New York City 2020: Ending the HIV Epidemic: A Plan for America
Situational Analysis

Table of Contents

[1] This includes transgender people and people who identify as gender nonconforming, gender non-binary, or genderqueer; referred to collectively in this document as people of trans experience unless otherwise specified or limited based on original data sources.

I. Background

New York City (NYC) is at the epicenter of the HIV epidemic in the United States (U.S.), with an estimated 91,500 people with HIV (PWH) in NYC at the end of 2019,[2] and 1,772 people newly diagnosed with HIV in 2019.[3] NYC's four most populous counties – Bronx, Kings (Brooklyn), New York (Manhattan), and Queens – are among the 48 counties designated as part of the Ending the HIV Epidemic: A Plan for America (EHE: Plan for America).[4]

As outlined in the New York City 2020: Ending the HIV Epidemic: A Plan for America Epidemiologic Profile,[5] the HIV epidemic in NYC is characterized by a declining number of annual new HIV diagnoses and estimated incident HIV infections, a large population of PWH, and generally high but inequitable achievement of outcomes along the HIV care continuum, such as linkage to care and viral suppression. Stark inequities by race/ethnicity, gender, sexual orientation, age, and neighborhood persist in new diagnoses and clinical outcomes.

The NYC Department of Health and Mental Hygiene (NYC HD) coordinates NYC's response to the HIV epidemic, including HIV testing initiatives; prevention, care, and treatment programming; surveillance; training and technical assistance; policy advocacy; community engagement; social marketing; and racial equity and social justice initiatives. Fundamental to this work is a commitment to racial equity and social justice to dismantle the underlying racism, identity-based stigmas, and other systemic oppressions that drive HIV-related health inequities.

The NYC HD works closely with key partners, including the New York State Department of Health (NYS DOH), local clinical and non-clinical agencies, planning and advisory bodies, and community members, to prioritize, plan, and implement HIV surveillance and status neutral prevention and care efforts citywide. This ongoing coordination aims to increase efficiency and reduce duplication; maximize the volume and accessibility of programming and services; ensure that community input informs the design and implementation of jurisdictional plans to end the epidemic; and facilitate implementation of innovative strategies to address the HIV epidemic.

NYC and NYS Plans for Ending the HIV Epidemic

The New York City Ending the Epidemic Plan (NYC ETE Plan),[6] first implemented in 2015, employs an innovative HIV status neutral approach[7] to reduce the number of new HIV infections to non-epidemic levels; to improve the health and well-being of PWH and people vulnerable to HIV infection; and to eliminate HIV-related health inequities. The NYC ETE Plan includes five key strategies:

---

[2] N.Y.C. Dep't of Health & Mental Hygiene, Care and Clinical Status of People with HIV/AIDS in NYC, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-related-medical-care-2019.pdf.

[3] N.Y.C. Dep't of Health & Mental Hygiene, HIV Surveillance Annual Report, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.

[4] HIV.gov, Ending the HIV Epidemic: A Plan for America – Overview (last accessed Mar. 26, 2021), *available at* https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview.

[5] N.Y.C. Dep't of Health & Mental Hygiene, New York City 2020: Ending the HIV Epidemic: A Plan for America Situational Analysis (last accessed March 26, 2021).

[6] N.Y.C. Dep't of Health & Mental Hygiene, Ending the Epidemic: Strategies to End HIV in New York City (last accessed Mar. 27, 2021), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/ah/ete-strategy.pdf.

[7] Julie E. Myers *et al.*, *Redefining Prevention and Care: A Status-Neutral Approach to HIV*, 5(6) Open Forum Infectious Diseases 1-4 (Jun. 2018).

- **Strategy 1**: Increase the number of people who know their HIV status by diagnosing HIV infection as early as possible, promoting routine testing within health care facilities, and scaling up testing options in non-clinical settings.
- **Strategy 2**: Prevent new HIV acquisition by increasing access to effective prevention interventions, including pre-exposure prophylaxis (PrEP), emergency post-exposure prophylaxis (emergency PEP), condoms, harm reduction, and supportive services.
- **Strategy 3**: Improve viral suppression and other health outcomes for PWH by optimizing medication adherence and access to care, improving coordination of clinical and supportive services, and increasing access to immediate antiretroviral treatment (iART).
- **Strategy 4**: Enhance methods to identify and intervene on HIV transmission networks to better support individuals and communities at increased risk of exposure.
- **Strategy 5**: In all NYC ETE strategies, utilize an intersectional, strengths-based, anti-stigma, and community-driven approach to mitigate racism, sexism, homophobia, transphobia, and other systems of oppression that create and exacerbate HIV-related health inequities.

The NYC ETE Plan reflects and builds upon the New York State Blueprint for Ending the Epidemic (NYS ETE Blueprint),[8] a set of recommendations New York State (NYS) adopted in 2015 organized around three overarching goals: 1) Diagnose PWH and link them to care; 2) Ensure that people diagnosed with HIV initiate and stay on HIV treatment and achieve viral suppression so they remain healthy and do not transmit HIV; and 3) Increase access to PrEP and emergency PEP for people who may be exposed to HIV. The NYS ETE Blueprint is the product of broad engagement and collaboration among NYS and NYC government officials, community leaders, advocates, researchers, health care and supportive service providers, and PWH and members of communities disproportionately affected by HIV.

The HIV Epidemic in NYC

In 2019, the annual number of new HIV diagnoses in NYC continued to decline, with 1,772 new HIV diagnoses made and reported in NYC (an 8% decrease from 2018 to 2019, and a 70% decrease since 2001). Men, women, and people of trans experience, all age groups, nearly all racial/ethnic groups, and nearly all HIV transmission groups experienced declines in new HIV diagnoses from 2018 to 2019. Estimated new HIV infections in NYC also continued to decline, down 14% from 2018 to 2019, and 40% since 2015. Men who have sex with men (MSM) experienced a particularly steep decline, with an estimated 840 new HIV infections in 2019, down 44% from the number of estimated new infections in 2015.

More New Yorkers with HIV are becoming virally suppressed and living longer, healthier lives. In 2019, 77% of all PWH estimated to be living were virally suppressed, and 87% of all PWH receiving HIV medical care in NYC in 2019 were virally suppressed, up from 83% in 2015.

[8] N.Y.S. DEP'T OF HEALTH, BLUEPRINT FOR ENDING THE EPIDEMIC (Mar. 2015), *available at* https://www.health.ny.gov/diseases/aids/ending_the_epidemic/docs/blueprint.pdf.

In 2019, NYC announced that as of 2018 it had become the first Fast-Track City[9] in the U.S. to reach the UNAIDS 90-90-90 treatment targets,[10] two years ahead of the UNAIDS year 2020 goal.[11] New data show that as of 2019, in NYC, 93% of PWH have been diagnosed, 90% of people diagnosed with HIV are on treatment, and 92% of people on treatment are virally suppressed.[12]

While these data represent an important step toward ending the epidemic, inequities persist across many communities in NYC. In 2019, of all cisgender and transgender women newly diagnosed with HIV, 91% were Black or Latina/Hispanic; of all cisgender and transgender men newly diagnosed, 81% were Black or Latino/Hispanic. In 2019, of all men newly diagnosed with HIV, 69% were MSM; of all new diagnoses among MSM, 80% were among Black or Latino/Hispanic MSM. Approximately half of New Yorkers newly diagnosed with HIV in 2019 lived in neighborhoods of high poverty. The data also show inequities in viral suppression among PWH in medical care, with 94% of White people and Asian/Pacific Islander people virally suppressed, compared to only 87% of Latino/Hispanic people and 84% of Black people.[13]

COVID-19 Public Health Emergency

As NYC has continued its efforts to end the HIV epidemic, it has had to grapple with a new public health emergency. Within the U.S., NYC has been among the regions hardest hit by COVID-19, with 829,305 confirmed and probable cases, 98,598 hospitalizations, and 30949 deaths from March 2020 through March 27, 2021, with stark racial/ethnic inequities playing out across all three.[14] Black and Latino/Hispanic people have nearly twice the hospitalization rates compared to White people, and had 68% and 87% greater death rates, respectively, compared to White people. An early epicenter of the domestic pandemic, NYC experienced an initial peak of an average 5,132 COVID-19 cases per day by the week of March 29, 2020, and 566 COVID-19 deaths per day by the following week. On March 22, 2020, NYS on PAUSE went into effect, closing all non-essential businesses statewide and banning non-essential gathering of any size for any reason.[15] Since then, COVID-19 case, hospitalization, and death rates in NYC have significantly decreased, and all NYS regions, including NYC, have gradually reopened in phases, though certain restrictions remain in place. COVID-19 increased to a second peak in January 2021.

A matched dataset using the NYC HIV surveillance registry, and COVID-19 case and death data through June 2, 2020, which included more than 200,000 COVID-19 cases, compared 1) All PWH; 2) All people diagnosed with COVID-19; and 3) All PWH who were also diagnosed with COVID-19, to describe these groups and assess differences in COVID-19-related outcomes. This analysis found that while PWH were

[9] Fast-Track Cities Initiative (last accessed Mar. 26, 2021), *available at* https://www.fast-trackcities.org/.
[10] UNAIDS, 90-90-90: Treatment for All (last accessed Mar. 26, 2021), *available at* https://www.unaids.org/en/resources/909090.
[11] Press Release, Office of Mayor Bill de Blasio, New York City Achieves Global Milestone in Fight to End the HIV/AIDS Epidemic (Dec. 2, 2019), *available at* https://www1.nyc.gov/office-of-the-mayor/news/582-19/new-york-city-achieves-global-milestone-fight-end-hiv-aids-epidemic.
[12] Press Release, N.Y.C. Dep't of Health & Mental Hygiene, New HIV Diagnoses Fall to Historic Low As New York City Nears Goal to End the Epidemic, Mayor de Blasio to Participate in "World Aids Day 2020" Virtual Event (Dec. 1, 2020), *available at* https://www1.nyc.gov/site/doh/about/press/pr2020/new-hiv-diagnoses-fall-to-historic-low.page.
[13] N.Y.C. Dep't of Health & Mental Hygiene, Care and Clinical Status of People with HIV/AIDS in NYC, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-related-medical-care-2019.pdf.
[14] N.Y.C. Dep't of Health & Mental Hygiene, COVID-19 Data (last accessed March 27, 2021), *available at* https://www1.nyc.gov/site/doh/covid/covid-19-data-totals.page.
[15] Press Release, Office of Gov. Andrew M. Cuomo, Governor Cuomo Signs the 'New York State on PAUSE' Executive Order (Mar. 20, 2020), *available at* https://www.governor.ny.gov/news/governor-cuomo-signs-new-york-state-pause-executive-order.

not overrepresented in COVID-19 cases citywide, they were more likely to be hospitalized or die following COVID-19 diagnosis.[16] An analysis using data from across New York State similarly found that PWH were not only more likely to be hospitalized and die of HIV in the hospital.[17] Future analysis will likely include additional cases from later in 2020 and enhance control for underlying comorbidities. On February 15, 2021, PWH became independently eligible to receive a COVID-19 vaccine (as an underlying condition) in NYS.[18]

Advancing HIV Health Equity

Advancing HIV health equity is a key strategic priority of NYC HD's HIV response. Progress will require action to address overlapping social and structural determinants of health that increase risk of HIV infection, and, for PWH, put care and treatment further out of reach. These include sexism, homophobia, transphobia, ableism, ageism, and other complex and intersectional systems of oppression, as well as stigma occurring at the structural, interpersonal, or individual level. HIV-related stigma is one of many types of stigma that PWH and people vulnerable to acquiring HIV may experience; others include stigma related to race/ethnicity, nationality and immigration status, gender identity, sexual orientation, poverty, food insecurity, housing instability, substance use, mental health, history of criminal justice involvement, lack of education and employment opportunities, and intimate partner violence, among other identities and experiences. Research shows that stigma is associated with lack of HIV testing, nondisclosure of HIV status, delayed entry to HIV care, poorer adherence to treatment, substance use, medical distrust, and behavioral health issues.

Recognizing that years of racist policies, practices, and norms of institutions, including many NYC institutions, have led to worse health outcomes in communities of color than in White communities, NYC HD launched Race to Justice, an internal reform effort to better address racial health disparities and improve health outcomes for all New Yorkers.[19] In September 2017, NYC Mayor Bill de Blasio signed into law broad-based legislation designed to strengthen local policies to address the root causes of health and social inequities, including racism, sexism, and homophobia.[20] Local law 174 and Executive Order 45 now require NYC HD, along with other municipal agencies, to monitor and report on a number of equity-focused indicators designed to maintain a diverse workforce and equitably allocate resources and services.[21] In 2019, building on the agency-wide Race to Justice reforms, NYC HD's Bureau of HIV (BHIV)

---

[16] Sarah L. Braunstein *et al.*, *COVID-19 Infection among People with HIV in New York City: A Population-Level Analysis of Linked Surveillance Data*, CLINICAL INFECTIOUS DISEASES (Nov. 30, 2020).

