional machines with lower capacity, including the Cepheid GeneXpert, can also be employed by PHL for SARS-CoV-2 detection as needed once reagents are received (estimated June 2020). PDPH has obtained 14 Abbott ID Now instruments, and utilizing funding previously secured under the CARES grant, has ordered 5 Cepheid Xpert Xpress machines intended for distribution to FQHCs to perform rapid point-of-care testing. Additional funding will support acquisition of additional instruments and kits for rapid point-of-care testing as well as the supplies necessary to perform specimen collection and RT-PCR testing by PHL. By ensuring FQHCs and other community testing partners are well supported through adequate training and supply management, we will be positioned to continue to test at a minimum 2% of our population per month.

PDPH has a long-standing relationship with many FQHCs who provide care to marginalized and underserved communities across the city. Since April, we have been assisting FQHCs to expand their testing operations through provision of resources, including testing supplies and personal protective equipment (PPE). We have also leveraged these relationships to support expanded SARS-CoV-2 detection using rapid point-of-care testing. The 14 Abbott ID Now machines provided by Health and Human Services are all intended to be deployed in FQHCs or city-run health centers. PHL has implemented a train-the-trainer model, providing clinic staff with adequate support to execute and expand point-of-care testing within their locations. FQHCs may be testing individuals in a traditional clinical care setting or meeting high-risk populations where they are at (e.g. outdoor testing for people

living homeless). Additional funds received will directly support the purchase of Abbott ID Now and Cepheid Xpert Xpress machines for use in these clinical and non-traditional settings by FQHC staff, contingent upon product availability. A limiting factor expressed by community partners is the ability to procure acceptable specimen collection materials. PDPH has utilized internal resources to procure and manage a supply of swabs, media (VTM, saline, PBS), and collection tubes to support expanded testing across the city. Laboratory reagents have also been sourced through International Reagents Resources, as well as ID Now testing kits supplied directly from Abbott. Staff will continue to support supply management through June 2020, exploring multiple avenues to procure hard-to-source items.

To rapidly respond to potential outbreaks, PDPH partners with Long Term Care Facilities (LTCFs) to coordinate SARS-CoV-2 testing at PHL using the Abbott m2000. All specimen collection materials will continue to be provided to these facilities, ensuring timely identification and isolation of confirmed cases. Through June 2020, LTCFs can expect direct support in the acquisition of testing materials, courier service to PHL, and rapid results reporting. On May 12th, 2020 the Pennsylvania Department of Health issued guidance for LTCFs to institute universal testing of all residents and staff. This guidance has exponentially increased demand for testing, and PDPH has been working closely with facilities to coordinate testing. Distribution of additional point-of-care testing platforms for use in LTCFs would be possible utilizing this additional funding, dependent upon facility cooperation and PDPH's ability to procure instruments and necessary testing materials. Furthermore, PDPH has supported rapid detection of SARS-CoV-2 in other congregate settings including group shelters. We have worked closely with the Philadelphia shelter system to rapidly identify and contain SARS-CoV-2 outbreaks through coordination of testing performed by PHL. As with other community testing partners, we have ensured adequate testing supplies are available to meet growing need. One Abbott ID Now has also been provided to the Philadelphia Prison System to assist in rapid case detection, used in conjuncture with NP swabs sent to a commercial lab for confirmatory testing.

To accommodate the rapid scaling of testing, PDPH began hiring in May 2020 with further staff increases anticipated in June as a result of the additional funding. Thus far talent acquisition has focused on recruiting office-based staff to support the management and coordination of SARS-CoV-2 testing. Moving forward, it will be essential to recruit qualified laboratorians to increase the testing capacity of PHL. Funding will be utilized to hire two contract Medical Technologists capable of performing necessary assays in addition to an informatician/LIS specialist responsible for results reporting and a program coordinator to support administrative functions. An expanded workforce within PHL will directly impact testing capacity as more staff will be available to process and run patient samples. To address the anticipated increased interest in rapid point-of-care testing by FQHCs and other testing partners, PDPH will increase the number of staff capable of training clinicians on proper specimen processing on the Abbot ID Now through June 2020.

While most of the SARS-CoV-2 testing in Philadelphia has occurred within traditional clinical settings, PDPH has sought out opportunities to promote testing in non-traditional settings. In May 2020, a Request for Proposals was released to local provider organizations in order to fund expanded testing

within the community beyond our direct partnership with FQHCs and city-run health centers. Emphasis was placed on organizations' experience with underserved and vulnerable populations to ensure equity in testing availability across the city. This arrangement will allow testing organizations to reach Philadelphians from a wide variety of zip codes who are eligible for testing while moderating the volume of supplies and testing services provided by PDPH. When considering prospective recipients, PDPH will pay special attention to the testing locations as well as the population served to avoid unnecessary duplication of efforts within the testing community. Review and approval of RFP applications will continue through June 2020 to allow for consistent expansion of the variety of testing options offered to Philadelphians.

