Dalberg

Inequity in Covid-19 Testing in the US – How DC's response to HIV/AIDS might help

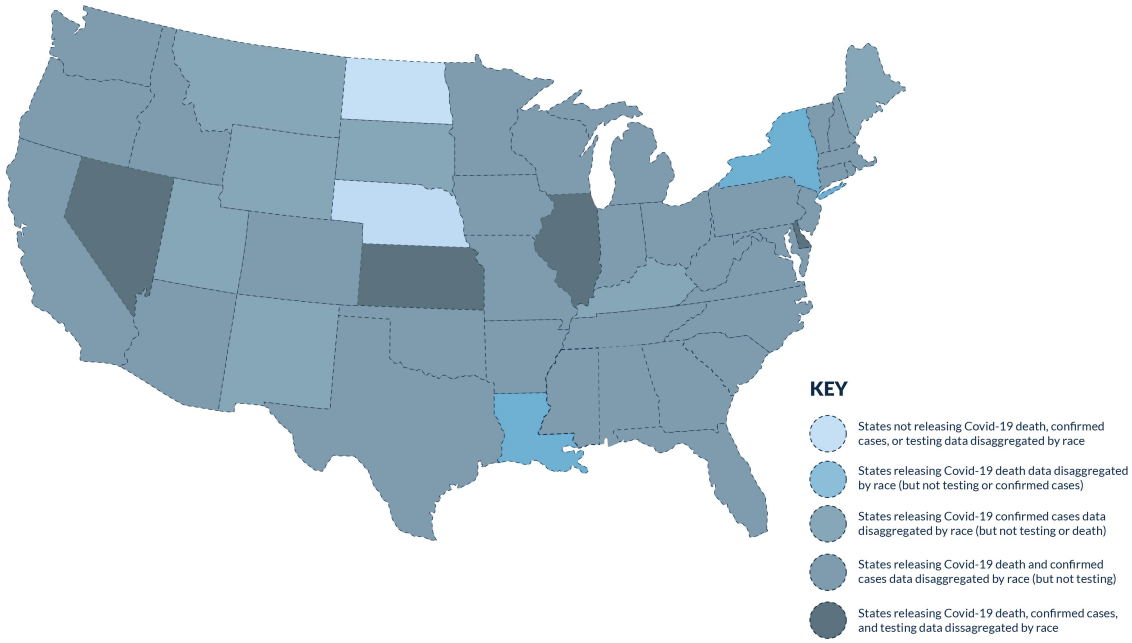
Covid-19 is disproportionately impacting lower-income people of color across the United States, with longstanding disparities in access to medical care and historical mistrust of the healthcare system due to racism in medicine at the root of the problem. This is further complicated by racism's contribution to high prevalence of risk factors among people of color like underlying health conditions, type of work, and living conditions, which result in higher risk of infection and worse illness severity.

In Washington, DC, 46% of Covid-19 cases and 75% of deaths have occurred among Black people[1], while comprising 44% of the overall population[2], compared to 15% of cases and 11% of deaths among whites[3], while compromising 46% of the overall population[4]. There are similar stories in other US cities – with Black people accounting for 69% of cases and 73% of deaths in St. Louis[5] (while accounting for 46% of the population[6]), and 40% of cases and 51% of deaths in Chicago[7] (while accounting for 30% of the population[8]).

Race-specific data and equitable testing are critical steps

Routine data that reflects race is considered a first step to tackling the disproportionate impact of Covid-19 on people of color. But such data is not widely available. Currently race-disaggregated testing is reported in only 4 states, while confirmed cases are reported in 47 states and death data reported in 42 states[9]. Gathering this critical data on testing, confirmed cases, and deaths – by race – could help inform programming and decision-making. Advocacy efforts are pushing for more equitable data, and this will require systematic changes in collection and recording of data, particularly for testing. In the absence of this data, the opportunity lies with scaling access to testing in the immediate term, allowing for reopening in the most equitable way.