[17] James Tesoriero *et al.*, *COVID-19 Outcomes among Persons Living with or without Diagnosed HIV Infection in New York State*, 4(2) JAMA NETWORK OPEN e2037069 (2021).

[18] Press Release, Office of Gov. Andrew M. Cuomo, Governor Cuomo Announces List of Comorbidities and Underlying Conditions Eligible for COVID-19 Vaccines Starting February 15 (Feb. 5, 2021), *available at* https://www.governor.ny.gov/news/governor-cuomo-announces-list-comorbidities-and-underlying-conditions-eligible-covid-19-vaccine.

[19] N.Y.C. Dep't of Health & Mental Hygiene, Race to Justice (last accessed Mar. 26 ,2021) *available at* https://www1.nyc.gov/site/doh/health/neighborhood-health/race-to-justice.page.

[20] Press Release, Office of Mayor Bill de Blasio, Mayor de Blasio Signs 12 Bills Strengthening Justice and Equity in New York City (Sept. 8, 2017), *available at* https://www1.nyc.gov/office-of-the-mayor/news/581-17/mayor-de-blasio-signs-12-bills-strengthening-justice-equity-new-york-city.

[21] N.Y.C. ADMIN. OF CHILDREN'S SERVICES *ET AL.*, REPORT ON EFFORTS UNDERTAKEN IN CONNECTION WITH LOCAL LAW 174 (Jul. 1, 2019), *available at* https://www1.nyc.gov/assets/operations/downloads/pdf/ll174_public_report_w_appendices_2019.pdf; THE CITY OF NEW YORK OFFICE OF THE MAYOR, EXECUTIVE ORDER 45: ONE NYC EQUITY REVIEW (May 8, 2019), *available at* https://www1.nyc.gov/assets/home/downloads/pdf/executive-orders/2019/eo-45.pdf; Equity NYC (last accessed Mar. 26, 2021), *available at* https://equity.nyc.gov.

established a new Racial Equity and Social Justice Initiatives Program, formalizing its commitment to reducing racial inequities in HIV outcomes and access to HIV services and biomedical interventions. The program builds NYC HD staff capacity to recognize the role of racism in perpetuating health inequities and develop strategies to intervene on its impacts; organizes staff to create a supportive and sustainable infrastructure to further this work; and operationalizes a comprehensive racial equity approach to effect change in program, policy, and practice, including at the workforce level.

II. Cross-Cutting Issues

Social and structural determinants of HIV-related health inequities, the HIV service delivery system in NYC, and unique situations and challenges experienced by members of priority populations cut across policy and service delivery discussions for all four EHE Pillars. These factors are discussed as cross-cutting issues affecting timely HIV diagnosis, linkage to and sustained treatment for PWH, and access to comprehensive prevention services.

Social and Structural Determinants of Health; Impact on HIV-Related Health Inequities

Many New Yorkers face complex, challenging environments affecting HIV prevention and HIV-related health outcomes. Below is a snapshot of how social and structural determinants of health and various types of stigma drive inequitable access to HIV testing, prevention, care, and treatment services for New Yorkers.

Stigma and Discrimination

Stigma undermines the HIV response and contributes to HIV health disparities by worsening the physical and mental well-being of people, deterring people from seeking needed health services, and diminishing the quality and effectiveness of health services.[22] Stigma and discrimination related to HIV status, race/ethnicity, sexual orientation, gender identity and expression, mental health, socioeconomic status, immigration status, or status as a drug user or person involved in the sex trade, are demonstrated barriers to HIV prevention and care services.[23] [24]

Stigma based on HIV status and marginalized identity remains high in NYC.[25] Data from the Community Health Advisory and Information Network (CHAIN) study[26] show that concern regarding disclosure of HIV status (disclosure stigma) is the most common type of stigma experience among PWH in NYC, followed by enacted stigma. One in five PWH (21%) report multiple negative responses from others due to their HIV status. Among priority populations, Latina cisgender women with HIV report the highest level of disclosure stigma, and Black cisgender women with HIV the highest level of enacted stigma; Black and

[22] Valerie A. Earnshaw *et al.*, *Stigma and Racial/Ethnic HIV Disparities: Moving toward Resilience*, 68(4) AM. PSYCHOLOGY 225-236 (May – Jun. 2013).
[23] Matthew E. Levy *et al.*, *Understanding Structural Barriers to Accessing HIV Testing and Prevention Services Among Black Men Who Have Sex with Men (BMSM) in the United States*, 18(5) AIDS & BEHAVIOR 972-996 (May 2014).
[24] Celia B. Fisher *et al.*, *Perceived Barriers to HIV Prevention Services for Transgender Youth*, 5 (6) LGBT HEALTH 350-358 (Sept. 1, 2018).
[25] Stigma can be experienced as internalized (self) stigma, disclosure concern or anticipated (fear of) stigma, and/or enacted or perceived stigma (discrimination in a health care or other setting/interaction). *See, e.g.*, Valeria A. Earnshaw, *From Conceptualizing to Measuring HIV Stigma: A Review of HIV Stigma Mechanism Measures*, 13(6) AIDS & BEHAVIOR 1160-1177 (Dec. 2009).
[26] The CHAIN cohort study, in place since 1994, employs a large, probability sample to provide ongoing information on the characteristics, co-morbidities, and medical and social service needs and use patterns of PWH in NYC.

Latino MSM with HIV also report high levels of HIV stigma, especially enacted stigma and disclosure stigma, and over half of Black MSM with HIV report some experience with enacted stigma. Transgender PWH report the highest levels of disclosure, enacted, and internalized stigmas, though the number of transgender respondents was too low to determine statistical significance. Nearly half (49%) of PWH surveyed report being "treated with less courtesy or respect than other people" based on their race/ethnicity, sexual orientation, or other status or identity, with higher than average prevalence of this experience reported by Black and Latino MSM, youth and young adults, people with recent hard drug use, and people recently homeless or unstably housed. Analyses reveal that regular exposure to this disrespectful or biased treatment is strongly correlated with experience of HIV stigma and increases the severity of HIV stigma experiences.[27]

NYC Medical Monitoring Project (MMP) data show that among PWH in care surveyed from 2011 to 2014, 75% reported at least one indicator of internalized stigma, with the highest stigma scores among Latinos and people recently diagnosed.[28] National Behavioral Health Surveillance (NHBS) data from NYC show that 49% of MSM ages 13 to 18 years and 37% of adult MSM report stigma or discrimination based on their MSM identity,[29] and that 73% of women who exchange sex and 77% of women who inject drugs report perceived HIV stigma.[30] Women who exchange sex also reported high levels (20%) of not being treated well in health centers and avoiding health centers because they exchange sex.[31]

Provider-enacted discrimination toward patients born of both explicit and implicit bias is also present in health care settings.[32, 33] Among PWH in NYC receiving Ryan White HIV/AIDS Program (RWHAP) medical case management, 39% report lifetime experience of discrimination in health care settings and RWHAP medical case management clients with a history of at least three social vulnerabilities (mental health diagnosis, incarceration, substance use, and/or housing instability) had more than twice the odds of reporting discrimination than those who do not report any of these social vulnerabilities.[34]

Immigrant Health

Of the 1,722 people newly diagnosed with HIV in NYC in 2019, 555 (31.3%) were born outside the U.S.[35] Between 2015 and 2019, there was an 18% decrease in new HIV diagnoses among U.S.-born New Yorkers, and a 37% decrease among New Yorkers born outside the U.S. In 2019, the overall proportion of concurrent HIV and AIDS diagnoses[36] among U.S.-born New Yorkers was 14% compared to 23% among New Yorkers born outside the U.S. Of the approximately 20,000 PWH born outside the U.S. and living in NYC in 2019, 81% were virally suppressed compared to 76% of U.S.-born PWH in NYC. In 2019,

---

[27] MAIKO YOMOGIDA *ET AL.*, CHAIN 2020-1 STIGMA AND DISCRIMINATION EXPERIENCED BY PLWH IN THE NYC CHAIN STUDY COHORT: BRIEFING REPORT (2020), *available at* https://nyhiv.org/wp-content/uploads/2020/08/CHAIN-2020-1-Stigma-and-Discrimination.pdf.

[28] JAMIE HUANG, HIV-RELATED STIGMA AND DISCRIMINATION AMONG PLWH IN NEW YORK CITY, MMP 2011-2014, PRESENTATION TO HIV HEALTH & HUMAN SERVICES PLANNING COUNCIL OF NEW YORK (Aug. 2018).

[29] CRISTINA RODRIGUEZ-HART, NATIONAL HIV BEHAVIORAL SURVEILLANCE (NHBS), PRESENTATION TO N.Y.C. HIV PLANNING GROUP (Oct. 16, 2018).

[30] WOMEN AND STIGMA: RESULTS FROM THE NATIONAL HIV BEHAVIORAL SURVEILLANCE STUDY, PRESENTATION TO N.Y.C. HIV PLANNING GROUP (Dec. 5, 2018).

[31] *Id.*

[32] Zinzi D. Bailey *et al.*, *Structural Racism and Health Inequities in the USA: Evidence and Interventions*, 389(10077) LANCET 1453-1463 (Apr. 2017).

[33] Janice A. Sabin *et al.*, *Health Care Providers' Implicit and Explicit Attitudes Toward Lesbian Women and Gay Men,* 105(9) AM. J. PUB. HEALTH 1831-1841 (Sept. 2015).

[34] Katherine Penrose *et al.*, *Social Vulnerabilities and Reported Discrimination in Health Care among HIV-Positive Medical Case Management Clients in New York City*, 5(2) STIGMA & HEALTH 179-187 (Aug. 2019).

[35] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV AMONG PEOPLE BORN OUTSIDE OF THE US IN NEW YORK CITY, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-among-people-born-outside-us-2019.pdf.

[36] People with concurrent HIV and AIDS diagnoses were diagnosed with AIDS within 31 days of their HIV diagnosis.

PWH in NYC born outside the U.S. had a lower overall age-adjusted death rate than those born in the U.S. (6.6% compared to 9.4%). These data show that while New Yorkers born outside the U.S. are exhibiting better HIV-related health outcomes across much of the HIV care continuum, linguistically and culturally appropriate programming and services – including interventions to increase access to and frequency of HIV testing and ensure linkage to care – remain critical to improving the HIV-related health of immigrant communities.

Stigma and discrimination based on immigration status remains a key barrier to increasing access services and improving HIV-related health outcomes. Research shows that stigma associated with HIV status, isolation, lack of HIV education, fear of disclosure of HIV status and/or immigration status, and lack of linguistic and cultural awareness among medical providers, exacerbate HIV vulnerability among people born outside the U.S.[37] Under the Trump Administration, immigrants faced increasingly hostile political and policy environments. The NYC Mayor's Office of Immigrant Affairs (NYC MOIA) reports that from federal fiscal years 2016 (the last year of the Obama Administration) to 2019, total arrests in NYC by the U.S. Immigration and Customs Enforcement (ICE) increased by 34% and arrests of individuals without criminal convictions increased by 292%; total removals in NYC by ICE increased by 165% and removals of individuals without criminal convictions increased by 340%.[38]

In October 2018, the U.S. Department of Homeland Security (DHS) published a proposed federal rule regarding the circumstances under which a non-citizen is considered a "public charge" for immigration purposes. NYC MOIA and NYC HD surveyed NYC residents to measure general awareness of the proposed public charge rule among citizens and non-citizens, and to develop messaging discouraging individuals from unnecessarily withdrawing from services. Conducted in January and February 2018, the survey found that once non-citizens learned about the public charge rule, 76% stated they would consider withdrawing from or not applying to needed services should the rule go into effect. In December 2018, NYC MOIA and other NYC agencies reported that the public charge rule would negatively affect up to 400,000 NYC immigrants' future ability to adjust their immigration status, and that an additional estimated 300,000 NYC residents not subject to the public charge rule would be discouraged from participating in crucial public benefits programs due to confusion and fear.[39] Numerous injunctions and ongoing litigation following the adoption of the final rule prompted NYC MOIA to ramp up outreach and education efforts. Even after the public charge rule was permanently blocked nationwide in early March 2021, providers and community partners continue to report that many immigrant communities remain confused about the rule, and may opt to forgo services they need and applications for public benefits.

---

[37] *See, e.g.*, ANISHA G. GANDHI, AMOR DE LEJOS, ¿FELICES LOS CUATRO? SOCIAL ENVIRONMENT, SEXUAL PARTNERSHIPS, AND HIV TESTING IN A CENTRAL AMERICAN IMMIGRANT COMMUNITY IN NYC, PRESENTATION TO HIV CENTER FOR CLINICAL & BEHAVIORAL STUDIES AT THE NEW YORK STATE PSYCHIATRIC INSTITUTE & COLUMBIA UNIVERSITY (Sept. 22, 2017); Michelle G. Shedlin *et al*., *Immigration and HIV/AIDS in the New York Metropolitan Area*, 83(1) J. URBAN HEALTH 45-58 (Jan 2006); LATINO COMM'N ON AIDS, HIV PREVENTION SERVICES FOR IMMIGRANT AND MIGRANT COMMUNITIES (last accessed Mar. 26, 2021), *available at* https://www.latinoaids.org/publications/HIV_Prevention_Immigrant_Migrants.pdf; Tonya N. Taylor *et al*., *Intersectional Stigma and Multi-Level Barriers to HIV Testing Among Foreign-Born Black Men From the Caribbean*, 7 FRONTIERS IN PUBLIC HEALTH 373 (Jan. 10, 2020).

