



Public Health Innovation  
and Workforce Committee  
Recommendations to the  
ReOpen DC Advisory Group  
Steering Committee

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May 21, 2020

For more information, and to see the ReOpen DC Advisory Group Steering Committee's full recommendations, please visit <https://coronavirus.dc.gov/>.

# **PUBLIC HEALTH INNOVATION AND WORKFORCE**

## **COMMITTEE MISSION & FOCUS**

This unprecedented crisis has stressed our public health infrastructure, yet we will depend on a robust healthcare system in order to start reopening. While public health officials will be determining reopening based on their gating criteria, and the Emergency Operations Center is the lead on operations, there are numerous innovations rapidly occurring in the public health space in response to COVID-19.

The committee researched and identified the necessary public health technologies needed to scale up testing and surveillance and identified deployable technologies and innovations. It examined specific issues such as personal protective equipment (PPE), temperature monitoring, testing capacity and analysis, serum testing, contact tracing, and other health technologies. Finally, it considered opportunities to train and reskill workers for new job opportunities arising from the crisis. The committee made recommendations focusing on scaling testing and tracing capabilities to meet the challenge.

## **COMMITTEE CHAIRS**

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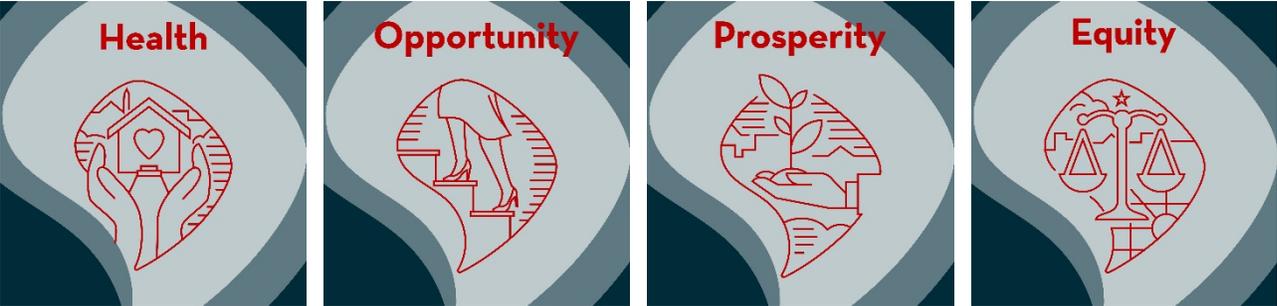
# OVERVIEW & STATUS

## CURRENT STATUS

The current situation of healthcare due to COVID-19 is in flux. Efforts are focused on building medical capacity to meet the expected demand due to the pandemic. As has been stated in the Johns Hopkins report, the transition to reopening should only be considered when the following four criteria have been met: (1) the number of new cases has declined for at least 14 days; (2) rapid diagnostic testing capacity is sufficient to test, at minimum, all people with COVID-19 symptoms, as well as close contacts and those in essential roles; (3) the healthcare system is able to safely care for all patients, including having appropriate personal protective equipment for healthcare workers; and (4) there is sufficient public health capacity to conduct contact tracing for all new cases and their close contacts.

Furthermore, for a successful reopening with minimal recoil back to the current situation, the capacity of diagnostic testing, personal protective equipment, healthcare and medical resources needs to be maximized.

## MOVING TOWARD OUR VALUES



## COMMITTEE APPROACH AND ENGAGEMENT

The Public Health Innovation and Workforce Committee was made up of representatives from a broad swath of the local public health and workforce ecosystems. This included healthcare providers, testing and health equipment manufacturers, the Workforce Investment Council, and others. The committee heard from Councilmembers Gray, Silverman, and Allen, current and former District and federal officials, and businesses, in addition to more than 15,136 District residents through the ReOpen DC survey. Feedback received is summarized below.

### Public Survey Input

Survey results related to Public Health and Innovation focused on three major themes: technology, regulation, and information.

- **Technology:** Several recommendations were made for expanding use of existing technology or considering new public health technology to monitor resident health, trace potential spread of the disease, and expand personal protection. In some cases, recommendations for new technology were supported by links to research.
- **Regulation:** Many commenters highlighted the need for the District to increase enforcement of personal protective guidelines in businesses and government facilities, primarily regarding the wearing of masks. Other suggestions related to processes for implementing contact tracing.
- **Information:** Some commenters recommended that successfully combating the spread of the coronavirus requires more sharing of information about the location of confirmed cases within the District.