State released breakdowns of COVID-19 Data by Race



[1] As of May 26, 2020, available from: https://coronavirus.dc.gov/page/coronavirus-data
[2] DC Health Matters. "2020 Demographics – Summary Data for DC".
[3] As of May 26, 2020, available from: https://coronavirus.dc.gov/page/coronavirus-data
[4] US Census. "QuickFacts DC"
[5] As of May 6, 2020, available from: https://www.stlouis-mo.gov/covid-19/data/demographics.cfm
[6] US Census. "Quick Facts St. Louis City"
[7] As of May 6, 2020, available from: https://www.chicago.gov/city/en/sites/covid-19/home/latest-data.html
[8] US Census. "Quick Facts Chicago city"
[9] As of June 2, 2020. JHU. "Racial Data Transparency", 2020.

Equitable testing is important because it will provide the information required for targeted policy and containment interventions, serve as a critical entry point to connect those with Covid-19 to health care resources, and help decrease incidence. Timely diagnosis allows for improved monitoring and containment, allowing cities to direct resources towards communities with the highest burden. Cities can then put in place stronger containment measures in a targeted manner, and caution individuals who test positive on how to prevent infection of family and community members. Testing may be especially important for people of color who are more likely to have comorbidities and need hospital care sooner, especially once a proven treatment is available.

Covid-19 Equitable Testing

Covid-19 testing is not yet equitable

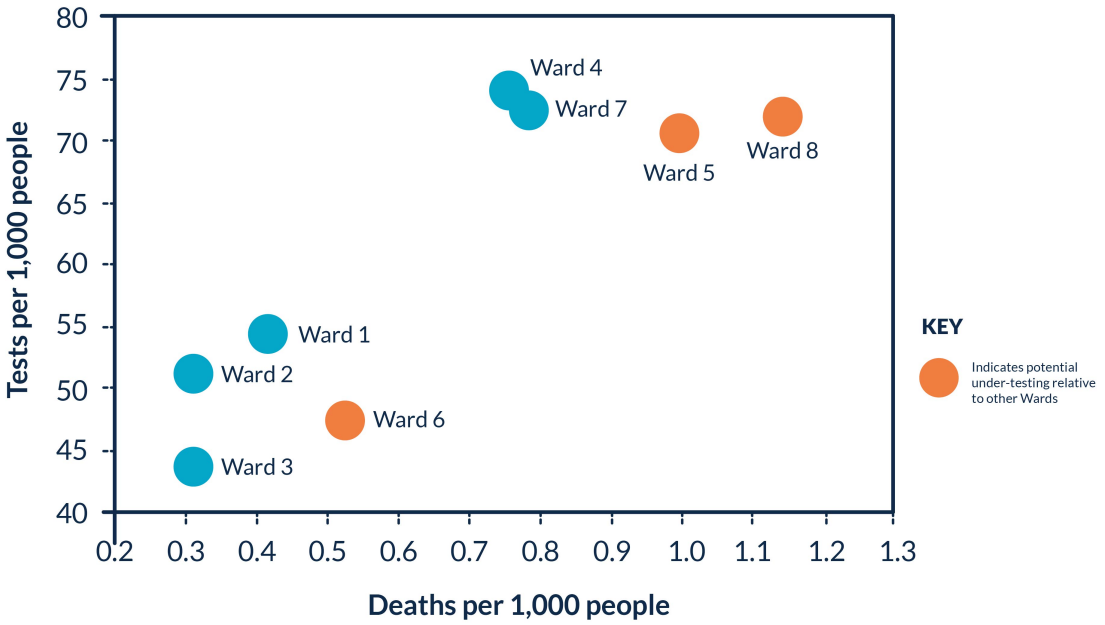
Initial data suggests expanded testing access will not be equitable across many geographies. A heat map of Memphis shows more tests are being conducted in majority white higher socioeconomic neighborhoods compared to majority Black lower-income areas[10]. Data from Illinois and Kansas, two of the four states reporting testing data by race, also suggest racial disparities in testing, despite incomplete information[11,12].

In DC, despite a rapid response to the pandemic, majority lower income Black neighborhoods are most impacted by Covid-19. Wards 4, 5, 7, and 8 have the highest reported number of Covid-19 cases and deaths and are higher percentage Black (between 60-94%) and low income populations, compared to Wards 1, 2, 3, and 6 with lower percentage Black (between 8-40%) and low income populations.

The city has responded quickly over the last couple of months to release more data disaggregated by neighborhood and race and to ramp up testing in the immediate term. Although the picture is murky due to the nature of the data and the amount of testing occurring outside of public testing sites (e.g., prisons, nursing homes, health care facilities), there is evidence to suggest that more testing is occurring among the most burdened Wards in recent times (see Figure).