[38] N.Y.C. MAYOR'S OFFICE OF IMMIGRANT AFFAIRS, FACT SHEET: ICE ENFORCEMENT IN NEW YORK CITY (updated Jan. 2021), *available at* https://www1.nyc.gov/assets/immigrants/downloads/pdf/enforcement-factsheet-2020-01-22.pdf.

[39] N.Y.C. MAYOR'S OFFICE OF IMMIGRANT AFFAIRS *ET AL.*, EXPANDING PUBLIC CHARGE INADMISSIBILITY: THE IMPACT ON IMMIGRANTS, HOUSEHOLDS, AND THE CITY OF NEW YORK (Dec. 2018), *available at* https://www1.nyc.gov/assets/immigrants/downloads/pdf/research_brief_2018_12_01.pdf.

Immigrants may experience heightened vulnerability to poor health outcomes, including those related to HIV, during the COVID-19 public health emergency. 2020 and 2021 have been marked by an astronomical increase in hate incidents against Asian/Pacific Islander (API) individuals – including API immigrants – due to their being associated with or blamed for COVID-19;[40] this may have led to increased isolation, increased mental health challenges, and delays or avoidance of care-seeking due to fear of experiencing harassment or violence. A May 2020 NYC HD Health Opinion Poll of 1,200 city residents indicated that one third of respondents reported that they or someone in their household avoided or delayed care for severe health issues, including but not limited to COVID-19 symptoms, due to concerns related to their immigration status.[41]

Housing Status

Homelessness and unstable housing are consistently linked to greater risk of HIV acquisition, inadequate HIV health care, poor health outcomes, and early death.[42,43,44] Among RWHAP clients engaged in HIV medical care in NYC in 2018, 79% of temporarily housed clients and 69% of unstably housed clients were virally suppressed, compared to 85% stably housed clients, underscoring the role of stable housing as a critical enabler of effective treatment.[45] A recent NYS analysis found unstable housing the single strongest predictor of racial/ethnic disparities in HIV viral load suppression.[46]

The NYC Department of Social Services/Human Resources Administration (DSS/HRA) HIV/AIDS Services Administration (HASA) program coordinates access to public benefits for low-income PWH in NYC, including emergency, transitional, and permanent housing assistance, and meaningful rental assistance in line with U.S. Department of Housing and Urban Development (HUD) Fair Market Rents. In 2014, NYS enacted a 30% rent cap affordable housing protection for HASA recipients with disability or other income, and in 2016, HASA eligibility was expanded to include all diagnosed PWH in NYC who meet financial needs requirements, making NYC the first jurisdiction to guarantee housing assistance for all income-eligible PWH in need of housing supports.[47] As of January 2021, HASA provided housing assistance to 27,633 NYC households that included someone with HIV.[48] NYC HD also administers two federally funded housing resources to meet the needs of low-income PWH and their families: the Housing Opportunities for People with AIDS (HOPWA) program, which supports permanent supportive

[40] RUSSELL JEUNG *ET AL*., STOP AAPI HATE NATIONAL REPORT, 3/19/20-2/28/21 (last accessed Mar. 26, 2021), *available at* https://secureservercdn.net/104.238.69.231/a1w.90d.myftpupload.com/wp-content/uploads/2021/03/210312-Stop-AAPI-Hate-National-Report-.pdf.

[41] N.Y.C. Dep't of Health & Mental Hygiene, Knowledge, Concerns, Opinions, and Social Distancing Actions Amid the Novel Coronavirus Outbreak in New York City, unpublished N.Y.C Health Opinion Poll data (May 2020).

[42] Daniel P. Kidder *et al*., *Health Status, Health Care Use, Medication Use, and Medication Adherence among Homeless and Housed People Living with HIV/AIDS*, 97 (12) AM. J. PUB. HEALTH 2238-2245 (Dec. 2007).

[43] Daniel P. Kidder *et al*., *Housing Status and HIV Risk Behaviors among Homeless and Housed Persons with HIV*, 49(4) J. AIDS 451-455 (Dec. 1, 2008).

[44] Angela A. Aidala *et al*., *Housing Status, Medical Care, and Health Outcomes Among People Living With HIV/AIDS: A Systematic Review*, 106(1) AM. J. PUB. HEALTH e1–e23 (Jan. 2016).

[45] N.Y.C. Dep't of Health & Mental Hygiene, unpublished Ryan White HIV/AIDS Program data (last accessed Mar. 26, 2021).

[46] Daniel J. Feller *et al. Understanding Determinants of Racial and Ethnic Disparities in Viral Load Suppression: A Data Mining Approach*, 16(1) J. INT'L ASS'N OF PROVIDERS OF AIDS CARE 23-29 (Sept. 20, 2016).

[47] N.Y.C. Dep't of Social Services/Human Resources Admin., HIV/AIDS Services (last accessed Mar. 26, 2021), *available at*: https://www1.nyc.gov/site/hra/help/hiv-aids-services.page.

[48] N.Y.C. DEP'T OF SOCIAL SERVICES/HUMAN RESOURCES ADMIN., HASA FACTS: FEBRUARY 2021 (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/assets/hra/downloads/pdf/facts/hasa/hasa_facts.pdf.

housing and long-term rental assistance, and RWHAP-funded short-term and transitional housing assistance.[49]

NYC has a high prevalence of homelessness and housing instability, and a housing market with an extremely low vacancy rate, creating an affordable housing shortage for those most in need.[50] Loss of employment and income as a result of the ongoing COVID-19 public health emergency has created new pressures for many New Yorkers, with the potential for increased housing loss once the NYS moratorium on evictions and forecloses due to the COVID-19 public health emergency expires on May 1, 2021.[51] More than 133,000 unique individuals accessed the NYC shelter system in fiscal year 2018,[52] and data indicate that nearly 3,900 homeless individuals may be unsheltered on any given night.[53] Systemic racism has informed policies and practices over decades and has contributed to the overrepresentation of people of color experiencing poverty and homelessness in NYC; 86% of single adults experiencing homelessness and 93% of heads-of-household in family shelters identify as Black or Latino/Hispanic, which is markedly higher than the 53% of NYC's population overall who identify as Black or Latino/Hispanic.[54]

Housing instability among PWH remains high even with HASA, HOPWA, and RWHAP housing supports. Many PWH lack the credit or rental history required to secure an apartment, and despite local law prohibiting "source of income" discrimination in the rental market, PWH still experience discrimination by potential landlords on the basis of their HIV status and/or reliance on HASA rental assistance. CHAIN studies conducted between 2017 and 2019 in NYC found that 30% of PWH surveyed were homeless or unstably housed, and 33% reported needing housing assistance.[55] As of January 2021, of PWH receiving HASA housing assistance, 9% remained homeless, staying in emergency single-room occupancy (SRO) housing.[56]

The COVID-19 public health emergency has exacerbated many challenges and health risks related to homelessness and housing instability in NYC. The Coalition for the Homeless describes that "the lack of access to safe private spaces for homeless people has exacerbated transmission, hospitalization, and deaths among this vulnerable group of individuals and families, with those living in congregate shelters finding themselves at particularly high risk." As of June 1, 2020, COVID-19 mortality was 61% higher among homeless New Yorkers than the general population.[57] Additionally, more people faced

[49] N.Y.C. Dep't of Health & Mental Hygiene, Housing Services for New Yorkers Living with HIV/AIDS (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/site/doh/health/health-topics/aids-hiv-care-housing.page.
[50] NYC DEP'T OF CITY PLANNING, CONSOLIDATED PLAN: 2015-2019 NEEDS ASSESSMENT AND MARKETING ANALYSIS (Dec. 16, 2016), *available at* https://www1.nyc.gov/assets/planning/download/pdf/about/consolidated-plan/2015-conplan-needs-assessment.pdf.
[51] Press Release, Office of Gov. Andrew M. Cuomo, Governor Cuomo Signs the COVID-19 Emergency Eviction and Foreclosure Prevention Act of 2020 (Dec. 28, 2020), *available at*:https://www.governor.ny.gov/news/governor-cuomo-signs-covid-19-emergency-eviction-and-foreclosure-prevention-act-2020.
[52] COALITION FOR THE HOMELESS, STATE OF THE HOMELESS 2018 (Mar. 2018), *available at* https://www.coalitionforthehomeless.org/state-of-the-homeless-2018/.
[53] N.Y.C. DEP'T OF HOMELESS SERVICES, HOPE 2020: NYC HOPE 2020 RESULTS (2020), *available at* https://www1.nyc.gov/assets/dhs/downloads/pdf/hope-2020-results.pdf.
[54] COALITION FOR THE HOMELESS, STATE OF THE HOMELESS 2018 (Mar. 2018), *available at* https://www.coalitionforthehomeless.org/state-of-the-homeless-2018/.
[55] Columbia University, Mailman School of Public Health, unpublished CHAIN data (accessed August 22, 2019).
[56] N.Y.C. DEP'T OF SOCIAL SERVICES/HUMAN RESOURCES ADMIN., HASA FACTS: FEBRUARY 2021 (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/assets/hra/downloads/pdf/facts/hasa/hasa_facts.pdf.
[57] GISELLE ROUTHIER *ET AL.*, COALITION FOR THE HOMELESS, COVID-19 AND HOMELESSNESS IN NEW YORK CITY: PANDEMIC PANDEMONIUM FOR NEW YORKERS WITHOUT HOMES (Jun. 2020), *available at* https://www.coalitionforthehomeless.org/wp-content/uploads/2020/06/COVID19HomelessnessReportJune2020.pdf.

intermittent or ongoing risk of housing insecurity due to massive job losses, which disproportionately affected Black, Latino/Hispanic, and Asian New Yorkers.[58]

Food Insecurity

Food insecurity is widespread among PWH in NYC and independently associated with unsuppressed viral load after controlling for other socioeconomic factors.[59] RWHAP funds food and nutrition services, and very low income PWH are eligible for both SNAP benefits and an enhanced nutritional allowance administered by HASA. A CHAIN longitudinal analysis shows that food insecure PWH receiving RWHAP food and nutrition services were less likely to have missed appointments, had a detectable viral load, and had an emergency department visit or inpatient stay compared to their counterparts who remained food insecure.[60] Yet, MMP participants report food assistance as a top unmet need. The economic recession corresponding to the COVID-19 public health emergency may have increased food insecurity across NYC; an estimated 10% to 25% of New Yorkers experienced food insecurity in October 2020.[61]

Poverty and Neighborhood Conditions

According to the NYC Government Poverty Measure, in 2018, the NYC poverty rate was 19.1% and the near-poverty rate was 41.3%.[62] However, poverty rates in NYC vary widely by neighborhood as a result of historic injustice and ongoing differential investment. Consistently, NYC neighborhoods experiencing worse HIV health outcomes have higher concentrations of poverty. The proportion of PWH living in poverty in NYC is unknown, but among all people newly diagnosed with HIV in 2019 for whom area-based poverty level data were available, 83% lived in areas with medium-, high-, or very high-poverty levels.[63] In 2020, 88% of RWHAP clients in NYC lived below 138% of the federal poverty level (FPL) and 99% lived below 400% of FPL.[64] PWH living in high or very high-poverty neighborhoods were less likely than residents of low-poverty neighborhoods to maintain viral load suppression.[65] Analyses have also shown that the rate of HIV/hepatitis C virus (HCV) co-infection is four times higher in high-poverty NYC neighborhoods than in low-poverty neighborhoods; a similar pattern was seen for HIV/hepatitis B virus (HBV) and HIV/tuberculosis co-infection.[66] COVID-19 case, hospitalization, and death rates in NYC also increase with increasing neighborhood poverty.[67]

---

[58] N.Y.C. Dep't of Consumer and Worker Protection. Uneven Impact: What Job Loss During COVID-19 Means for New Yorkers Now and into the Future (Dec. 2020), *available at* https://www1.nyc.gov/assets/dca/downloads/pdf/partners/Uneven_Impact.pdf.

[59] Matthew B. Feldman *et al*., *The Association between Food Insufficiency and HIV Treatment Outcomes in a Longitudinal Analysis of HIV-Infected Individuals in New York City*, 69(3) J. AIDS 329-337 (Jul. 1, 2015).