### **Council of the District of Columbia**

The Public Health Innovation and Workforce Committee had the opportunity to engage with DC Councilmembers Allen, Silverman, and Gray. Specifically, the Councilmembers addressed the entire Public Health Innovation and Workforce committee and provided comments for the committee to consider as they pursued their work. Comments from the councilmembers included the following themes:

- **Clear and Specific Guidance Where Possible:** Guidance on the type of PPEs and testing for employers and customers to reopen will be critical and needs to be specific where possible.
- **Public Transit:** Public transit including bus and Metrorail are important for many essential workers and any guidance on supplies and messaging for riders and transit workers will be important.
- **Transparency of Health Data:** Public transparency on health data and being flexible with regard to feedback and the ability to pivot will be key.
- **Extend to Vulnerable Communities:** Need to push testing to vulnerable communities not just rely on making it available.
- **Rapid testing:** To maximize testing, we need to ensure that vulnerable communities have rapid testing available to limit the spread of the virus and allow staff to return to work instead of being quarantined.
- **Contact tracing:** To prevent the spread of the virus to vulnerable individuals. Assess the mayor's proposal of 900 contact tracers by analyzing its benefits and limitations because funding must be weighed against other priorities in the upcoming budget.
- **Tele-school technology:** To ensure that every student has access to a tele-education curriculum for the 2020-2021 school year.
- **Antibody testing database:** To create a reliable database to determine if people who had the virus might become reinfected.
- **Grocery store access:** Innovative financing and funding for grocery stores in the city to end food deserts in Wards 7 and 8.

- **Worker safety issues:** Provide some thoughts on how we are going to use testing and surveillance to make sure that our workers (i.e., cashiers and construction workers) have access to the PPE as well as protection in the workplace.
- **DC Government Worker Safety Unit:** Contemplate the idea of having a unit of DC Government that is ensuring worker safety – including education and enforcement – and house the unit in the Office of the Attorney General.
- **Opportunities to Address Equity Issues in City:** Workforce development training in the healthcare sector to create opportunity for District residents – create career pipelines into healthcare including contact tracers as entry-level into the healthcare field.

## REOPENING PREPARATION

### TESTING

Much of the guidance of reopening suggests a massive expansion in testing on a scale that is not yet possible given current supplies and capacity. Daily testing capacity in DC is 3,700 samples a day, as of April 27, which is equal to approximately 0.4%. However, due to limited reagent supply, daily testing capacity is closer to 1,500. The Harvard Safra Center for Ethics recommends a national capacity to test 2% of the population per day by early June and 6% of the population per day by early July to “fully remobilize the economy.” Reaching this goal has been stymied by a lack of supplies to administer tests and capacity to process tests.

While it is clear that the District will need to increase testing, the District must also answer which tests we should use and who is tested. Testing includes 1) infection testing and 2) antibody testing. To date, the District has mostly focused on infection testing; administering tests to those with symptoms and, to a limited degree, to those with exposure to people confirmed to have COVID-19. In order to fully understand the risk to the population, the District would need to expand testing to include non-symptomatic people, ideally using randomized testing. Importantly, potential immunity can only be ascertained using infection testing if a negative test follows a positive. Antibody testing, also known as serology testing, would identify those who had COVID-19 already and may be protected from future infection. Widespread and high-quality antibody testing would paint a more complete picture of population risk, if representative of the District’s population. Antibody tests are also important for identifying plasma donors to treat those infected. However, there are open questions about the accuracy of currently available antibody tests as well as their significance, as studies do not yet indicate how long immunity exists.

As long as testing capacity is limited, the District will also need to answer who should be prioritized for testing and how to do so fairly. Currently, the District has been focusing

efforts on increasing test capacity to at-risk populations including nursing homes and clinics serving people with respiratory illnesses. The following recommendations outline how the District can expand testing and where to focus efforts.

### **Priority Recommendations**

- Testing is not a panacea and will be limited to the priority groups specified in our gated criteria in the near- to mid-term. The District should establish a public-private partnership with the authority to track, report and centrally coordinate testing strategy, consistent with CDC and DC Health guidance, as well as supply and demand management across District wide testing efforts. The goal will be to maximize available testing capacity, pursue strategies and tactics to expand capacity, recommend diverse capabilities to reduce single points of failure, identify and remove bottlenecks, identify appropriate funding sources, and develop targeted testing strategies to support business reopening, school reopening, health access for vulnerable populations, as well as research and future decision making. Evaluate strategies and alternative methods for testing that can be implemented safely in order to expand capacity.
  - Model potential capacity of available/attainable equipment and systems to determine appropriate testing capacity for each Ward.
  - Determine potential bottlenecks that reduce capacity due to delayed processes.
  - Confirm ability to run multiple brands of tests and replace reagents in the instance a platform or testing kit becomes unavailable.
  - Consider the use of pooled testing where multiple samples are tested together and only tested individually if positive.
  - Use digital tools for symptom tracking, contact tracing and risk-stratification. Integrate the testing intake process with the contact tracing process.
- To extend the impact of testing it will be essential to quantify and stratify communities/businesses/workplaces by risk of infection, availability of health access, and presence of comorbidities, define the percentage of each population targeted for testing, determine the frequency of testing, and calculate the total testing capacity required over defined periods of time (near-, mid- and long-term). Testing should not be decoupled from clinical healthcare; therefore, the goal should be to extend the reach of both healthcare and testing to help build the long-term infrastructure necessary for treatment and vaccine distribution.
- Many misconceptions exist about testing; the District should seek to broadly educate residents and employers about testing methods & protocols, the limitations of testing, and what a positive or negative test result does and does not mean (for each testing type). For example, little is still known about whether the presence of antibodies confers immunity and for how long.