[10] NPR. "The Coronavirus doesn't discriminate, but US health care showing familiar biases", 2020.
[11] Illinois Department of Public Health, "Covid-19 Statistics", 2020.
[12] Kansas Department of Health and Environment, "Covid-19 Cases in Kansas", 2020.

Figure, DC tests per 1,000 people vs. deaths per 1,000 people, by Ward (as of May 26, 2020)[13]



But, as DC continues to build out its longer-term programming for a sustained response, scaling-up of equitable testing, may be hampered by:

- *Fewer public testing sites in majority Black, low income areas.* Based on geographic spread, public Covid-19 testing locations rolled out to date seem to be more accessible to higher socioeconomic status populations. For example, Ward 4 has the highest prevalence of Covid-19 cases, but fewer testing centers than less burdened Wards 1, 2, and 3 (Ward 4: 1.1 per 100,000 people; compared to 2.3, 5, and 1.2 per 100,000 people, for Wards 1, 2, and 3, respectively).[13] To address the inequity in burden of cases, a much higher number of testing sites should be evident in the Wards most affected. Additionally, while most sites offer both drive thru and walk-up testing, if locations are not geographically accessible, the benefits of offering walk-up testing may be diminished. DC is currently amid shifting one of its testing sites to a walk-up site in Ward 8 to begin to address these issues.
- *Inconvenient testing hours for low-income and/or essential workers.* DC recently opened two public testing facilities, UDC-CC Bertie Backus Campus (Ward 5) and United Medical Center (Ward 8) to help increase access, but their limited hours during weekdays only (10am-2pm) may make it challenging for hourly and essential workers to utilize them. In fact, less than half of public testing clinics in DC are open outside of business hours.
- *Requirements for a primary care physician referral.* Almost all public testing sites require prior consultation or referral from a primary care physician. But, between 6-11% of the population in the most impacted Wards - 4, 5, 7, and 8 - are uninsured[14] and only about 50% of those on Medicaid have seen a primary care provider in the last year[15]. Referral requirements present an additional hurdle both in time and expense for low-income or uninsured populations to be able to access testing. Howard University's testing site has recently announced that they will not require primary care referrals to remove this barrier in hopes to increase access for those in Wards 7 and 8.[16]

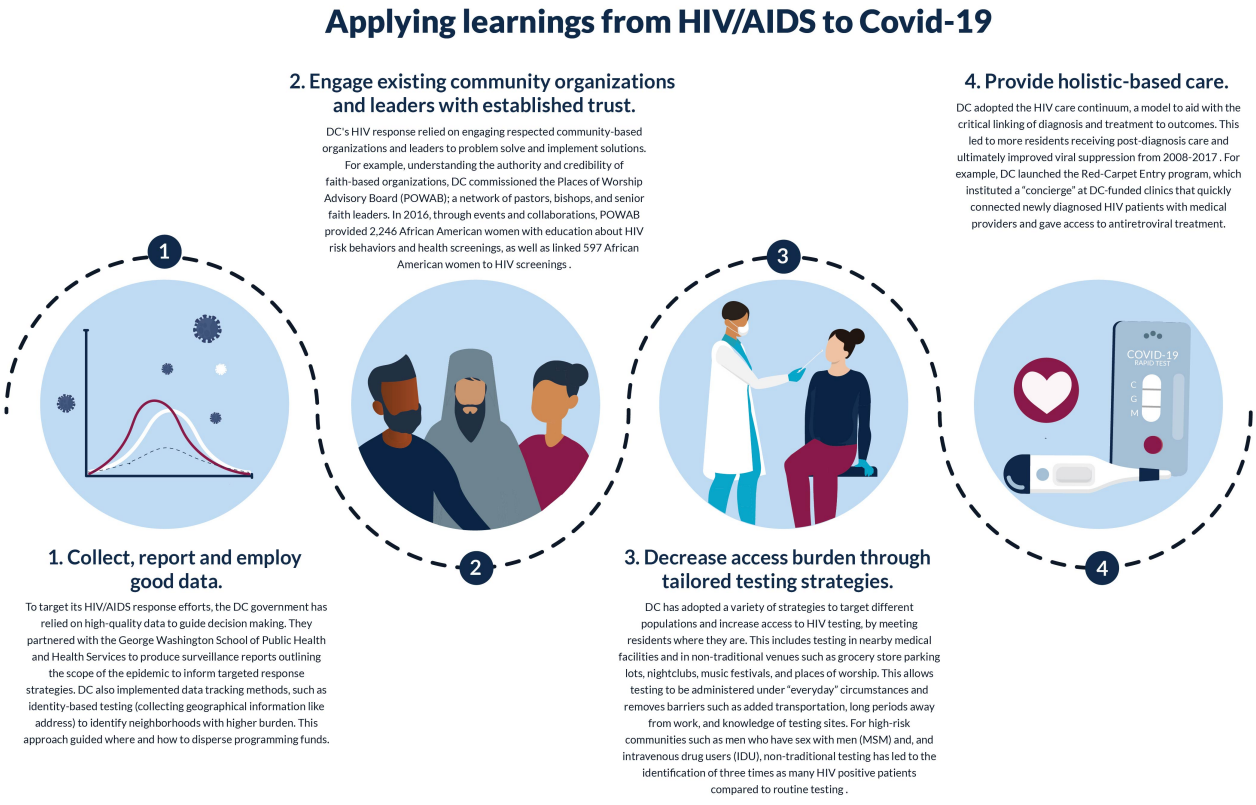
[13] As of May 26, 2020, available from https://coronavirus.dc.gov/testing.
[14] DC Office of Planning, "Census and Demographic Data by Ward", 2020.
[15] DC Health Systems Plan 2017.
[16] Howard University, "Howard University Faculty Practice Plan Opens Covid-19 Testing Clinic to Serve Diverse DC Communities", 2020.