[60] Angela A. Aidala *et al*. CHAIN 2012-3 Report: Food Insecurity, Food and Nutrition Services, and HIV Care and Health Outcomes (2015), *available at* https://nyhiv.org/nyhiv-archive/pdfs/chain/CHAIN%202012-3_%20Food%20Insecurity%20FN%20Services%20Outcomes%20Combined%20FINAL.pdf.

[61] N.Y.C. Dep't of Consumer and Worker Protection, Uneven Impact: What Job Loss During COVID-19 Means for New Yorkers Now and into the Future (Dec. 2020), *available at* https://www1.nyc.gov/assets/dca/downloads/pdf/partners/Uneven_Impact.pdf.

[62] N.Y.C. Mayor's Office of Economic Opportunity, New York City Government Poverty Measure 2018 (2020), *available at* https://www1.nyc.gov/assets/opportunity/pdf/20_poverty_measure_report.

[63] N.Y.C. Dep't of Health & Mental Hygiene, HIV Surveillance Annual Report, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.

[64] N.Y.C. Dep't of Health & Mental Hygiene, unpublished Ryan White HIV/AIDS Program data (last accessed Mar. 26, 2021).

[65] Ellen W. Wiewel *et al.*, *Neighborhood Characteristics Associated with Achievement and Maintenance of HIV Viral Suppression Among Persons Newly Diagnosed with HIV in New York City*, 21(12) AIDS & Behavior 3557-3566 (Dec. 2017).

[66] N.Y.C. Dep't of Health & Mental Hygiene, Epi Research Report, Matching New York City Viral Hepatitis, Tuberculosis, Sexually Transmitted Diseases and HIV Surveillance Data, 2000-2010, *available at* http://www1.nyc.gov/assets/doh/downloads/pdf/epi/epiresearch-PCSI.pdf; N.Y.C. Dep't of Health & Mental Hygiene, Epi Data Brief: Geographic Co-occurrence of HIV/AIDS, Viral Hepatitis, Sexually Transmitted Diseases and Tuberculosis in New York City (Dec. 2012), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief20.pdf.

[67] N.Y.C. Dep't of Health & Mental Hygiene, COVID-19: Data (last accessed Mar. 28, 2021), *available at* https://www1.nyc.gov/site/doh/covid/covid-19-data-totals.page.

Demographic, environmental, cultural, and health care contexts differ markedly between NYC boroughs. The population of the four EHE: Plan for America counties in NYC – Bronx, Kings (Brooklyn), New York (Manhattan), and Queens Counties – ranges from 1.4 to 2.6 million people. In many ways, Manhattan serves as an outlier compared to the other counties. For example, while Manhattan is 47% White and non-Latino/Hispanic overall, that group comprises only 9% of the Bronx, 37% of Brooklyn, and 25% of Queens. Black New Yorkers are more likely to live in the Bronx or Brooklyn, Latino/Hispanic New Yorkers are more likely to live in the Bronx, and Asian New Yorkers are most likely to live in Queens. More than a third of Bronx, Brooklyn, and Queens residents are born outside the U.S.; more than half of Bronx and Queens residents speak a language other than English at home. The median household income in Manhattan is more than twice that of the Bronx ($86,553 vs. $40,088); with Brooklyn and Queens in between ($60,231 and $68,666, respectively).[68]

There are borough-specific differences in health care access and outcomes as well. In terms of national percentile heath rankings in 2019, a composite of multiple self-reported and clinical indicators, The Bronx was at the 62nd, Brooklyn at the 22nd, Manhattan at the 10th, and Queens at the 13th; Brooklyn had experienced the greatest improvement in NYS from 2010 to 2019.[69] While health insurance coverage across the boroughs was relatively high (85% to 92%), 13% of Bronx residents and 12% of Brooklyn residents reported not receiving needed medical care in the last year, compared to 9% of Manhattan and Queens residents.[70] The Bronx and Brooklyn had twice and 1.5 times as high the rates of avoidable hospitalizations among adults, respectively, compared to Manhattan and Queens. Compared to the life expectancy of 80.9 years in the Bronx, life expectancy was 2.0 years higher in Brooklyn, 3.3 years higher in Queens, and 3.8 years higher in Manhattan.[71] These health inequities are a result of differential resources allocated to these areas based on longstanding structural racism, classism, and xenophobia.

Criminal Justice Involvement

Black and Latino/Hispanic New Yorkers are disproportionately represented among people incarcerated in jail or prison. Data from the first six months of 2019 show that 53% of people in NYC jails identified as Black and 34% identified as Hispanic, compared to 7.5% who identified as White.[72] Studies have linked the mass incarceration of Black Americans with increased risk of HIV acquisition in Black communities.[73] Criminal justice involvement can also increase social isolation and disconnection from health care through stigma and by presenting practical barriers to employment, housing, and other supports. NYC

[68] U.S. Census Bureau, Quick Facts: New York City, New York; Bronx County (Bronx Borough), New York; Kings County (Brooklyn Borough), New York; New York County (Manhattan Borough), New York; Queens County (Queens Borough), New York; Richmond County (Staten Island Borough), New York (last accessed Mar. 26, 2021), *available at* https://www.census.gov/quickfacts/fact/table/newyorkcitynewyork,bronxcountybronxboroughnewyork,kingscountybrooklynboroughnewyork,newyorkcountymanhattanboroughnewyork,queenscountyqueensboroughnewyork,richmondcountystatenislandboroughnewyork#.

[69] NYS Health Foundation, New York State's County Health Rankings in National Perspective (Sept. 2019), *available at* https://nyshealthfoundation.org/wp-content/uploads/2019/09/new-york-state-county-health-rankings-national-perspective-sep-2019.pdf.

[70] N.Y.C. Dep't of Health & Mental Hygiene, Community Health Survey, 2017 (last accessed Mar. 26, 2021), *available at* https://a816-health.nyc.gov/hdi/epiquery/visualizations?PageType=ps&PopulationSource=CHS.

[71] N.Y.C. Dep't of Health & Mental Hygiene, New York City Community Health Profiles 2018 New York Map Atlas (2018), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/data/2018-chp-atlas.pdf.

[72] N.Y.C. Dep't of Correction, NYC Department of Correction at a Glance: Information for 1st 6 months of FY 2019 (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/assets/doc/downloads/press-release/DOC_At%20a%20Glance-1st6_Months_FY2019_012919.pdf.

[73] Joella W. Adams *et al., Potential Drivers of HIV Acquisition in African-American Women Related to Mass Incarceration: An Agent-Based Modelling Study*, 18 BMC Pub Health 1387 (Dec. 18, 2018).

HD's 2018 Sexual Health Survey of Black and Latina women recruited in NYC neighborhoods with a high burden of HIV (those with the top 25% of HIV diagnosis rates among women) indicates that 17% of participants had a recent sexual partner who had been incarcerated.[74]

PWH face an increased risk of discontinuity of care both during incarceration and once they are released from correctional settings, with recent incarceration independently associated with worse health outcomes and increased use of emergency services among PWH in care.[75] PWH released from jails and prisons face numerous challenges to successful linkage and retention in HIV treatment and care, including lack of adequate housing, lack of health insurance post-release, difficulty securing employment, behavioral health issues, and the experience of multiple, intersecting stigmatized identities.[76] A history of incarceration and lack of stable housing are overlapping vulnerabilities for many PWH in NYC, and life disruption due to frequent experiences of jail incarceration and homelessness or prolonged jail stays has a significant negative impact on viral load suppression.[77] Forty percent of active RWHAP clients assessed in 2019 reported a history of incarceration, and among those in HIV medical care in 2019, 69% of clients with a history of incarceration were virally suppressed, compared to 86% of those who had never been incarcerated.

Effective transitional services are critical to sustained and effective HIV care for PWH returning to the community from prison or jail. In 2017, 43% (5,610) of NYS first releases from prison were committed from New York City,[78] with the majority of them historically returning to Central Brooklyn and the South Bronx where numbers of new HIV diagnoses and PWH are highest in NYC.[79] The joint NYC HD and NYC Health + Hospitals Correctional Health Services (CHS) Transitional Health Care Coordination program (THCC) provides discharge and care coordination planning, including referrals for community-based primary care, case management, and other supportive services for PWH who self-identify during a NYC jail stay. Among THCC participants seen for follow-up six months following release, a greater number were taking ART (93% vs. 56% at baseline) and were adherent with treatment (93% vs. 81% at baseline), and reported significant reductions in emergency department visits, unstable housing, and food insecurity compared to baseline.[80]

Mental Health Needs

Unaddressed mental health needs negatively affect access to HIV prevention and care, and there is a paucity of affordable, high-quality, and culturally affirming substance use and mental health services in

[74] N.Y.C. Dep't of Health & Mental Hygiene, unpublished 2018 Sexual Health Survey of Black and Latina Women data (last accessed Mar. 26, 2021).

[75] Muazzam Nasrullah *et al*., *The Association of Recent Incarceration and Health Outcomes among HIV-Infected Adults Receiving Care in the United States*, 12(3) INT'L J. PRISON HEALTH 135–144 (Sept. 12, 2016).

[76] Katherine S. Elkington *et al*., *Can TasP Approaches Be Implemented in Correctional Settings? A Review of HIV Testing and Linkage to Community HIV Treatment Programs*, 27(2A) J. HEALTH CARE POOR UNDERSERVED 71–100 (2016).

[77] Sungwoo *Lim et al*., *Influence of Jail Incarceration and Homelessness Patterns on Engagement in HIV Care and HIV Viral Suppression among New York City Adults Living with HIV/AIDS*, 10(11) PLOS ONE e0141912 (Nov. 23, 2015).

[78] N.Y. DEP'T OF CORRECTIONS & COMMUNITY SUPERVISION, RELEASES AND DISCHARGES FROM INCARCERATION REPORT, 2017 (Sept. 2019), *available at* https://doccs.ny.gov/system/files/documents/2019/09/2017%20Releases%20and%20Discharges%20from%20Incarceration%20Report%20-%20Final.pdf.

[79] PRISON POLICY INITIATIVE, MAPPING DISADVANTAGE: THE GEOGRAPHY OF INCARCERATION IN NEW YORK STATE (Feb. 19, 2021), *available at* https://www.prisonpolicy.org/origin/ny/report.html.

[80] Paul A. Teixeira PA *et al.*, *Health Outcomes for HIV-Infected Persons Released from the New York City Jail System with a Transitional Care-Coordination Plan*, 105(2) AM. J. PUB. HEALTH 351-357 (Feb. 2015).

NYC.[81] PWH and people with increased HIV vulnerability to HIV are more likely than the U.S. population as a whole to have mental health challenges, which can significantly impact their ability to access and benefit from HIV prevention, care, and treatment services.[82] Among participants in the 2017 and 2019 CHAIN study cohorts, 59% had a low mental health functioning score and 38% had a very low score on a standardized mental health functioning measure,[83] yet 55% of those with low mental health scores reported no mental health services in the past six months.[84]

A 2019 NYC HD analysis employed HIV surveillance data to match people with serious mental illness (SMI)[85] referred to NYC HD Bureau of Mental Health services to PWH in NYC. When compared to PWH in NYC, the 1,326 PWH with SMI identified through the match were more likely to be female or transgender, Black, residing in the Bronx, and living in neighborhoods of high or very high poverty; had worse outcomes at each point of the HIV care continuum; were less likely to be receiving HIV care and less likely to be prescribed ART; and far less likely to be virally suppressed.[86]

Among all RWHAP clients served in 2018, 23% screened positive for depression and 25% screened positive for anxiety.[87] Since 1998, NYC HD has provided RWHAP-funded mental health services that primarily target PWH who cannot access other treatment because of barriers related to health coverage and/or immigration status. An analysis examining the association between use of these services and mental health status found that 40% of clients who received RWHAP-funded mental health services experienced a significant improvement in mental health status, and that clients with medium or high levels of mental health service utilization were more likely to benefit than those with low levels of service utilization, controlling for other client characteristics.[88] These findings underscore the potential of integrated HIV and mental health services, and provide insight to inform their design.