## High-Level Considerations

- Segment DC's workforce into risk categories and develop guidance for testing in each category.
  - Identify industries/businesses currently operating near normal capacity while working remotely. These businesses should continue to operate remotely.
  - Stratify businesses/workplaces by risk of infection, current economic impact and societal importance. Quantify the number of employees in each category.
  - Work with experts to develop testing protocols for each category, determine the frequency of required testing and identify the total testing capacity required over a defined period of time (near-, mid- and long-term).
- Educate employers and residents on recommended testing methods and protocols to be used in return to work and re-opening decisions.
  - Communicate to employers and residents the goals and limitations of testing.
  - Educate the community on best practices to conduct testing (i.e., facilitating testing in the least invasive way, having testing agents with proper training, maintaining physical safety during testing and screening, etc.).
  - Develop guidance for Phase 1 employers to educate employees on when to stay home and seek testing if circumstantially exposed or symptomatic.
- Communications should provide instruction, knowledge, and assistance with implementation, and be in multiple formats.
  - Health literacy matters, even more so during an emergency, and communication channels need to be tailored to different audiences and learning styles. Even if they read guidance, some people wanted to talk to a human expert or hear guidance live, evidenced by the volume of calls received by DC Health when the Stay-at-Home Order began. While messages need to be simplified for easy communication, *oversimplifying* will not help. Messages should provide *the instruction, the why, and the how*. Finally, guidance should be available on multiple channels, from print to phone to mobile.
- Conduct robust community testing in identified hotspots and where disparities in healthcare access and resources currently exist (including asymptomatic testing). Expansion of mobile testing should be coupled with an expansion of mobile healthcare, particularly to address any co-morbidities that may be undertreated. Fragmenting care to just testing further disadvantages underserved communities.
- Engage community leaders and resources to establish neighborhood testing sites and educate residents on testing availability and procedures.
- Translate testing information into multiple languages.

- Prioritize public health lab testing capacity for underserved and vulnerable populations.
- Recruit trusted community organizations and social service agencies to administer testing programs for specific communities of need.
- Test a random sample of DC first responders, essential workers, or specific populations (e.g., teachers) in order to inform the timing of reopening for various industries and the health protections we should put in place.
- Form a partnership between the Public Health Laboratory, commercial labs, and hospitals to expand testing to identify, treat, and isolate cases before they develop into clusters.
- Conduct random viral or serological tests in DC over several months to provide an early indicator where we are on the curve over time.

## DISEASE SURVEILLANCE AND CONTACT TRACING

Contact tracing, paired with widespread testing, can decrease the spread of disease by identifying those who may have contracted COVID-19 and isolating them before they infect others. The John Hopkins report recommends testing all patients with symptoms as well as all of their contacts. Those contacts would be determined through interviews in which people truthfully disclose their contact, travel and interactions. Contact tracing has played a role in international success stories around flattening the curve including in Hong Kong and South Korea.

Contact tracing requires a significant amount of trust, since people are disclosing personal information with government. This trust has been building throughout the health emergency as the public recognizes the importance of public health experts. However, certain populations and individuals may be better reached through trusted community organizations rather than government. Many have touted the potential of new technologies to expand the reach of more traditional public health surveillance methods. Most recommend using GIS-enabled smartphones to identify who was nearby an infected person. While smartphone technology is a potentially powerful tool, it would not reach all people and has privacy implications. Furthermore, University of Oxford researchers estimate that, in order to be effective, an app would need to be adopted by 60% of the population – no jurisdiction has come close to that level of adoption. Even with technology, contact tracing will require a workforce who can ascertain information such as the nature of interactions.

Contact tracing is only effective when those who are at risk are safely separated from others. For many, 14-day quarantines are disruptive and may have significant financial implications, especially for without paid sick leave. It may also be logistically challenging, especially for those living in tight quarters or who have childcare responsibilities. For this reason, it is imperative that contact tracing carefully identify those who pose the greatest risk.

## Priority Recommendations

- Build scalable internal and external systems that maximize existing healthcare assets and can support future public health efforts.
  - Contact tracing is only effective if done quickly and collaboratively. DC Health’s internal system must be able to allow 900-plus staff members to collaborate and tract contacts remotely. Ideally, the ability to make voice calls, as well as SMS and email messages, would be built into the platform.
  - DC has one of the highest rates of health insurance in the country, it is important that the processes maximize a patient’s existing “health home” for testing and care, so that DC Government resources can be targeted to those who are not currently connected to care and at highest risk.
  - We cannot know how long surveillance and contact tracing of COVID-19 must last and therefore any systems and processes must be designed to reflect a long-term effort. Building those systems now will make DC better prepared and more resilient in the face of future health emergencies.
- Disease surveillance and contract tracing communication should provide instruction, knowledge, and assistance with implementation, and be in multiple formats.
  - Contact tracing doesn’t work unless residents pick up their phone. For that to happen, residents need to understand and trust the process and DC Health. Throughout, we should be transparent with residents about the nuts and bolts of contact tracing, using conversational language that is non-threatening and engage existing government and trusted community channels to deliver the message.
  - Contact tracers should adopt a common, empathetic call script in plain language, e.g., “Hi, I’m Mark from DC Health. I’m reaching out because someone you were in contact with yesterday has tested positive for coronavirus. This call is to tell you exactly what you need to do to keep yourself, your family and friends, and community safe. I’m here to support you, answer your questions, and connect you to any resources you might need....”
  - Finally, we should work with credible messengers and community leaders to set norms on what they should expect, including actions they should take and timing.
- Empower residents to understand their health risks and what to do about them through public maps for high-risk locations identified through the contact tracing and disease surveillance protocol.
  - As DC reopens and residents being to move around the city again, it becomes much more likely that they will not know everyone they come in close contact with (e.g., “I was at the supermarket, church, or on the B2 bus”). In order to empower residents those locations should be shared