In Philadelphia, serologic testing is unfolding as PDPH establishes criteria and validates its IgG assay (planned completion in Week 22). One starting point for this testing is following up on recent congregate setting outbreaks to better understand the number of individuals who were infected with SARS-CoV-2. In response to these outbreaks, PCR testing was performed to identify individuals with active COVID-19 infections to inform infection control practices, however it is possible that some individuals experienced subclinical infection or had been symptomatic prior to the identification of the outbreak. Serologic testing performed by PHL will enhance understanding of COVID-19 transmission within these settings. Additionally, in June 2020 PDPH will develop an algorithm for serologic testing and plan for potential needs for this test type by discussing availability with FQHCs and city-run health centers.

To achieve adequate testing coverage, PDPH has utilized existing communication streams to ensure FQHCs and other community partners are aware of our testing services as well as the Request for Proposals to expand testing services available to the community. Existing relationships with our Immunizations and Public Health Preparedness programs have also been leveraged to reach healthcare and testing service providers in Philadelphia, highlighting our willingness to support expanded testing activities through acquisition of supplies, funding of testing, and coordination of specimen testing at PHL. Additionally, established relationships between PDPH's Acute Communicable Disease and Healthcare Associated Infections programs and LTCFs have been utilized to ensure high-risk settings are receiving adequate support for rapid resident and staff testing. Through June 2020, the additional funding will secure training for staff on the Abbott ID Now instrument as well as the Cepheid Xpert Xpress (pending availably) within FQHCs as well as congregate settings. With this funding PDPH will also have the increased capacity to support FQHCs with inventory management to deliver consistent testing across the city. PDPH will continue to support community organizations in establishing mechanisms for electronic lab reporting and transmission of individual-level data to better characterize COVID-19 infection.

Through a coordinated effort of promotion and education, this additional funding will allow PDPH to continue to support COVID-19 testing amongst Philadelphia's care providers. Current barriers that exist include acquisition of testing equipment and supplies, however PDPH continues to seek out alternative suppliers capable of providing materials needed to continually expand SAR-CoV-2 testing in Philadelphia.

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*	40,000	150,000							190,000
Serology		500							500
TOTAL	40,000	150,500	0	0	0	0	0	0	

Table #1b: Planned expansion of testing jurisdiction-wide

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
AFC Urgent Care (Northwest Phila)	Hospitals or clinical facility	Quest	30			African Americans, uninsured
AFC Urgent Care (Northern Liberties)	Hospitals or clinical facility	Quest	30			
Children's Hospital of Philadelphia (CHOP)	Hospitals or clinical facility	Internal	68			Children, uninsured, healthcare workers, essential workers

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
CVS Pharmacy (6701 Ridge Ave.)	Drug store or pharmacy	Commercial lab	50			
Delaware Valley Community Health - Fairmount Primary Care Center	Federally Qualified Health Center	Quest, LabCorp	25			Uninsured persons, African Americans
Delaware Valley Community Health - Fairmount Primary Care Center at Girard Medical Center	Federally Qualified Health Center	Quest, LabCorp	25			Persons in congregate living settings, persons experiencing homelessness
Delaware Valley Community Health - Maria de Los Santos Health Center	Federally Qualified Health Center	Quest, LabCorp	25			Undocumented immigrants, Spanish speaking persons, uninsured persons

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
Einstein Mayfair	Hospitals or clinical facility	Internal	20			
Einstein Physicians Front and Olney	Hospitals or clinical facility	Internal	20			
Esperanza Health Center at Rock Ministries	Federally Qualified Health Center	Quest, LabCorp				Persons experiencing homelessness, Spanish speaking persons
Greater Philadelphia Health Action- Hunting Park Health Center	Federally Qualified Health Center	Quest, LabCorp	25			African Americans, uninsured persons, non-English speaking persons
Greater Philadelphia Health Action- Carl Moore Health Center	Federally Qualified Health Center	Quest, LabCorp	10			African Americans, uninsured persons