Mental health challenges have increased nationally and locally in parallel with the loss, trauma, stress, and isolation resulting from the COVID-19 public health emergency and the distancing measures recommended (or at times, required) to control transmission. In a May 2020 NYC HD Health Opinion Poll, 44% of respondents had possible general anxiety disorder and 36% of respondents had probable

[81] Robert H. Remien *et al*., *Mental Health & HIV/AIDS: The Need for an Integrated Response*, 33(9) AIDS 1411-1420 (Jul. 15, 2019).
[82] *See* Matthew B. Feldman *et al.*, *Utilization of Ryan White-Funded Mental Health Services and Mental Health Functioning among People Living with HIV in New York City*, 17(3) J. HIV/AIDS & SOC. SERVICES 195-207 (Mar. 12, 2018).
[83] Low mental health functioning is indicated by a score below 42.0 on a standardized measure (MOPS-SF 36) indicating clinically significant mental health symptoms; very low mental health functioning is indicated by a score below 37.0, the mean score seen in psychiatric inpatient populations. *See* Colleen A. McHorney *et al.*, *The MOS 36-Item Short-Form Health Survey (SF-36): II. Psychometric and Clinical Tests of Validity in Measuring Physical & Mental Health Constructs*, 31(3) MED. CARE 247-263 (Mar. 1993); John E. Ware *et al*., *The SF-36 Health Survey: Development and Use in Mental Health Research & the IQOLA Project*, 23(2) INT'L J. MENTAL HEALTH 49-73 (summer 1994).
[84] Columbia University, Mailman School of Public Health, unpublished CHAIN data (accessed Aug. 22, 2019).
[85] Serious mental illness (SMI) is defined as a mental, behavioral, or emotional disorder resulting in serious functional impairment in one or more major life activities. A person with SMI may have major depression, schizophrenia, or bipolar disorder, among others.
[86] PERMINDER KHOSA, PERSONS WITH SERIOUS MENTAL ILLNESS REFERRED TO SELECT BUREAU OF MENTAL HEALTH SERVICES AND MATCHED TO THE NYC HIV REGISTRY, DECEMBER 31, 2018*,* PRESENTATION TO HIV HEALTH & HUMAN SERVICES PLANNING COUNCIL OF NEW YORK (Feb. 13, 2020).
[87] N.Y.C. Dep't of Health & Mental Hygiene, unpublished Ryan White HIV/AIDS Program data (last accessed Mar. 26, 2021).
[88] Matthew B. Feldman *et al.*, *Utilization of Ryan White-Funded Mental Health Services and Mental Health Functioning among People Living with HIV in New York City*, 17(3) J. HIV/AIDS & SOC. SERVICES 195-207 (Mar. 12 ,2018).

depression, both warranting further evaluation.[89] In April, May, and October 2020, 13-14% of Health Opinion Poll participants said that they had gone without mental health treatment they needed.[90]

Substance Use

Substance use, including use of alcohol, opioids, and crystal methamphetamine (methamphetamine), and IDU for purposes not prescribed,[91] can increase risk of HIV acquisition through sharing injection equipment and/or sexual behaviors, and substance use disorder can diminish the ability of people to access and remain engaged in HIV prevention and care. Among CHAIN participants surveyed between 2017 and 2019, 20% of those in NYC reported problem substance use (i.e., cocaine/crack, heroin, methamphetamine use, or problem drinking) in the past six months. In the 2017 National HIV Behavioral Surveillance (NHBS) cycle, 65% of NYC MSM interviewed reported non-injecting drug use in the last 12 months, including 9% who reported use of methamphetamine and 47% who reported binge drinking (five or more drinks in one sitting).[92] Methamphetamine use appears to be increasing among MSM in NYC. Among a sample of sexually active MSM ages 18 to 40 years in NYC surveyed by NYC HD in spring 2018, 5% reported methamphetamine use in the past six months, with no statistically significant differences by age or race/ethnicity. Among those reporting methamphetamine use in the past six months, 26% reported injection use.[93]

The coexistence of HIV and substance use disorder is associated with delayed HIV diagnosis and care, decreased access to and adherence to ART, increased behaviors that can transmit HIV, and increased morbidity and mortality from HIV and non-HIV-related causes.[94] NYC 2019 HIV surveillance data show significantly lower levels of sustained viral suppression among PWH established in medical care who have a with history of injection drug use (IDU), and MSM who report a history of IDU (61% and 56%, respectively) compared to PWH overall (69%). PWH with a history of IDU (including MSM) were disproportionately represented among 2019 deaths, making up only 14% of PWH but 29% of deaths.[95] Among NYC RWHAP clients with evidence of HIV medical care (i.e., at least one lab report) in 2018, 66% of those who reported recent hard drug (i.e., cocaine, heroin, methamphetamine, and/or prescription drugs) use during the year were virally suppressed, compared to 83% of those who did not report recent hard drug use.[96] Among MSM with HIV in NYC, methamphetamine use has been found to be associated with unsuppressed viral load.[97]

Significantly reducing HIV transmission among people who inject drugs (PWID) in NYC has been a notable success, attributable to implementation of harm reduction focused "combined prevention and

[89] N.Y.C. Dep't of Health & Mental Hygiene, Knowledge, Concerns, Opinions, and Social Distancing Actions Amid the Novel Coronavirus Outbreak in New York City, unpublished N.Y.C Health Opinion Poll data (May 2020).
[90] N.Y.C. Dep't of Health & Mental Hygiene, Knowledge, Concerns, Opinions, and Social Distancing Actions Amid the Novel Coronavirus Outbreak in New York City, unpublished N.Y.C. Health Opinion Polls data (Apr., May, & Oct. 2020).
[91] Inability to secure clean syringes for injecting hormones can also increase vulnerability to HIV.
[92] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV RISK AND PREVALENCE AMONG NYC MEN WHO HAVE SEX WITH MEN: RESULTS FROM THE 2017 NATIONAL HIV BEHAVIORAL SURVEILLANCE STUDY (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-risk-among-msm-in-nyc-2017study.pdf.
[93] N.Y.C. Dep't of Health & Mental Hygiene, unpublished Sexual Health Survey of Men Who Have Sex with Men data (spring 2018) (last accessed Mar. 26, 2021).
[94] *See, e.g.,* Jaime P. Meyer *et al*., *Optimizing Care for HIV-Infected People Who Use Drugs: Evidence-Based Approaches to Overcoming Health Care Disparities*, 587 CLINICAL INFECTIOUS DISEASES 309-1317 (Nov. 1, 2013).
[95] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV SURVEILLANCE ANNUAL REPORT, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.
[96] N.Y.C. Dep't of Health & Mental Hygiene, unpublished Ryan White HIV/AIDS Program data (last accessed Mar. 26, 2021).
[97] Matthew B. Feldman *et al.*, *Crystal Methamphetamine Use and HIV Medical Outcomes among HIV-Infected Men Who Have Sex with Men Accessing Support Services in New York*, 147 DRUG & ALCOHOL DEPENDENCE 266-71 (Feb. 1, 2015).

care," including syringe service programs (SSPs), medication-assisted treatment for substance use disorders, and access to ART, with data indicating that the HIV epidemic has effectively ended among all racial/ethnic groups of PWID in NYC.[98] However, disparities persist; estimated HIV incidence and untreated HIV infection among PWID in NYC is lowest among White people and highest among Black people,[99] and estimated incidence is significantly higher among women compared to men, likely due to the fact that most new infections among PWID can be attributed to sexual transmission.[100]

Like many other areas of the U.S., NYC is experiencing increasing rates of IDU, as people transition from oral use of opioid analgesics to injecting opioids and heroin. Avoiding a resurgence in injecting-related HIV transmission must be prioritized, including improving PrEP and PEP awareness and access for PWID. NYC NHBS 2018 data indicate that awareness of PrEP (33%) and use of PrEP in the last 12 months (3%) were low in PWID who were HIV-negative or did not know their HIV status.[101] Targeted dissemination of PrEP and PEP information to extremely vulnerable PWID and their partners including through social networks, expanding access to PrEP and PEP in SSPs, and other strategies are critical to increasing awareness and uptake.

Increased IDU, together with the emergence of illicitly manufactured fentanyl, has dramatically increased the number of unintentional drug poisoning (overdose) deaths in NYC. NYC overdose deaths remain a serious public health crisis, with 1,444 fatal overdoses in 2018.[102] In 2019, 7% of all deaths among PWH in NYC (10% of non-HIV-related deaths) were attributed to accidental overdose, up from 5% of all deaths in 2015.[103] While overdose-related deaths in NYC were substantially higher in the first quarter of 2020 compared to the first quarter of 2019,[104] pending analyses limit ability to determine whether this trend continued during subsequent periods of the COVID-19 public health emergency.[105]

Intimate Partner Violence

Intimate partner violence (IPV), including physical, sexual, verbal, emotional, and economic abuse, is associated with adverse physical and behavioral health outcomes, including increased likelihood of HIV acquisition and suboptimal HIV care. IPV exposure can increase exposure to HIV infection through sexual coercion, compromised negotiation of safer sex practices, increased substance use that can amplify vulnerability to HIV acquisition, and by exacerbating anxiety or depression that can impair self-

---

[98] Don C. Des Jarlais *et al., HIV Infection among Persons Who Inject Drugs: Ending Old Epidemics and Addressing New Outbreaks*, 30(6) AIDS (815-826) (Mar. 27, 2016).

[99] Don C. Des Jarlais *et al*., *Racial/Ethnic Disparities at the End of an HIV Epidemic: Persons Who Inject Drugs in New York City, 2011-2015*, 107(7) AM. J. PUB. HEALTH 1157-1163 (Jul. 2017).

[100] Don C. Des Jarlais *et al.*, *Heterosexual Male and Female Disparities in HIV Infection at the End of an Epidemic: HIV Infection among Persons Who Inject Drugs in New York City, 2001-2005 and 2011-2015*, 185 DRUG & ALCOHOL DEPENDENCE 391-397 (Apr. 1, 2018).

[101] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV RISK AND PREVALENCE AMONG PEOPLE WHO INJECT DRUGS IN NEW YORK CITY: FINDINGS FROM THE 2018 NATIONAL HIV BEHAVIORAL SURVEILLANCE STUDY (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-risk-and-prevalence-among-people-who-inject-drugs-in-nyc.pdf.

[102] Michelle Nolan *et al*., *Unintentional Drug Poisoning (Overdose) Deaths in New York City in 2018*, 116 N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE EPI DATA BRIEF 1-9 (Aug. 2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief116.pdf.

[103] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV SURVEILLANCE ANNUAL REPORT, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.

[104] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, UNINTENTIONAL DRUG POISONING (OVERDOSE) DEATHS QUARTER 1, 2020, NEW YORK CITY (Dec. 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/basas/provisional-overdose-report-first-quarter-2020.pdf.

[105] Samar Khurshid, *Have Drug Overdoses Spiked During the Coronavirus Crisis? It Depends Who You Ask*, GOTHAM GAZETTE (Jun. 25, 2020), *available at* https://www.gothamgazette.com/city/9534-drug-overdoses-spiked-during-coronavirus-pandemic-new-york-city-unclear.

protection.[106] Women in violent relationships are at a four times greater risk for contracting STIs, including HIV, than women in non-violent relationships, and women who experience IPV are more likely to report the presence of factors that increase vulnerability to HIV.[107] In addition to women, adults ages 18 to 24 years, people of color, immigrants, people with limited income, people with disabilities, people who identify as non-heterosexual, and people of trans experience may be more likely to experience IPV than the rest of the general population[108]; the overlap with many groups experiencing increased HIV vulnerability underscores the risk of multiple adverse outcomes. A global meta-analysis found that IPV-exposed MSM had nearly 50% greater odds of being HIV-positive.[109]

Rates of IPV are high among PWH. Evidence indicates that approximately 55% of women and 24% of men with HIV experience IPV,[110] and that women with HIV may experience abuse that is more frequent and more severe.[111] Among PWH, a history of trauma has been linked to poorer mental health, increased substance use, increased behaviors that can transmit HIV, lower rates of HIV disclosure, reduced ART adherence, lower rates of viral load suppression, and faster HIV disease progression.[112] Exposure to trauma is associated with mental health conditions such as depression, posttraumatic stress disorder (PTSD), and anxiety, which are in turn linked to poorer adherence, increased viral load, and decreased CD4 counts.[113] Abusive partners may also directly or indirectly interfere with HIV care by preventing an individual from taking medications or attending health care appointments; increasing the individual's reluctance to be seen by providers who might recognize signs of IPV; reducing an individual's self-worth and motivation to take care of their own health; and refocusing attention and care to themselves.[114]

Promoting "trauma-responsive" models of care in HIV prevention, treatment, and supportive services is an NYC HD priority. Trauma-responsive strategies and training are designed to help health and social service staff lower barriers to addressing sexual violence and IPV, build organizational capacity for providers to respond to patient disclosures, and increase referrals to supports for people coping with IPV. NYC HD is currently building capacity to support implementation of universal education and referral networks among HIV providers using CUES (Confidentiality, Universal Education, Empowerment,

---

[106] *See, e.g.*, Ying Li *et al.*, *Intimate Partner Violence and HIV Infection among Women: A Systematic Review and Meta-Analysis*, 17(1) J. INT;L AIDS SOC. 18845 (Feb. 13, 2014); Michele R. Decker *et al.*, *Recent Partner Violence and Sexual and Drug-Related STI/HIV Risk among Adolescent and Young Adult Women Attending Family Planning Clinics*, 90(2) SEXUALLY TRANSMITTED INFECTIONS 145-149 (Mar. 2014); Suzanne Maman *et al.*, *The Intersections of HIV and Violence: Directions for Future Research and Interventions*, 50(4) SOC. SCI. & MED. 459-478 (Feb. 2000).

[107] CENTERS FOR DISEASE CONTROL & PREVENTION, INTERSECTION OF INTIMATE PARTNER VIOLENCE AND HIV IN WOMEN (Feb. 2014), *available at* https://www.cdc.gov/violenceprevention/pdf/ipv/13_243567_green_aag-a.pdf.