quickly and publicly so that anyone who may have been exposed to coronavirus can take the recommended precautions.

- Maps and other information should identify public and private facilities, but not residences, and be accompanied with a clear public message about how residents should respond, including whether it is safe to return to the location or facility.

### **High-Level Considerations**

- Tailor contact tracing messaging, technology, and guidance so they can meet the needs of all residents. There is no one-size-fits-all approach so contact tracing needs to take into account a person's circumstance (e.g., financial situation, health conditions, age, technology access).
- Consider investing in digital tools that can collect and alert anonymous health information. Digital contact tracing provides quick identification and mass-alerting of positive individuals and their contacts, utilizing mobile technology (Bluetooth interactions or GPS). Also, DC Government should consider developing a COVID command center system where critical data such as testing capacity, infections, transmission and recovery data, current hot spots for active cases, as well as entry tracking are all integrated into one system to help stakeholders understand, collaborate and take action on key findings. Command centers can be quickly deployed via a cloud solution, making it easy to bring in new data sources to help inform decisions as situations change.
- Build sustainable systems that can support current and future public health needs. Invest in technology that leverages the existing health system, while meeting the needs of COVID-19 response today and future public health needs. From the government side, this means a system that can integrate with other data systems, can securely be used remotely, and is sufficiently flexible to adapt to the next challenge. For residents, this means meeting their preferred modes and languages for communication. The District should not pursue an app for residents until there is a single coordinated solution that is well-vetted, secure, and broadly adopted regionally. A coordinated solution is crucial given our permeable borders and high volume of tourists.
- Ensure the 900 contact tracers can speak with all of the city's residents. Use the language access line, but also recruit multilingual staff that collectively speak, at least, the seven most common languages in DC as well as American Sign Language. Direct communication in a resident's preferred language will strengthen trust, boost clear and contextualized communication, and ensure that tracing happens as effectively for all residents as it will for native-English speakers. Communication is about more than just the language—DC cultural competence matters, too.
- Use trusted voices to actively engage residents in contact tracing. Contact tracing doesn't work unless residents pick up their phone. For that to happen, residents need to understand and trust the process and DC Health. Throughout,

we should be transparent with residents about the nuts and bolts of contact tracing, using conversational language that is non-threatening and engage existing government and trusted community channels to deliver the message. Finally, we should work with community leaders to set norms on what they should expect, including actions they should take and timing.

- Empower residents to understand their health risks and what to do about them. Consider public maps for high-risk locations identified through the contact tracing and surveillance protocol. If DC Health determines through contact tracing that people in a public location have been exposed, and cannot individually identify or contact them, then it should consider ways of communicating that risk to the public (e.g., heat maps, tweets or public advisories).
- Build trust and public health for all DC residents.
- Use trusted intermediaries (e.g., churches, schools and neighborhoods) to build trust and facilitate contact tracing.
- Engage and empower residents.
- Put the right technology in place to support current and future work. Contact tracing at scale requires new technology. The previously manual, in-person or by-phone work of traditional contact tracing needs to be supplemented by new processes to quickly handle the number of people involved in a trace and to more efficiently manage and integrate data from multiple sources.
- Using existing data—like previously collected contact information and health records—can make contact tracing more effective, but requires interoperable systems and privacy protections.
- How might DC find or build sustainable tech systems that are right for our community in this situation and that are sufficiently flexible for future needs?
- Increase health literacy through targeted messaging and appropriate and diversified mediums.
- Look beyond existing legacy systems and processes to meet the increased demand in contact tracing. In doing so, ensure that new systems are user-tested, vetted, and load tested.
- Resource contract trace force to work remotely.
  - Equip tracing force with laptops and cell phones for virtual support.
- To improve access and equity, allow for distanced, but face to face contact tracing for communities that are hard to connect.
- Expand isolation and quarantine guidance to anticipate the unique needs of different populations. For example, many residents do not have the luxury of isolating (e.g., the need to report in-person for work, reliance on public transportation to get groceries, etc.)
- While technology offers opportunities for more robust and efficient contact tracing, not all DC residents have access to and/or dexterity with tech solutions. Our contact tracing strategy cannot rely solely on smartphone applications and online tools. Otherwise we will miss some of our most vulnerable neighbors—low-income residents and seniors.

- Big data offers many opportunities to support contact tracing. It can not only help fill-in the gaps of human recall (e.g., a person's location data captured by their phone), but it can also identify contacts that are otherwise unknowable to that person (e.g., the people they passed in the grocery store or rode the bus with). Using that data and recording it will require careful consideration of confidentiality, legality, ethics, and public trust.