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
Hub of Hope	Federally Qualified Health Center	Quest, LabCorp				Persons experiencing homelessness
Jefferson - Center City	Hospitals or clinical facility	LabCorp, internal	150			Healthcare workers, uninsured
Jefferson - Navy Yard	Hospitals or clinical facility	LabCorp, internal	50			Healthcare workers, uninsured
Nazareth/Trinity Health	Hospitals or clinical facility	Quest, LabCorp	40			Healthcare workers
PDPH COVID-19 Testing Center	Community- based	Philadelphia Public Health Laboratory, Quest, LabCorp	50			Healthcare workers, uninsured, essential workers, undocumented immigrants

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
PDPH Health Centers (Health Center 2)	Federally Qualified Health Center	Philadelphia Public Health Laboratory, Quest, LabCorp	3			Uninsured, undocumented immigrants, Non-English speaking persons
PDPH Health Centers (Health Center 3)	Federally Qualified Health Center	Philadelphia Public Health Laboratory, Quest, LabCorp	10			Uninsured, undocumented immigrants, Non-English speaking persons
PDPH Health Centers (Health Center 4)	Federally Qualified Health Center	Philadelphia Public Health Laboratory, Quest, LabCorp				Uninsured, undocumented immigrants, Non-English speaking persons

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
PDPH Health Centers (Health Center 5)	Federally Qualified Health Center	Philadelphia Public Health Laboratory, Quest, LabCorp	4			Uninsured, undocumented immigrants, Non-English speaking persons
PDPH Health Centers (Health Center 6)	Federally Qualified Health Center	Philadelphia Public Health Laboratory, Quest, LabCorp	1			Uninsured, undocumented immigrants, Non-English speaking persons
PDPH Health Centers (Health Center 9)	Federally Qualified Health Center	Philadelphia Public Health Laboratory, Quest, LabCorp	3			Uninsured, undocumented immigrants, Non-English speaking persons

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
PDPH Health Centers (Health Center 10)	Federally Qualified Health Center	Philadelphia Public Health Laboratory, Quest, LabCorp	1			Uninsured, undocumented immigrants, Non-English speaking persons
PDPH Health Centers (Strawberry Mansion Health Center)	Federally Qualified Health Center	Philadelphia Public Health Laboratory, Quest, LabCorp	3			Uninsured, undocumented immigrants, Non-English speaking persons
Penn Presbyterian Medical Center	Hospitals or clinical facility	Quest, LabCorp, internal	200			Children (14 years or older), uninsured, African Americans, healthcare workers

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
Philadelphia FIGHT- Community Center at Visitation	Federally Qualified Health Center	Quest, LabCorp	20			Persons experiencing homelessness
PHMC - Congreso Health Center	Federally Qualified Health Center	Quest, LabCorp	12			Undocumented immigrants, Spanish speaking persons, uninsured persons
PHMC - Health Connection	Federally Qualified Health Center	Quest, LabCorp	12			Uninsured, African Americans
PHMC - Mary Howard Health Center	Federally Qualified Health Center	Quest, LabCorp	2			Persons experiencing homelessness, uninsured

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
PHMC - Rising Sun Health Center	Federally Qualified Health Center	Quest, LabCorp	2			Uninsured, undocumented immigrants, non-English speaking persons
Project HOME- Stephen Klein Wellness Center	Federally Qualified Health Center	Quest, LabCorp	5			Persons experiencing homelessness
Rite Aid (Kensington)	Drug store or pharmacy	Quest, LabCorp	50			Healthcare workers, uninsured persons, essential workers

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
Rite Aid (Northeast Philadelphia)	Drug store or pharmacy	Quest, LabCorp	50			Healthcare workers, uninsured persons, essential workers
Rite Aid (Olney)	Drug store or pharmacy	Quest, LabCorp	275			Healthcare workers, uninsured persons, essential workers
Rite Aid (Southwest Philadelphia)	Drug store or pharmacy	Quest, LabCorp	50			Healthcare workers, uninsured persons, non- English speaking persons

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
Sayre Health Center	Federally Qualified Health Center	Quest, LabCorp	150			African Americans, uninsured
Spectrum Heath Services	Federally Qualified Health Center	Quest, LabCorp	20			African Americans, uninsured
Temple Health - Jeanes Hospital	Hospitals or clinical facility	Internal	25			Healthcare workers, Uninsured
Temple Health- Episcopal Hospital	Hospitals or clinical facility	Internal	15			Persons experiencing homelessness, uninsured, Spanish speaking persons

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
Temple University Hospital	Hospitals or clinical facility	Internal	15			Healthcare workers, uninsured persons
The Family Practice & Counseling Network (FPCN) (11th Street Family Health Services)	Federally Qualified Health Center	Quest, LabCorp	40			
The Family Practice & Counseling Network (FPCN) (Abbottsford Falls Family Practice & Counseling)	Federally Qualified Health Center	Quest, LabCorp	40			Uninsured, African Americans
The Family Practice & Counseling	Federally Qualified Health Center	Quest, LabCorp	40			