[108] N.Y.C. Dep't of Health & Mental Hygiene, *Intimate Partner Violence: Encouraging Disclosure and Referral in the Primary Care Setting*, 36(2) CITY HEALTH INFORMATION 1-16 (2017), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/chi/chi-36-2.pdf; TAYLOR N.T. BROWN *ET AL.*, THE WILLIAMS INSTITUTE, INTIMATE PARTNER VIOLENCE AND SEXUAL ABUSE AMONG LGBT PEOPLE (Nov. 2015), *available at* https://williamsinstitute.law.ucla.edu/publications/ipv-sex-abuse-lgbt-people/.

[109] Ana Marie Buller *et al.*, *Associations between Intimate Partner Violence and Health among Men Who Have Sex with Men: A Systematic Review and Meta-Analysis,* 11(3) PLOS. MED. e1001609 (Mar. 4, 2014).

[110] Reed A. C. Siemieniuk *et al.*, *Domestic Violence Screening: Prevalence and Outcomes in a Canadian HIV Population*, 24(12) AIDS PATIENT CARE & STDS 763-770 (Dec. 2010)

[111] Edward L. Machtinger *et al., Psychological Trauma and PTSD in HIV-Positive Women: A Meta-Analysis*, 16(8) AIDS & BEHAVIOR 2091-2100 (Nov. 2012).

[112] Sara LeGrand *et al.*, *A Review of Recent Literature on Trauma Among Individuals Living with HIV*, 12(4) CURRENT HIV/AIDS REP. 397-405 (Dec. 2015).

[113] Edward L. Machtinger *et al.*, *Recent Trauma is Associated with Antiretroviral Failure and HIV Transmission Risk Behavior among HIV-Positive Women and Female-Identified Transgenders*, 16(8) AIDS & BEHAVIOR 2160-2170, (Nov. 2012).

[114] Sara LeGrand *et al.*, *A Review of Recent Literature on Trauma Among Individuals Living with HIV*, 12(4) CURRENT HIV/AIDS REP. 397-405 (Dec. 2015).

Support), an evidence-based approach to addressing domestic and sexual violence that draws from research findings that survivors want providers to speak with them about IPV without the pressure to disclose, while strengthening resources available to survivors, such as PrEP referrals, behavioral health care, and economic opportunities.[115]

Both local and national data suggest that intimate partner violence has increased during the COVID-19 public health emergency – an outcome anticipated by experts given that survivors may face increased difficulty asking for or receiving assistance following the experience of harassment, abuse, or violence while personal privacy, mobility, economic security, and shelter occupancy is restricted.[116]

Sex Exchange

People who exchange sex for money, drugs, housing, or other resources have increased vulnerability to HIV acquisition[117] and increased risk of exposure to violence from both clients and nonpaying intimate partners,[118] due in part to stigma and discrimination in health care settings, socioeconomic disadvantage, and inability or reluctance to seek protection from law enforcement.

Data from a 2016 NYC NHBS cycle focused on heterosexually active women who exchange sex revealed high levels of HIV vulnerability. Over one-third of surveyed women who exchange sex for money or drugs with a confirmed HIV test result were HIV-positive; among those who were HIV-negative or whose HIV status was unknown, 75% reported condomless vaginal sex and 27% condomless anal sex the last time they had sex with a male partner. Nearly three-quarters of women who exchange sex reported illicit drug use in the past 12 months, half reported homelessness in the past 12 months; and 43% reported physical or sexual violence by a partner or client in the past 12 months. Over 40% reported refusing help from the police or avoiding the police on account of exchanging sex. Nearly one in five (18%) had been incarcerated in the last 12 months; and 52% had an annual household income of less than $10,000. In spite of this high prevalence of both proximate and structural factors that increase risk of HIV acquisition, only 29% were aware of PrEP, and 2% reported taking PrEP in the past 12 months.[119]

NYC HD is working with people involved in the sex trades and their providers to gather information on the overall experience of sex work in NYC. This includes recent focus groups with MSM who exchange sex and interviews with people of trans experience who exchange sex, as well as ongoing engagement with local grassroots organizations advocating on behalf of sex workers. Information on sex workers' health and safety, experiences with law enforcement, and barriers to accessing health care and

---

[115] Elizabeth Miller *et al*., *Implementation of a Family Planning Clinic–Based Partner Violence and Reproductive Coercion Intervention: Provider and Patient Perspectives*, 49(2) PERSPECTIVES ON SEXUAL & REPRODUCTIVE HEALTH 85-93 (Jun. 2017).

[116] Mayor's Office to End Domestic and Gender Based Violence, unpublished data (2020) (last accessed Mar. 26, 2021); NAT'L COMM'N ON COVID-19 & CRIMINAL JUSTICE, IMPACT REPORT: COVID-19 AND DOMESTIC VIOLENCE TRENDS (Feb. 23, 2021), *available at* https://covid19.counciloncj.org/2021/02/23/impact-report-covid-19-and-domestic-violence-trends/.

[117] Centers for Disease Control & Prevention, HIV Risk Among Persons Who Exchange Sex for Money or Nonmonetary Items (last accessed Mar. 29, 2021), *available at* https://www.cdc.gov/hiv/group/sexworkers.html.

[118] Kathleen N. Deering *et al*., *A Systematic Review of the Correlates of Violence against Sex Workers*, 104(5) AM. J. PUB. HEALTH e42-e54 (May 2014).

[119] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV RISK AND PREVALENCE AMONG HETEROSEXUALS AT INCREASED RISK FOR HIV IN NEW YORK CITY: HIGH-RISK WOMEN: RESULTS FROM THE NATIONAL HIV BEHAVIORAL SURVEILLANCE STUDY AMONG HIGH-RISK WOMEN 2016 (last accessed Mar. 26, 2021) *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-risk-prevalence-among-heterosexuals.pdf; Alexis V. Rivera *et al*., *Individual, Environmental, and Early Life Factors Associated With Client-Perpetrated Violence Among Women Who Exchange Sex in New York City, 2016*, J. OF INTERPERSONAL VIOLENCE (Nov. 21, 2018); SARAH BRAUNSTEIN, SEXUAL RISK BEHAVIORS AND PARTNERSHIP CHARACTERISTICS AMONG WOMEN WHO EXCHANGE SEX IN NYC, 13TH ANNUAL IRIS HOUSE WOMEN AS THE FACE OF AIDS SUMMIT (May 7, 2018).

supportive services has provided valuable context as NYC HD explores programming and services to meet sex workers' needs.

Federal "anti-trafficking" legislation signed into law in 2018[120] led to the closure of nearly all websites that U.S. sex workers use for online solicitation and safety screening. This may have contributed to a recent increase in street-based sex work, which carries the highest risk of violence and disease transmission.[121] One study found that previously available erotic advertising sites may have prompted a 17% decrease in female homicides throughout the U.S., principally because sex workers were able to use the sites to move into safer indoor environments and screen clients more carefully.[122] Conflating the gross human rights violation of trafficking with the consensual exchange of sex for money or resources impedes efforts to decriminalize sex work, which public health researchers have found would significantly reduce new HIV infections, reduce mistreatment of sex workers and increase their access to human rights, including health care.[123] A comprehensive meta-analysis of over 130 quantitative and qualitative studies involving sex workers of all genders and occurring between January 1990 and May 2018 found that, "collectively, lawful or unlawful repressive policing practices linked to sex work criminalization (partial or full) are associated with increased vulnerability to HIV and STI acquisition, sexual or physical violence from clients or intimate partners, and condomless sex."[124]

The HIV Service Delivery System

NYS and NYC have established a comprehensive HIV service delivery system, including testing, prevention, care, treatment, and a wide range of supportive services. Programming and services are funded and operationalized by numerous mechanisms, including Medicaid and Medicare; U.S. Department of Veterans Affairs; private insurance and insurance provided through the New York State of Health insurance marketplace; federal grant-funded programs for the uninsured and underinsured; NYC and NYS public assistance programs; and direct services by NYC HD's eight Sexual Health Clinics.

Strengths

Health Insurance

Health insurance coverage is widely available to PWH in NYC. NYS Medicaid (which expanded to include adults up to 138% of the FPL with the passage of the Affordable Care Act) is the primary payer of care for PWH in NYS and supports a full range of health care services and medications, as well as care management services**.** In addition, insurance coverage is available at no cost to PWH with an income up to 500% FPL (as of April 2019) through a combination of expanded Medicaid and New York State of Health insurance marketplace plans alongside support for premiums and copays from the NYS Uninsured Care Programs (NYS UCP). In January 2016, NYS introduced the Essential Plan, available to low-income people who do not qualify for Medicaid or Child Health Plus and who have incomes up to

[120] Allow States and Victims to Fight Online Sex Trafficking Act of 2017, Pub. L. No. 115-164, 132 Stat. 1253 (2018).
[121] Magali Lerman, Impacts of SESTA on US Sex Worker's Vulnerability to Infectious Disease, Int'l AIDS Conference 2018 (Jul. 2018), *available at* https://swopusa.org/wp-content/uploads/2020/03/Impacts-of-SESTA-on-US-SWs.pdf.
[122] SCOTT CUNNINGHAM *ET AL.*, CRAIGSLIST REDUCED VIOLENCE AGAINST WOMEN (Feb. 2019), *available at* https://economics.sites.stanford.edu/sites/g/files/sbiybj9386/f/craigslist_reduced_violence_against_women_scott_cunningham.pdf.
[123] Editorial, *Keeping Sex Workers Safe*, 386(9993) LANCET P504 (Aug. 8, 2015); *see also* HIV and Sex Workers, The Lancet Series (Jul. 23, 2014), *available at* https://www.thelancet.com/series/hiv-and-sex-workers.
[124] Lucy Platt *et al., Association between Sex Work Laws and Sex Workers' Health: A Systematic Review and Meta-Analysis of Quantitative and Qualitative Studies*, 15(12) PLOS MED. E1002680 (Dec. 11, 2018).

200% of the FPL. The Essential Plan has low monthly premiums (maximum of $20 per person per month), free preventive care, and no deductibles**.**

NYS UCP provides health care and medications to uninsured or underinsured NYS residents. The programs bridge the gap between Medicaid coverage and private insurance, providing universal access to medications and care for PWH. In addition, NYS UCP offers the PrEP Assistance Program (PrEP-AP) which covers the costs associated with medical visits, tests, and labs for NYS residents receiving PrEP medication through manufacturers' patient assistance programs.

PWH may be eligible for additional Medicaid products and services developed in recent years as part of efforts to reduce costs and improve outcomes among vulnerable New Yorkers. Medicaid HIV Special Needs Plans (HIV SNPs) offer additional care coordination and include providers experienced in serving PWH. HIV SNP eligibility also includes people of trans experience and people experiencing homelessness, regardless of HIV status, in order to better address the needs of these vulnerable and underserved populations. Health Homes (HH) care coordination services are available for Medicaid-eligible people with a variety of qualifying chronic conditions, including HIV infection. Health and Recovery Plans (HARPs) serve people with complex behavioral health needs, and Home and Community Based Services (HCBS) are available to subset of HARP enrollees who need additional support to achieve behavioral health goals.

Service Delivery

NYC HD's eight Sexual Health Clinics offer comprehensive, affirming sexual health care, regardless of immigration status, insurance coverage, or ability to pay.[125] All clinics offer low- to no-cost state of the art services, including STI and HIV testing; PEP; PrEP initiation and navigation; JumpstART, the immediate initiation of ART with navigation to other clinical sites for longer-term care; and partner services. The clinics also provide a range of reproductive health services, including emergency contraception and longer-term options such as pills, patches, rings, Depo-Provera injections, intrauterine devices (IUDs), and implants; cervical cancer screening; naloxone kits and sterile syringes; and behavioral health services, including screening, brief interventions, and referrals for substance use, and crisis and short-term counseling, assessment, and referrals to social services. In 2019, the NYC HD launched the Quickie Lab at Chelsea Express, a cutting-edge laboratory system that tests for chlamydia and gonorrhea with results provided within hours instead of days, which accelerates treatment initiation and reduces the likelihood of forward transmission.

NYC Health + Hospitals, the largest public health care provider in the U.S., provides HIV care to many of NYC's poorest residents. HIV prevention and care services are available in Designated AIDS Centers (DACs), state-certified, hospital-based programs that serve as hubs for a continuum of hospital and community-based care. Services are also available at numerous hospital-based HIV clinics; Federally Qualified Health Centers (FQHCs) and other community health centers located in medically underserved NYC neighborhoods; LGBTQ health centers; NYC Department of Education's School-Based Health Centers (SBHC) and Connecting Adolescents to Comprehensive Healthcare (CATCH) programs; SSPs with co-located drug user health services; substance use disorder treatment programs; and private health care providers across the city. NYC HD has contractual and non-contractual supportive relationships with the uniquely well-established, interconnected, and voluminous network of HIV prevention and care specialists.