## PERSONAL PROTECTIVE EQUIPMENT, CLEANING, AND WORKPLACE SANITIZATION

A phased reopening of the District will occur prior to a vaccine, and thus PPE, personal hygiene (i.e., hand washing), staying home when sick, and cleaning will be essential for many settings. Unfortunately, PPE supply lines are fragile and have not yet been able to produce the supplies needed to completely support the healthcare and first responder communities, let alone District Government workers and employees of private companies.

The PPE used by the health sector versus other District agencies and private businesses are similar, but not the same. There are three primary types of face masks: respirator masks, medical face masks, and non-medical masks. Masks are effective only when used in combination with frequent hand-cleaning with store-bought alcohol-based hand sanitizer or soap and water.

Federal and District agencies, as well as large companies, have more purchasing power to source large quantities of PPE. Cooperative buying facilitated by the District Government may be needed to assist small local businesses and organizations with obtaining the necessary masks, soap, and more to keep their employees and patrons safe.

The current PPE procurement plan by the District of Columbia include supporting hospital, primary care, public health agencies, long-term care, dialysis facilities, clinics, and private providers. Six-month goals for PPE include

- 800,000 face shields
- 1,250,000 N95 masks
- 3,500,000 gowns
- 21,853,648 gloves (pairs)
- 5,461,900 surgical masks

*\*Total received ranges from 10% to 50% of the goal to date*

The safe workplace supply plan for the District has been established to support DC agencies. The six-month goal includes:

- 5,000,000 nonsurgical disposable masks
- 1,250,000 reusable cloth masks
- 54,767 large-format hand sanitizers
- 4,679,080 disinfecting wipes
- 33,480,000 disinfecting liquids
- 45,378 hand soap

*Total Ordered ranges from 20%to50% of the goal to date*

### **Priority Recommendations**

- All employers and employees across all sectors should wear face coverings if they return to work during the first phase of reopening (including public transportation and public buildings).
- Centralize procurement for PPE and cleaning supplies at-cost to non-government organizations (i.e. faith-based and non-profit organizations), prioritizing healthcare-related industries, especially smaller healthcare providers with little purchasing power.
- Consider subsidizing PPE for certain non-government organizations that do not have the wherewithal to provide PPE to their employees, especially for those that serve at-risk populations.

### **High-Level Considerations**

- Assess availability of PPE and supply chain coordination
- Support cooperative purchase power for small business, non-profit, and faith-based organizations to obtain face coverings for general public.
- Leverage cooperative purchase power for PPE/face-covering supplies for at-risk communities (small business, non-profit, faith-based).
- All employees and employers should have consistent access to sinks supplied with soap and water, tissues and lined trash receptacles, store-bought alcohol-based hand sanitizer that contains at least 60% alcohol, and disinfectant spray or wipes.
- Educate employers and employees as to the types and proper use of PPE upon reopening.
- Provide guidance to employers on proper social distancing protocols.
- Coordinate supply chain necessary for PPE.
- Develop a cooperative agreement for particular sectors to leverage supply chains into community (i.e., small business, non-profit, faith-based organizations).
- Identify DC Government procurement options for increased demand for supply.

- Provide consistent messaging that face coverings must accompany social distancing and proper hygiene to be effective.
- Require all employers and employees (of all sectors) to wear face coverings upon return to work
- Educate employers and employees as to the types and proper use of PPE upon reopening
  - Use of non-medical face coverings
  - Employee and employer share responsibility for ensuring access to individual face coverings
- Develop face covering marketing material/training for the public
  - What is acceptable?
  - Why is it important?
  - DIY guides
- Combine PPE utilization, social distancing, testing, and contact tracing into comprehensive strategy for Phase 1 reopening
  - Develop infographic explaining the intersection between all of the above

## TEMPERATURE MONITORING

Fever is a common symptom of COVID-19, but it is not exclusive to this disease or present in all those infected. Nonetheless, the extensive use of touchless thermometers or at-home monitoring may help mitigate some of the risks of reopening prior to a vaccine.

The existing COVID-19 studies on temperature screening have been limited. One study found that nearly half of infected travelers would not be detected by airport temperature screening. Previous studies regarding SARS found that, while many individuals were quarantined, very few were infected with SARS. To date, the CDC has not issued guidance on healthy employee screenings, but rather employees who were COVID-19 positive and returning to work. Some private organizations have implemented employee temperature screening. For example, Home Depot and Starbucks have distributed kits to promote self-monitoring and Amazon has required temperature screening for employees reporting to work.

Temperature checks are not a substitute for social distancing, PPE, and increased sanitation procedures, but can be an important tool if applied in a non-discriminatory way with the guidance or supervision of medical professionals in adherence with health privacy laws.

### Priority Recommendations

- All employers and employees across all sectors should undergo daily temperature monitoring (self-monitoring, upon entering facility, and/or written check list) if they return to work during the first phase of reopening.