HIV/AIDS testing in DC – a model for equitable testing

As DC and other cities scale-up long-term testing access and seek to do so in the most equitable way, they might capitalize on learnings from the roll-out of HIV/AIDS testing over more than two decades.

To tackle increasing numbers of HIV/AIDS infections, DC successfully devised approaches over time to target those most affected by the HIV/AIDS epidemic—predominantly lower-income Black residents. Programs range from collaborating with community-based organizations to providing services across the care continuum (i.e., diagnosis, and linkage to, receipt of, and retention in care), including the expansion of support services such as food vouchers and transportation to appointments and use of mobile testing facilities. The city's efforts have been diverse and heralded as a model around the nation.

DC strategically concentrated testing facilities per Ward according to burden. In 2010, Wards 1, 5, 6, and 8 had the highest numbers of persons living with HIV and 3.9, 6.7, 7.8, and 5.7 testing sites per 100,000 residents, compared to Wards 2, 3, 4, and 7 with fewer numbers of HIV positive residents and 3.6, 0, 1.3, and 1.4 testing sites per 100,000 residents. These targeted efforts worked; from 2004-2008, D.C. saw a 415% increase in HIV testing among Black people[17]. Testing progress coupled with connection to medical care and provision of support services led to overall improvements in HIV/AIDS outcomes in DC, including decreases in new diagnoses.



Applying learnings from HIV/AIDS to Covid-19

While there are notable differences between the HIV/AIDS epidemic and Covid-19 pandemic, including testing outcomes, associated stigma, modes of transmission, and length of illness, DC's response still lays a blueprint for action. Key lessons to increase access to testing equitably include:

1. **Collect, report, and employ good data.**
   To target its HIV/AIDS response efforts, the DC government has relied on high-quality data to guide decision making. They partnered with the George Washington School of Public Health and

[17] CDC Morbidity and Mortality Weekly Report, "Expanded HIV Testing and Trends in Diagnosis of HIV Infection – DC, 2004-2008", 2010.

Health Services to produce surveillance reports outlining the scope of the epidemic to inform targeted response strategies. DC also implemented data tracking methods, such as identity-based testing (collecting geographical information like address) to identify neighborhoods with higher burden. This approach guided where and how to disperse programming funds.

In the context of Covid-19, DC can continue to look to similar tactics to create a clear, data-driven approach to understanding the impact on various populations, including the collection of race-based testing data and tracking of funding per ward. Additionally, while barriers to Covid-19 testing are likely a combination of lack of access and skepticism, we do not have data on the biggest drivers. Collecting further information on what is preventing those who may have Covid-19 from getting tested would also be a big step to inform programming.