[125] N.Y.C. Dep't of Health & Mental Hygiene, Sexual Health Clinics (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/site/doh/services/sexual-health-clinics.page.

RWHAP-funded activities promote high-quality care and treatment through the support of core medical and support services that address gaps in the HIV care continuum for eligible PWH, help meet basic needs, and address barriers to viral suppression. Services include critical facilitators of improved treatment outcomes such as housing, mental health services, health education, and food and nutrition, as well as medical case management services to engage PWH in medical care and further address barriers to viral suppression. Funded agencies provide a range of services and are either affiliated or co-located with a medical provider.

NYC has established a unique system for addressing the basic subsistence needs of very low-income New Yorkers with HIV, including publicly funded housing assistance and enhanced nutrition and transportation allowances. As noted above, HASA provides a single point of access to facilitate public benefits for low-income New Yorkers with HIV.

Recent policy changes that improve treatment access and systems of care include the NYS regulatory amendments finalized in 2017 allowing minors to consent to HIV prophylaxis and treatment without parental/guardian consent or notification,[126] and the July 2018 expansion of Medicaid coverage to include harm reduction services (other than syringe exchange) provided by a NYS DOH authorized and waivered syringe service program.[127]

For over 25 years, NYC and NYS have been leaders in using a public health approach to IDU, including injected heroin and other opioids, to protect individual and community health by preventing transmission of HIV and other blood borne infections such as HCV. The NYC HD Bureau of Alcohol and Drug Use Prevention, Care, and Treatment (BADUPCT) works to reduce morbidity and mortality related to alcohol and other drug use among New Yorkers and collaborates on agency efforts to address the local HIV and viral hepatitis epidemics. In the early 1990s, New York pioneered the creation of government-approved community-based organizations (CBOs) to distribute new, sterile syringes and collect them after use. NYS now supports the largest SSP network in the world, which has also become the largest single source of voluntary drug treatment referrals in NYS.

NYC has a broad and strong system of CBOs that employ a range of funding sources to provide HIV testing, prevention, and care services, and to engage in individual and system-level advocacy with and on behalf of PWH and people vulnerable to HIV infection, including priority-population led agencies that have the community access and cultural competency that is critical in order to reach underserved populations. NYC HD currently provides funding to 144 unique clinical and non-clinical providers through over 357 contracts to deliver HIV testing, prevention, care, and ancillary support services. Through these funded services NYC HD reaches PWH and those vulnerable to HIV infection in a range of settings across sectors including CBO's, hospitals, community health centers, correctional facilities, and substance use and mental health service centers, with services that include medical and non-medical case management, behavioral health interventions, food and nutrition services, housing assistance, health education, HIV testing, HIV treatment, PrEP and PEP patient navigation, and STI testing and treatment. To address inequities in HIV outcomes, NYC prioritizes services to underserved neighborhoods with high numbers of PWH and funds services that address the social and structural factors that drive disparities in

[126] URI BELKIND WITH THE MEDICAL CARE CRITERIA COMMITTEE, HIV CLINICAL GUIDELINES PROGRAM, N.Y.S. DEP'T OF HEALTH, GUIDANCE: ADOLESCENT CONSENT TO HIV AND STI TREATMENT AND PREVENTION (Jan. 2021), *available at* https://cdn.hivguidelines.org/wp-content/uploads/20210106134515/NYSDOH-AI-Adolescent-Consent-Guidance_1-6-2021_HG.pdf.

[127] N.Y.S. DEP'T OF HEALTH, HARM REDUCTION SERVICES (May 2018), *available at* https://www.health.ny.gov/health_care/medicaid/redesign/2018/harm_reduction.htm.

access to care and HIV prevention and treatment effectiveness. A qualitative study of barriers and facilitators to HIV primary care among vulnerable populations in NYC (young MSM, African immigrants, people recently released from incarceration, and women of trans experience) highlighted the essential role of CBOs in engaging vulnerable populations in care, specifically referencing their tailored and culturally competent services.[128]

NYC HD promotes comprehensive, affirming health care for all New Yorkers, and supports community-driven initiatives focused on those disproportionately affected by HIV. In NYS it is illegal to discriminate on the basis of a person's sexual orientation, gender identity or gender expression in public accommodations, including in health care settings. To promote optimal Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) health, in 2017 NYC released and distributed the LGBTQ Health Care Bill of Rights,[129] which details health care protections on local, state, and federal levels to empower LGBTQ New Yorkers to get the health care they deserve, and reiterates that health care providers and staff cannot provide LGBTQ people with a lower quality of care because of their sexual orientation, gender identity, or gender expression.[130] To ensure a state and citywide LGBTQ health equity agenda persists, NYC HD's LGBTQ Health Equity Coalition was established as a group of nonprofit, private, and governmental organizations, individual community members, and allies, committed to advancing the health of LGBTQ New Yorkers. Additionally, the NYC HD has provided funding and technical assistance to transgender-led and Black MSM-led community-based organizations to build and sustain their capacity to provide robust, culturally sensitive services to their communities.

NYC HD is expanding services to reach individuals who might not otherwise seek care. In 2017, NYC HD launched Re-Charge, an HIV status neutral and sex-positive harm reduction program focused on MSM and people of trans experience who have sex with men who use methamphetamine. Taking a status-neutral approach, the program supports PWH to engage with and stay in HIV care, and adhere to ART, and supports people who may benefit from prophylaxis to take PrEP to prevent HIV infection. Re-Charge features twice weekly drop-in groups facilitated by a peer support worker and licensed social worker, and a range of individualized services including health education, individual and group counseling and medical and psychiatric visits.

An enhanced home-based care initiative brings NYC HD services directly to people who are not comfortable engaging in a traditional care setting through a virtual sexual health clinic, whereby nurse practitioners linked through telemedicine and disease intervention specialists make visits in the community to provide HIV and STI testing, immediate PrEP initiation, immediate initiation of antiretroviral treatment for people diagnosed with HIV, and linkage to continued care with local providers.[131]

Workforce

Both the NYS Department of Health (NYS DOH) and NYC HD support the HIV workforce and the service delivery system by providing education and training opportunities for all levels of health and human

[128] Robert H. Remien *et al*., *Barriers and Facilitators to Engagement of Vulnerable Populations in HIV Primary Care in New York City*, 69 J. AIDS S16–S24 (May 1, 2015).
[129] N.Y.C. Dep't of Health & Mental Hygiene, LGBTQ Health Care Bill of Rights (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/ah/lgbtq-bor-wallet.pdf.
[130] N.Y.C. Dep't of Health & Mental Hygiene, LGBTQ Health (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/site/doh/health/health-topics/lgbtq.page.
[131] Matthew B. Feldman *et al.*, *Crystal Methamphetamine Use and HIV Medical Outcomes among HIV-Infected Men Who Have Sex with Men Accessing Support Services in New York*, 147 DRUG & ALCOHOL DEPENDENCE 266-71, (Feb. 1, 2015).

services providers. NYC HD provides comprehensive training and technical assistance for clinical and non-clinical staff at health departments, hospitals, clinics, and CBOs on more than 25 topics. Training is provided to organizations funded directly by the NYC HD as well as non-HD funded HIV providers.[132] NYC HD provides ongoing tailored technical assistance to HIV clinics, regardless of HD funding status, via site visits, resource development and distribution, in-person presentations, referrals to relevant stakeholder meetings, and public health detailing. Individual contractors receive similar support from their respective technical assistance teams. NYS DOH also supports the service delivery system by promoting, monitoring, and supporting the quality of HIV clinical services for PWH.[133] Training and technical assistance services have continued during the COVID-19 public health emergency through virtual implementation, though training frequencies have decreased due to NYC HD's COVID-19 response efforts.

NYS DOH offers training and a formal certification to HIV, HCV, and harm reduction peer workers who meet established standards. The certification process recognizes the growing body of research demonstrating that patient health outcomes improve when a peer worker is involved in the care team.[134]

NYC HD also coordinates and works with clinical and non-clinical service provider networks to improve coordination of, availability of, and access to comprehensive HIV prevention, treatment, and support services, including the PlaySure Network for HIV Prevention, *New York Knows* (*NYK*), and Sexual Health Advisory Group (SHAG), and collaborates with the NYS DOH New York Links (NY Links) initiative that works to improve linkage to and retention in effective care for PWH.

Public Resources

NYC HD has become a leader in health promotion and education through sexual health marketing campaigns focused on HIV testing, biomedical prevention and treatment, and stigma. Informed by HIV surveillance data and community need, recent campaigns include "Be HIV Sure" (2014), which promoted HIV testing; "Play Sure" (2015), which encouraged New Yorkers to choose the safer sex combination that works for them, including condoms, testing, PrEP, PEP, and ART; and "Stay Sure" (2016), which emphasized the importance of taking medications to treat or prevent HIV.[135] In 2017, NYC HD released "Bare It All," designed to embolden LGBTQ New Yorkers to talk openly with their doctors about their sex lives, drug use and any issues that affect their health.[136] In 2018, NYC HD released "Living Sure," which

[132] N.Y.C. Dep't of Health & Mental Hygiene, NYCHealthTraining (last accessed Mar. 26, 2021), *available at* http://nychealthtraining.org.

[133] N.Y.S. Dep't of Health, HIV Education and Training, Clinical Education Initiative (HIV/Hepatitis C Center, Resource Center, STD Center of Excellence) (last accessed Mar. 26, 2021), *available at* https://health.ny.gov/diseases/aids/general/about/education.htm.

[134] N.Y.S. Dep't of Health, HIV Education and Training, Peer Certification (last accessed Mar. 26, 2021), *available at* https://health.ny.gov/diseases/aids/general/about/education.htm.

[135] N.Y.C. Dep't of Health & Mental Hygiene, Be Sure, Play Sure, Stay Sure (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/ah/beplay-staysure-booklet; Carmen Carrera YouTube, NYC Health #PlaySure Campaign Television Commercial (May 13, 2016), *available at* https://www.youtube.com/watch?v=rXiHyGDSgRc; NYCHealth YouTube, Play Sure | HIV Prevention for NYC (Sept. 6, 2018), *available at* https://www.youtube.com/watch?v=SZU6nibG35s.

[136] Press Release, N.Y.C. Dep't of Health & Mental Hygiene, To Kick-off Pride Month, de Blasio Administration Publishes New York City's First-Ever LGBTQ Health Care Bill of Rights (Jun. 6, 2017), *available at* https://www1.nyc.gov/site/doh/about/press/pr2017/pr046-17.page; NYCHealth YouTube, Bare It All – LGBTQ Health (Jun. 16, 2017), *available at* https://www.youtube.com/watch?v=nu5Y2L24Hhc.

encourages cisgender and transgender women to consider PrEP as part of their sexual health plan.[137] Later that year, NYC HD released two installments of "*¡Listos!*," the agency's first awareness campaign to be conceived of and largely released in Spanish. The first "*¡Listos!*" installment promoted PrEP among Latinos and the second promoted HIV testing, prevention, and treatment among Latino MSM.[138] In 2019, NYC HD released "Made Equal," which promoted the evidence-based finding that HIV cannot be passed through sex if the virus is undetectable, and was designed to reduce HIV-related stigma, celebrate healthy sexuality and sexual pleasure, and redefine what it means to live with HIV.[139] The campaigns have appeared in newspapers, subway cars and stations, buses and bus shelters, and billboards, as well as on social media, dating apps, and were promoted through the online platforms of NYC HD contracted and partner HIV service agencies.

Through its comprehensive website, NYC HD offers various public- and provider-facing online resources related to HIV and sexual health, including service provider directories. The NYC Health Map is an online directory of service providers citywide, searchable by type of service type, populations served, hours of operation, payment/cost, and other features.[140] In 2018, the NYC Condom Availability Program (NYCAP) launched the NYC Safer Sex Portal, an online system through which NYC-based nonprofit organizations and business can order safer sex products and request condom education trainings.

Challenges/Gaps

Service Delivery

The NYC HIV epidemic must be viewed in light of the syndemics of co-occurring infectious diseases, including viral hepatitis, STIs, and tuberculosis. At the end of 2018, an estimated 10.6% of PWH in NYC were living with diagnosed HCV co-infection. Currently, Medicaid covers Direct Acting Agents (DAAs) that cure HCV with very few limitations, but coverage under other forms of insurance varies widely. For those PWH who are uninsured, or who need assistance with co-pays and deductibles, NYS ADAP added most DAAs to the formulary in November 2016. Despite the wider availability of effective, well-tolerated treatments in NYS, only 62% of co-infected people appear to have initiated HCV treatment by the end of 2018, though that number is slightly higher (72%) for those successfully managing HIV care.[141] In July

[137] Press Release, N.Y.C. Dep't of Health & Mental Hygiene, Health Department Launches City's First-Ever Campaign Promoting HIV Prevention Medication among Women (Mar. 6, 2018), *available at* https://www1.nyc.gov/site/doh/about/press/pr2018/pr017-18.page.