- Provide guidance to DC residents, visitors and employees to address the need for individuals to implement temperature self-monitoring at home as part of their daily morning or evening routine; safeguarding their individual health, as well as their family and friends. Guidelines should emphasize twice-daily temperature checks, a temperature threshold to contact an individual’s physician, and communications protocols to employers.
- Implement widespread temperature monitoring, using touchless thermometers or thermal scanners, in buildings that serve more than 50 people, but only when there are written policies, insurance support, and a legal relationship between individual conducting the temperature screen, and screenee.
- Centralize temperature monitoring devices at cost to non-government organizations, prioritizing healthcare-related industries, especially smaller healthcare providers with little purchasing power
- Highlight federal health privacy laws and training when designing temperature screening protocols.

### **High-Level Considerations**

- The District should require temperature monitoring at single business locations and buildings where you would find more than 50 individuals or with their employees if their business serves more than 50 individuals.
- Temperature monitoring should be implemented only when there is a legal agreement in place between the business and customer or business and employee.
- Employers are responsible to train employees in relevant health privacy laws when temperature monitoring is implemented.
- Employers should rely heavily on temperature checks, administered by medical professionals or trained managers.
- Employers should administer temperature checks based on legitimate and non-discriminatory business needs.
- Employers should consider regulatory, legal and liability risks in designing temperature screening protocols.
- Employers should support voluntary self-monitoring, including through the provision of health and safety kits, with guidance on how often to take temperatures and what to do if they register a fever.
- Businesses and government should use touchless thermometers, if available. If touchless thermometers are not available, then rely in questionnaires.
- Employers must couple the screenings with other measures, such as providing masks, encouraging employees to keep a distance from one another and monitoring workers for other symptoms.
- The District may need to provide additional support to certain residents by providing at-home kits for temperature and symptom monitoring.
- The District should work with Council to distribute “Reopen DC Kits” to small business owners with guidance, PPE, and temperature monitoring.

## TRAIN AND RESKILL WORKERS

Many business sectors will not be reopening to their pre-COVID states due to changes in customer preferences, safety concerns, and social distancing requirements. Overall unemployment is likely to remain high, but there will be wide variation with some jobs such as contact tracers in higher demand, with jobs associated with tourism remaining more limited. In all industries, there are also likely to be some workers who choose not to return to their previous jobs due to health or other concerns.

These conditions will combine to create a pressing need for training and resources to support businesses and employees. The healthcare industry in particular may not be able to meet current needs and may need additional staff if other businesses seek to add worker screening or health facilities. Information technology firms may need to add additional staff as employers continue to build their capacity for telework in anticipation of potential second waves of infection.

It will be essential to collect data and coordinate with regional partners to connect job seekers with emerging opportunities. This large-scale restructuring of the workforce will require collaboration between agencies, businesses, and non-profit organizations. The District has many universities, including the public UDC-CC, which may be able to provide training opportunities to meet these needs.

### Priority Recommendations

- Train and reskill workers to meet the immediate needs in the healthcare sector.
- Identify current and projected workforce needs and current and projected training capacity for those needs (across all sectors).
- Identify, reskill (if necessary), and match displaced workers.

### High-Level Considerations

- Consider access to technology as more employers rely on conduct assessments and interviews remotely.
- Consider programs for high-risk individuals who may be reluctant to return to work.
- Understand the need and identify roles needed to be filled including alignment on credentials, competencies, and experience.
  - Conduct and reference labor market analyses (some of this is already underway through the District's Economic Recovery Team (DERT), with agencies including OP, DOES, DMPED, and WIC contributing).
  - Survey DC and regional healthcare providers (home care, hospitals, pharmacies, etc.) to understand their immediate needs Do we have the workforce to meet immediate and long-term needs? Are there specific occupations we should target?

- To complement analyses, develop opportunities to formally and informally survey local business leaders (those that may require additional health support and/or services, as well as those offering those services) to estimate need. Some of this is likely captured through the existing surveys now open; additional opportunities for outreach and engagement could be developed.
- The healthcare expert in our group suggested that the current healthcare system can likely meet required and future testing needs, but there may be additional support needed for those who will help screen as workers enter office buildings or other places of business (though this is likely to be taking temperature or having individuals attest to not being symptomatic or having traveled could be done by security or existing business staff).
- One additional consideration is that some healthcare organizations (large hospitals, etc.) may partner with large businesses/offices to open clinics where on-site rapid testing could be deployed.
- If this happens, do healthcare providers anticipate challenges in making these expansions?
- As hospitals and other healthcare offices “turn back on” elective procedures, will there be any shift of individuals who have moved to provide support in response to the pandemic — and how will this contribute to needs in other parts of the healthcare system?
- Assess the existing pipeline and identify individuals who can meet the healthcare need.
  - Conduct outreach and match individuals from Medical Reserve Corps volunteers
  - Continue to shift individuals from across DC Government healthcare roles. If DC expanded task force to include non-healthcare specialists to assist, some of our customer service employees (i.e., library or DPR workers) could assist with tracing.
- Create new and expanded pipeline of individuals.
  - Identify those existing training programs that could easily scale (and/or shift to virtual training, if needed)
    - UDC-CC has several programs that could provide support, including graduates from their community college and workforce training programs.
    - There are other nursing and healthcare programs at local and regional undergraduate and graduate schools — relationships should be established quickly to ensure matching of talent to DC’s needs, as other regional institutions will likely be seeking to build out medical field needs, too.
- Identify other training programs that could be fast tracked for delivery locally (i.e., programs already offered virtually across the country; see resources section for an example.)