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
Network (FPCN) (Health Annex)						
Tower Health Urgent Care (Philadelphia)	Hospitals or clinical facility					
Vybe Urgent Care (Fairmount)	Hospitals or clinical facility					
Vybe Urgent Care (Kensington)	Hospitals or clinical facility					
Vybe Urgent Care (Northeast Philadelphia)	Hospitals or clinical facility					
Vybe Urgent Care (Northwest Philadelphia)	Hospitals or clinical facility					
Vybe Urgent Care (South Philadelphia)	Hospitals or clinical facility					

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
Vybe Urgent Care (West Philadelphia)	Hospitals or clinical facility					
Philadelphia Department of Prisons	Other	BioReference				Prisons
Philadelphia long-term care facilities	Other					Elderly, nursing homes

# 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.

Through May 2020, the Philadelphia Department of Public Health (PDPH) has partnered with the Public Health Laboratory (PHL), Federally Qualified Health Centers (FQHCs), health systems, retail pharmacies, community organizations, skilled nursing facilities, and other congregate settings to expand testing capacity in Philadelphia. At the onset of the COVID-19 pandemic, PHL was operating instruments capable of testing patient specimens for SARS-CoV-2 (Abbott m2000, Cepheid GeneXpert, and Hologic's Panther). Fourteen Abbott ID Now instruments were received by PHL through Health and Human Services for deployment to selected facilities. Additionally, funding received through the ELC Cares grant supported the purchase of reagents needed for testing and five Cepheid Xpert Xpress instruments to perform rapid point-of-care testing. Expanded testing capacity at PHL will be possible with additional funding to be used for staff onboarding, purchase of testing supplies, and procurement of testing equipment. In June 2020, PHL will seek out two contract Medical Technologists capable of performing necessary assays in addition to an informatician/LIS specialist responsible for results reporting and a program coordinator to support administrative functions. An expanded workforce within PHL will directly impact testing capacity as more staff will be available to process and run patient samples. PHL will also look to purchase additional modules to expand testing capacity on their existing BioFire FilmArray Torch. In June 2020, PHL will identify methods to streamline inventory management and accommodate the increase in supplies needed for expanded SARS-CoV-2 testing.

Another way in which PDPH has continued to expand testing capacity is through a partnership with a city-approved healthcare vendor, which has allowed for SARS-CoV-2 testing services with results reporting in a city-owned clinic space. This contract was renewed in May 2020, with additional negotiations set to occur in June 2020. At this time, PDPH is exploring ways to expand services provided by the vendor, including phlebotomy services to implement mobile serologic testing in congregate settings. Another avenue to explore in June 2020 is a partnership between PDPH and a local chain of Urgent Care centers with an established presence in historically underserved communities. By expanding the centers' capacity to provide testing, PDPH will continue to extend testing availability to vulnerable populations. Other benefits to this partnership include decreased need of PDPH staff to coordinate testing and PPE supplies, an established mechanism for electronic lab reporting, and the possibility of streamlined electronic transmission of individual-level demographic and clinical data to PDPH and CDC.

Further expansion of testing has been possible by supporting FQHCs in the procurement of testing instruments and supplies. In April 2020, PDPH entered into Memorandums of Agreement with eight FQHCs to assist them in expanding their capacity to provide testing to underserved populations. These FQHCs are now operating a total of 16 testing sites across the city. In May 2020, PDPH began distributing Abbott ID Now point-of-care devices to FQHCs known for providing healthcare and other social services to vulnerable populations, including individuals experiencing homelessness. Staff within PHL and PDPH

will continue to partner with FQHCs to promote good testing practices and coordination of testing supplies for expanded testing availability. We have worked with FQHCs to leverage existing reporting mechanisms to streamline results reporting and in June 2020 will work towards electronic reporting of patient-level demographic and clinical data. Additional FQHCs will be identified in June, with up to 10 sites receiving Abbott ID Now instruments and the necessary testing supplies.

Ensuring equitable and complete testing coverage across the city is a top priority for PDPH. We are working within established communication channels to promote testing of vulnerable and at-risk populations. Rapid response to all testing requests for individuals in congregate settings, including skilled nursing facilities, private personal care homes, and shelters have been prioritized. To work toward complete testing coverage in areas of the city where few healthcare options exist, PDPH has liaised with FQHCs and other community-based organizations to coordinate testing support. This support has been in the form of providing rapid point-of-care instruments, testing supplies, as well as PPE to allow for safe, consistent, and expanded testing service in all areas of the city. In May 2020, a COVID-19 Testing Manager was hired to oversee testing activities and will continue to strengthen relationships with community partners. To better visualize testing coverage and identify areas of need, a testing map was created in May 2020. This map is also public-facing and provides detailed location and service information to promote testing availability.