2. **Engage existing community organizations and leaders with established trust.**
DC's HIV response relied on engaging respected community-based organizations and leaders to problem solve and implement solutions. For example, understanding the authority and credibility of faith-based organizations, DC commissioned the Places of Worship Advisory Board (POWAB); a network of pastors, bishops, and senior faith leaders. In 2016, through events and collaborations, POWAB provided 2,246 African American women with education about HIV risk behaviors and health screenings, as well as linked 597 African American women to HIV screenings[18].

   Building on these learnings, DC has already partnered with Michelle Obama to record voicemail messages that encourage DC residents to seek out testing for Covid-19 if needed. Several community clinics that serve residents in the most impacted neighborhoods are suffering economically. DC can continue to support longstanding community clinics, engage community organizations active in HIV response (e.g., Community Education Group), and explore relationships with new organizations (e.g., Black Lives Matter) to define and drive solutions to encourage care seeking.

3. **Decrease access burden through tailored testing strategies.**
DC has adopted a variety of strategies to target different populations and increase access to HIV testing, by meeting residents where they are. This includes testing in nearby medical facilities and in non-traditional venues such as grocery store parking lots, nightclubs, music festivals, and places of worship. This allows testing to be administered under "everyday" circumstances and removes barriers such as added transportation, long periods away from work, and knowledge of testing sites. For high-risk communities such as men who have sex with men (MSM) and, and intravenous drug users (IDU), non-traditional testing has led to the identification of three times as many HIV positive patients compared to routine testing[19].

   For Covid-19, while everyday locations are not as relevant at this time with closures, they are a proxy for easy access, meaning it may help to scale-up testing in locations close to the homes of those most affected (e.g., mobile testing), expanding testing hours, as well as considering testing in hourly and essential employee workplaces (e.g., grocery stores, pharmacies).

4. **Provide holistic community-based care.**
DC adopted the HIV care continuum, a model to aid with the critical linking of diagnosis and treatment to outcomes. This led to more residents receiving post-diagnosis care and ultimately improved viral suppression from 2008-2017[20]. For example, DC launched the Red-Carpet Entry program, which instituted a "concierge" at DC-funded clinics that quickly connected newly diagnosed HIV patients with medical providers and gave access to antiretroviral treatment.

[18] Places of Worship Advisory board (POWAB) Annual Report, 2016.
[19] DC Jurisdictional HIV Prevention Plan for 2012-2015: Situational Analysis.
[20] DC Department of Health, "Annual Epidemiology & Surveillance Report", 2017.

An understanding, and application, of this type of continuum in today's fight against Covid-19, will ensure that DC's strategy is approached holistically to improve health outcomes and decrease fear associated with a positive test status. By linking testing programs with contact tracing and case investigator programs, DC can provide and help navigate end-to-end medical (e.g., referrals, access to medication, accurate information) and social (e.g., access to paid sick leave, food provisions, direct financial support, childcare alternatives) resources to those who receive a positive test. For example, DC is renting hotel rooms for those who cannot self-isolate at home to prevent household spread. Hiring care coordinators from neighborhoods most affected, with an equity lens and emphasis on a diversity of languages, can help ensure those who receive a positive test are linked to these resources and is a win-win—by having trusted partners who deeply understand the needs of those seeking services and creating jobs with benefits.

Opportunity to resolve testing inequity across US cities

In DC's rapid response to Covid-19, many important initial steps have been taken – from quickly ramping up testing, collecting and analyzing overall data by race, to considering economic fallout by providing resources such as food assistance and mortgage deferment programs. As the District continues to build out its long-term testing capacity, DC and cities like it can draw on learnings from the HIV/AIDS epidemic by crafting data-informed strategies to decrease access burden, engaging trusted community organizations in developing programming, and providing clear linkages to medical and social services. There is an opportunity for DC to take real leadership and demonstrate how to succeed, as they did with HIV/AIDS.

As these steps are taken, it is important to build these systems and structure to last – by connecting pandemic response with existing health infrastructure so that the public health system is strengthened and more equitable in the long-term as a result. The ultimate goal is to reduce the need to scale-up this infrastructure in the midst of a crisis like with HIV/AIDS and Covid-19, and address the underlying health inequity sustainably.

Cities across the US struggling with the inequities of the Covid-19 pandemic can draw on these learnings from HIV/AIDS responses, and implement strategies to reach those most burdened, with scaling up testing equitably as an important first step.