- Address Workforce Disruption and Plan for Longer-term Recovery (all sectors)
  - Identify sectors and occupations (and skills/competencies) with the greatest short-term and projected long-term workforce disruption, and conduct robust analyses to establish estimated needs, oversupply, and scenarios for potential changes (i.e., exits or transitions across sector; exits from the workforce, etc.)
  - In the immediate term, conduct outreach and surveys of employers; supplement with regional and national analyses.
  - Conduct analyses based on scenarios as phasing of economic “turn on” are determined (i.e., If office work and retail turn back on before hospitality, how many roles may be filled by hospitality workers?)
    - What happens when local and federal budgets contract in FY21 and beyond; how do we estimate local impact to the economy and workers if contracting opportunities decline?
  - Prioritize development of pipelines to support shifts and growth needed to support opening of two new hospitals recently announced by Mayor Bowser.
- JOB MATCHING AT SCALE: This work is currently underway at a smaller scale within the American Job Center (AJC) partners (led by WIC and DOES, along with DHS, DDS, OSSE, UDC, and others).
  - Build out training for job seekers; identifying platforms and tools to help employers conduct virtual hiring, etc.
  - Continues to leverage existing DC Networks job posting platform (not highly user-friendly, but integrated with AJC and UI).
  - Develop a public-private partnership resource for employers like what has been developed in California (<https://onwardca.org/>)
  - Consider participating or supporting a regional approach to help match impacted workers with available roles—this may be particularly important if DC, MD, and VA take different approaches to reopening (i.e., sectors open different phases across jurisdictions).
- DEVELOP PIPELINES:
  - As short- and long-term needs are identified through analyses, we will need to ensure we have training capacity to meet those needs. Prior to the public health emergency, we already had significant vacancies in healthcare and IT; this could be exacerbated by the current crisis
    - Create greater flexibility in our policies (including WIC and Higher Education Licensure Commission (HELC)) to allow for training programs to scale and/or launch new programs.
    - Conduct an information campaign to help impacted individuals become aware of resources to help them retrain or upskill to reconnect or progress in the labor market.
  - Identify and partner with higher education institutions that may be able to support this work.

- Some of the local IHEs offer workforce or sub-baccalaureate training, but this is at a very small scale. If we anticipate that much of the upskilling/training that will be required will be below an Associate's Degree level, local IHEs may offer limited support.
      - DCPS is already working on articulation agreements with regional community college programs; this could be an area for further collaboration and exploration.
    - Specifically focus on creation of pipelines into new industries or businesses
      - Leverage the engagement with healthcare providers (mentioned above), through structured industry engagement (mentioned below), to identify new lines of work, occupations, and expanded opportunities for DC businesses and workers to support the current or future public health emergencies.
      - Are there new businesses (R&D, diagnostics, testing production, etc.) that we can build; if so, how do we seize this opportunity to develop training programs so DC residents can take advantage and be trained to build this industry in DC?
      - We should ask employers about how government can support this; what we can do differently to advantage or remove potential barriers.
  - SECTOR PARTNERSHIPS AND STRATEGIES:
    - The District can and should establish sector partnerships/strategies in targeted industries (recommend healthcare and hospitality, and potentially IT).
      - This is a best practice for facilitating ongoing engagement between employers, training programs, and job-seeker/individual support organizations.
      - The goal is to establish a "table" through which employers can regularly provide information about their hiring/sector needs to ensure training pathways are preparing employees with the skills and competencies needed to be competitive and to meet employer needs.
      - In the past, DC has approached this model through short-term grant funding (which has not led to long-term sustainability)
      - A best practice is the Next Gen Sector Partnership model (<https://www.nextgensectorpartnerships.com/aboutnextgenerationpartnerships/>)

# EQUITY CONSIDERATIONS

## RECOMMENDATIONS FOR VULNERABLE POPULATIONS

Focus Area	Equity Consideration
PPE	<ul style="list-style-type: none"> <li>▪ Support cooperative purchase power for PPE/face covering supplies for at-risk communities (small business, non-profit, faith based).</li> </ul>
Temperature Monitoring	<ul style="list-style-type: none"> <li>▪ Provide at-home temperature thermometers or low-cost devices/ tools to at-risk and underserved populations.</li> <li>▪ Rely on questionnaires when temperature monitors are not available or feasible.</li> </ul>
Testing	<ul style="list-style-type: none"> <li>▪ Prioritize the capacity of public health lab resources and neighborhood testing sites to conduct robust community testing for hotspots, at-risk and underserved populations. Include broader testing of asymptomatic residents in each of these populations.</li> <li>▪ Engage community leaders and resources to outreach, educate and engage residents in testing availability, procedures and participation. Resources should be sensitized to each population and available in multiple languages.</li> <li>▪ Develop communication strategies for each target population, designed to address unique circumstances and reach individuals with identified access and functional needs. Communications should be sensitized to each population and available in multiple languages.</li> </ul>
Contact Tracing and Surveillance	<ul style="list-style-type: none"> <li>▪ Tailor contact tracing messaging, technology, and guidance so they can meet the needs of all residents in their preferred language.</li> <li>▪ Partner with credible messengers to build trust and reduce stigma around disease surveillance and contact tracing.</li> <li>▪ Make contact tracing and overall adherence to public health guidelines as easy to follow as possible, including using text messaging due to its widespread adoption.</li> </ul>
Training and Workforce	<ul style="list-style-type: none"> <li>▪ Address accessibility needs of job seekers, given increased reliance on remote/virtual interactions.</li> <li>▪ Address the needs of workers or job seekers who may</li> </ul>