Understanding barriers to efficient testing will continue to occur through direct communication with community partners. PDPH has been brokering supplies for some testing sites based on testing volume and need and will continue to do so as long as supply chain difficulties continue. Several staff at PDPH and the Philadelphia Office of Emergency Management (OEM) are systematically searching for testing supplies, and PDPH has also partnered with the Pennsylvania Department of Health (PADOH) to acquire additional VTM, as well as federal assets. A survey was distributed in May 2020 to laboratories and testing sites to assess testing capacity and identify barriers to providing expanded testing services. The results of this survey are under review and will be used to identify areas of support. In June 2020, a Testing and Results Notification Assistant will be brought on board to establish methods of cataloguing testing sites' available assets and help troubleshoot supply-chain difficulties. PDPH has also worked with individual sites to leverage established reporting channels and create new reporting mechanisms as needed to ensure efficient reporting.

Ability to perform serologic testing by PHL was under development in May 2020, however validation of the IgG assay is expected to occur during Week 22. As PHL begins to offer this service, PDPH will develop testing criteria and evaluate PHL's capacity for serologic testing in addition to RT-PCR testing. It is expected that in June 2020 PHL will bring on additional laboratory staff capable of running this assay, thus expanding the number of people who can receive serologic testing at PHL. As commercial labs are now offering this service, PDPH will work with FQHCs and skilled nursing facilities to understand barriers to offering this testing and offer potential solutions as appropriate. It will also be critical for PDPH to develop clear messaging to patients that would accompany receipt of serologic results.

As social distancing measures are relaxed, PDPH will aggressively ramp up testing to support rapid identification of new cases, contact tracing, and implementation of isolation and quarantine. Implementation of rapid POC testing at FQHCs that serve vulnerable populations is a key component of this strategy as it will allow for immediate results notification and counseling. Rapid identification of cases will increase the speed with which contact tracing can be conducted. With a median incubation period of 4-5 days before symptom onset, early identification of COVID-19 cases will allow for earlier identification of and quarantining of contacts.

Rapid procurement of SARS-CoV-2 testing supplies has been a challenge for many jurisdictions, including Philadelphia. However, due to existing relationships with private companies as well as state and federal agencies, PDPH has maintained a mostly steady supply of reagents, test kits, and specimen collection materials. PDPH will continue to utilize staff who will work through existing channels to track down the necessary resources. We will also have staff dedicated to supply procurement and inventory management who proactively address potential shortages before supply levels decrease. To assist in this task through June 2020, we will review potential use of lab inventory management software or explore the possibility of developing an in-house database to accurately track inventory requests, deliveries, and orders. PDPH will also seek to develop new relationships with suppliers to maintain a variety of supply streams.

Adequate staffing will be necessary to support expanded testing availability, both within PHL and office-based positions at PDPH. We have established relationships with local non-profit public health agencies who are able to rapidly respond to staffing requests for contracted employees. Staffing needs will be identified in June 2020, with position postings coordinated through the non-profits' Human Resources departments. Upon identification of qualified applicants, key PDPH staff will utilize a standard onboarding checklist and training modules stored within PDPH's Learning Management System. This will ensure new staff are efficiently brought up to speed and have the resources necessary to begin working on their assigned tasks.

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	1	5							6		
	FOR DIAGNOSTIC TESTING										
How many additional* testing equipment/devices are needed to meet planned testing levels? (provide an estimated number, and include platform details in narrative above)		5 Cepheid Xpert Xpress, 5 Abbott ID Now, 1 BioFire FilmArray Torch Additional Module							0		
Volume of additional swabs needed to meet planned testing levels <sup>++</sup>		25,000							25,000		
Volume of additional media (VTM, MTM, saline, etc.) needed to meet planned testing levels <sup>++</sup>		50 L							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 - Thermofisher)		Abbott m2000 - 40 kits/month; Hologic's Panther - 60 kits/month; Cepheid Xpert Xpress 250 tests/month; BioFire Torch 10 kits/month; Qiagen 10 kits/month							
FOR SEROLOGIC TESTING									
Number of additional* equipment and devices to meet planned testing levels	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 - Thermofisher)		Abbott IgG - 5 kits/month							

<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.