	<p>not reengage in the workforce due to increased risk of infection.</p> <ul style="list-style-type: none"> <li>▪ Redouble support for individuals who were already disadvantaged but will now compete with more people for fewer jobs.</li> </ul>
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## ISSUES FOR FUTURE PHASES

Focus Area	Issue for Future Phases
PPE	<ul style="list-style-type: none"> <li>▪ Establish sanitization stations to facilitate reuse of PPE.</li> <li>▪ Procure PPE that is designed for increased durability and repeated cleaning.</li> <li>▪ Develop process to monitor stock of clinical PPE (e.g., N95) and procure when needed.</li> <li>▪ Establish centralized distribution center within the District to manage and monitor stock of critical PPE.</li> <li>▪ Explore workplace design solutions to decrease contact with shared surfaces and minimize the need for enhanced cleaning.</li> <li>▪ Leverage trusted organizations for distribution of PPE to at-risk communities.</li> </ul>
Temperature Monitoring	<ul style="list-style-type: none"> <li>▪ Look at innovative technologies that enable high-through temperature screening; like infrared screening systems (cameras), wearables.</li> <li>▪ Integrating any screening devices into contract tracing databases.</li> </ul>
Testing	<ul style="list-style-type: none"> <li>▪ Ensure that additional resources go toward filling existing gaps, rather than replacing existing solutions.</li> <li>▪ Should DC offer free testing for all residents? See LA example.</li> <li>▪ Support individuals to use existing technologies (e.g., Google Maps history) to retrace their steps.</li> </ul>
Contact Tracing and Surveillance	<ul style="list-style-type: none"> <li>• The District should not pursue an app for residents until there is a single coordinated solution that is well-vetted, effective, secure, and broadly adopted regionally. A coordinated solution is crucial given our permeable borders and high volume of tourists.</li> <li>• Help individuals reference their everyday technology</li> </ul>

	<p>(e.g., Google Maps history, iPhoto, social media) to better recall locations and contacts without having to unnecessarily share granular data.</p> <ul style="list-style-type: none"> <li>• Using new technologies and connecting existing data to support disease surveillance and contact tracing will require careful consideration of confidentiality, legality, ethics, and public trust.</li> </ul>
<p><b>Training and Workforce</b></p>	<ul style="list-style-type: none"> <li>▪ Offer new and different types of training (with a focus on online, virtual programs).</li> <li>▪ Leverage this opportunity to co-create with the public and private sectors, a career pathways strategy that includes plans for upskilling and transitioning of individuals into the Contact Tracer Task Force and then into the private sector as the work of the Task Force wanes.</li> <li>▪ Pursue, within or beyond the healthcare sector, the development of a Service Corps program that includes supported employment to assist individuals who may be less competitive for available jobs, to assist their transition into or back to the workforce.</li> </ul>

## RESEARCH, RESOURCES, AND REFERENCES

### RESEARCH AND RESOURCES

#### Further Resources

- S Y Chng, et al. Arch Dis Child. 2004. “Mandatory temperature monitoring in schools during SARS.” <https://adc.bmj.com/content/archdischild/89/8/739.full.pdf>.
- Centers for Disease Control and Prevention. 2020. “Implementing Safety Practices for Critical Infrastructure Workers Who May Have Had Exposure to a Person with Suspected or Confirmed COVID-19.” <https://www.cdc.gov/coronavirus/2019-ncov/community/critical-workers/implementing-safety-practices.html>.
- Quilty, Bill J., et al. Eurosurveillance. 2020. “Effectiveness of airport screening at detecting travellers infected with novel coronavirus (2019-nCoV).” <https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.5.2000080>.
- Equal Employment Opportunity Commission. 2020. “Pandemic Preparedness in the Workplace and the Americans with Disabilities Act.” <https://www.eeoc.gov/laws/guidance/pandemic-preparedness-workplace-and-americans-disabilities-act>.

- Allen Danielle, et al. Edmond J. Safra Center for Ethics at Harvard University. 2020. "Roadmap to Pandemic Resilience." [https://ethics.harvard.edu/files/center-for-ethics/files/roadmaptopandemicresilience\\_updated\\_4.20.20\\_0.pdf](https://ethics.harvard.edu/files/center-for-ethics/files/roadmaptopandemicresilience_updated_4.20.20_0.pdf).