[138] Press Release, N.Y.C. Dep't of Health & Mental Hygiene, Health Department Launches *"¡Listos!"*, First-Ever Campaign Promoting HIV Prevention Medication to Latinos (May 16, 2018), *available at* https://www1.nyc.gov/site/doh/about/press/pr2018/pr038-18.page; Press Release, N.Y.C. Dep't of Health & Mental Hygiene, Health Department Expands Hours and Services at Corona Sexual Health Clinic, Launches Second *"¡Listos!"* Campaign (Oct. 15, 2018), *available at* https://www1.nyc.gov/site/doh/about/press/pr2018/pr082-18.page.

[139] Press Release, N.Y.C. Dep't of Health & Mental Hygiene, In Celebration of NYC Pride, Health Department Launches New Sexual Health Marketing Campaign, "Made Equal" (Jun. 10, 2019), *available at* https://www1.nyc.gov/site/doh/about/press/pr2019/new-sexual-health-marketing-campaign-made-equal.page; NYCHealth YouTube, Made Equal | Undetectable HIV Equals Untransmittable HIV (full version) (Jul. 11, 2019), *available at* https://www.youtube.com/watch?v=LyG6tYXNzxQ.

[140] N.Y.C. Dep't of Health & Mental Hygiene, PlaySure Network for HIV Prevention (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/site/doh/providers/resources/playsure-network.page.

[141] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, WORKING TOWARD A HEP FREE NYC: HEPATITIS A, B AND C IN NEW YORK CITY: 2018 ANNUAL REPORT (2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/cd/hepatitis-abc-annual-report-2018.pdf.

2018, Governor Cuomo announced the first strategy in the nation to eliminate HCV, and a task force is currently developing recommendations for HCV elimination.[142]

STI rates in NYC are high and, in contrast to HIV, have been increasing since 2014. In 2018, the rate (number of diagnosed STI per 100,000 population) of chlamydia was 840.2 (increase of 19%), gonorrhea 303.0 (increase of 82%), primary and secondary syphilis 23.5 (increase of 51%), and early latent syphilis 40.6 (increase of 73%). These trends are being driven primarily by increases in STI diagnoses among MSM, although all priority populations experienced a significantly increasing burden of STIs between 2014 and 2018. STIs increase the risk of HIV sexual transmission,[143] and in 2018, NYC's STI case rates were highest in neighborhoods with high numbers of PWH. Among HIV-negative women in NYC, gonorrhea and syphilis are predominantly diagnosed in women living in neighborhoods with high rates of HIV diagnoses.

NYC HD reports that 6% of New Yorkers with TB have a known HIV-positive status.[144] Bureau of TB Control staff provide rapid HIV testing and HIV counseling services at NYC HD chest clinics and refer patients with HIV infection to health care providers who specialize in HIV treatment. Anonymous HIV testing and counseling is available at chest clinics independent of need for TB services.

Lack of health care system integration of behavioral health services with HIV prevention and care is a persistent barrier to successful HIV health outcomes. For many reasons—including restrictive policies and funding streams and the siloed nature of health care organizations—identifying and treating behavioral health needs among people affected by HIV have not been prioritized and/or have been difficult to implement at the required scale. Referral networks for specialized behavioral health treatment are sparse, with long wait lists, and behavioral health care settings often lack the staff or training to provide HIV testing, access to PrEP and a space to discuss sexual health. System level strategies are needed to implement models for care integration, training, protocols, best practices, and evidence-based screening tools, in addition to developing a behavioral health workforce culturally responsive to and representative of NYC's priority populations.[145]

It is estimated that 70% of PWH have experienced trauma, such as the sudden, unexpected loss of a loved one, a physical or sexual assault, or childhood abuse.[146] CHAIN data show that trauma exposure and associated signs and symptoms is widespread among PWH in NYC, with women reporting a higher rate of multiple violent traumatic event experiences (31%) than heterosexual men (9%), and that PWH with traumatic event experiences had a higher prevalence of multiple missed appointments which may indicate or lead to disruption in HIV care.[147] These experiences can affect a person's ability to access and

---

[142] Press Release, Office of Gov. Andrew M. Cuomo, Governor Cuomo Announces First-In-Nation Strategy to Eliminate Hepatitis C (July 27, 2018), *available at* https://www.governor.ny.gov/news/governor-cuomo-announces-first-nation-strategy-eliminate-hepatitis-c.

[143] Preeti Pathela *et al.*, *The High Risk of an HIV Diagnosis Following a Diagnosis of Syphilis: A Population-level Analysis of New York City Men*, 61(2) CLINICAL INFECTIOUS DISEASES 281-287 (Jul 15, 2015); Preeti Pathela *et al.*, *HIV Incidence Among Men with and Those without Sexually Transmitted Rectal Infections: Estimates from Matching Against an HIV Case Registry*. 57(8) CLINICAL INFECTIOUS DISEASES 1203-1209 (Oct. 2013).

[144] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, NEW YORK CITY HEALTH DEPARTMENT ANNUAL TUBERCULOSIS SUMMARY, 2019 (2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/tb/tb2019.pdf.

[145] Robert H Remien *et al.*, *Mental Health and HIV/AIDS: The Need for an Integrated Response*, 33(9) AIDS 1411-1420 (Jul. 15, 2019).

[146] NASTAD, Trauma-Informed Approaches Toolkit (last updated Jun. 3, 2020), *available at* https://www.nastad.org/trauma-informed-approaches.

[147] MAIKO YOMOGIDA *ET AL.*, CHAIN 2016-3 REPORT: TRAUMA EXPOSURE AND HIV IN NEW YORK CITY, DRAFT 3 (Feb. 1, 2018).

participate in HIV prevention and care, underscoring the importance of provider education and systems of care equipped to diagnose and respond to patient trauma. "Trauma-responsive care" seeks to cultivate healing-centered service environments and building health care workforce capacity to utilize relevant evidence-based strategies to address, mitigate, and prevent patient trauma.

Despite a record low prevalence of smoking in NYC (less than 14%), heavy tobacco use persists among PWH. Recent tobacco smoking was reported by 39% of all PWH enrolled in RWHAP programs during 2019, with the highest rate (62%) among PWH receiving harm reduction services to address substance use disorder. Tobacco smoking is not routinely addressed by HIV service providers, and it is critical to increase efforts to encourage or require providers to treat tobacco dependence in tandem with medical and behavioral health care. Data from a CHAIN study confirmed prior findings of the detrimental effect of smoking on long-term survival. Former smokers had a higher rate of long-term survival than current smokers, suggesting that smoking cessation interventions may be an effective means to lengthen life among PWH.[148]

Health care access also differs because of markedly differential availability of providers by neighborhood or borough Manhattan has twice the number of health care workers per 100 inhabitants compared to The Bronx and Queens, and 1.5 times the supply compared to Brooklyn. Manhattan also has 3-5 times the number of general practitioners per 100,000 people compared to the other boroughs.[149] Neighborhoods outside of Manhattan are more likely to have a dearth of options for quality, affirming services for people who identify as non-heterosexual, and people of trans experience. Stakeholders have acknowledged that even the public transportation accessibility and quality of facility, and convenience of services differs between the NYC HD Sexual Health Clinics in Manhattan versus in other boroughs.

The COVID-19 public health emergency in NYC presented a significant challenge to the HIV service delivery system, particularly early on when NYC was hardest hit. On March 22, 2020, NYS on PAUSE went into effect, closing all non-essential businesses statewide and banning non-essential gathering of any size for any reason. NYS on PAUSE was extended for months, with a gradual scaling back of restrictions and closures occurring over the summer. Initially, New Yorkers were told to avoid all non-essential health care. This created a months-long interruption in HIV and STI testing, PrEP care, HIV care and ART, and other supportive services for many New Yorkers. NYC HD observed significant decreases in reported volumes of HIV-related laboratory tests and service utilization at contracted organizations, with nadirs at the first peak of COVID-19 public health emergency, and a gradual rebound in the subsequent months.[150] In the wake of decreased volumes, smaller clinics and organizations providing health and screening services had to furlough or lay off staff. In-person services have gradually resumed, alongside expanded tele-health and telemedicine, but many clinics and organizations have continued to redirect resources and workforce capacity toward addressing COVID-19 needs. Given persistent increased risk of exposure to COVID-19 in health care settings, consumers and NYC HD personnel alike have acknowledge the need to expand mobile service options, and particularly for HIV point of care

---

[148] PETER MESSERI *ET AL.*, CHAIN 2016-2 REPORT: PREDICTORS OF LONG-TERM SURVIVAL FOR PERSONS LIVING WITH HIV: A LITERATURE REVIEW AND EMPIRICAL STUDY OF THE NEW YORK CITY CHAIN COHORT (Apr. 9, 2018).

[149] Bertrand Teirlink *et al*., Access to Health Care in NYC: Borough Inequality and the Pandemic Effect (last accessed Mar. 26, 2021), *available at* https://edc.nyc/insights/access-to-health-care-in-nyc-borough-inequality-pandemic-effect.

[150] ANISHA D. GANDHI, ENDING THE HIV EPIDEMIC IN NEW YORK CITY DURING THE COVID-19 PANDEMIC, PHYSICIANS RESEARCH NETWORK GRAND ROUNDS (Dec. 8, 2020), *available at* https://www.prn.org/index.php/transmission/article/ending_hiv_epidemic_in_new_york_city_during_covid_19_2817; SARAH RAMTEKE *ET AL.*, PLAYSURE NETWORK SERVICE DELIVERY DURING THE COVID-19 PANDEMIC IN NEW YORK CITY, FEBRUARY – AUGUST 2020, 2020 ENDING THE EPIDEMIC SUMMIT (Dec. 2020).

testing. Expanded access to technology for clients in need would also reduce inequities in uptake of telehealth and telemedicine opportunities that may be more convenient and appealing for a variety of services, including for both HIV care and mental/behavioral health care.

Workforce

The decreasing availability of experienced HIV health practitioners may pose a barrier in some communities and settings. A NYC HD citywide clinic survey found that 35% of clinics report insufficient social workers and case managers, and over 25% report insufficient nursing and medical staff. Current HIV practitioners are aging and retiring, and research shows that new clinicians receive insufficient knowledge of HIV during their medical education. Specific HIV training is not required by health profession accreditation agencies; and residency programs' skew toward inpatient care limit exposure to PWH, who are increasingly seen in outpatient settings. Lack of interest in HIV care as a career choice among recent graduates, the lack of diversity in the HIV workforce and lack of providers with qualifications to provide HIV and primary care have all been reported in recent years. Ensuring clinicians' access to HIV-focused learning opportunities is essential. It will also be key to overcome the persistent "purview paradox," especially as it relates to prescribing PrEP and PEP, of health system acknowledgement of the importance of broadening access to HIV prevention and treatment as a part of primary care, countered by concerns regarding and the reluctance among providers who lack HIV expertise to support patients' HIV prevention and care needs.[151] New clinicians must be able to offer biomedical prevention options, treat HIV disease, and take a comprehensive whole-person approach to care. Experienced physicians must also have access to continuing educational opportunities to keep abreast of treatment advances.

There is a need for ongoing clinical and non-clinical training on HIV prevention and care. Both clinical and non-clinical providers need to maintain specific knowledge and skills due to: changing clinical management protocols as new therapies and regimens emerge; complications related to HIV and aging; challenges associated with multiple co-morbidities; addressing safety concerns across the reproductive life course or in concert with gender affirmation or transition therapies; expansion of program scope to encompass STIs and viral hepatitis; the need to expand access to PEP and PrEP; other advances in the field of HIV/AIDS; increasingly complex insurance navigation; and competency in facilitating effective linkage to supportive services.

There is an expressed need for trained and credentialed mental health providers (eg licensed clinical social workers or licensed mental health counselors), and for non-clinical providers who are well-versed in leveraging social media strategies to enhance outreach and delivery of services.

Explicit and implicit biases around race/ethnicity, sexual orientation, gender identity or expression, socioeconomic status, HIV status, engagement in sex work, and drug use persist among health providers, and induce significant barriers to engagement in HIV prevention and care services among those who most need it. There is a need to reduce provider-enacted stigma and discrimination in health

[151] Susie Hoffman, *et al*., A Clinical Home for Preexposure Prophylaxis: Diverse Health Care Providers' Perspectives on the "Purview Paradox" 15(1) J. INT'L ASS'N PROVIDERS AIDS CARE 59-56 (Jan.-Feb. 2016).

care settings associated with these and other aspects of patients' identities.[152] [153] [154] A 2016 NYS survey of health facility staff found that most respondents had not received training on HIV-related stigma and discrimination and did not have knowledge of policies protecting members of key populations from discrimination. A significant percentage agreed with a statement that HIV infection occurs due to "irresponsible behavior" and most had observed colleagues speaking badly about women, people of color, people with a mental health diagnosis, and people of trans experience. In general, survey respondents lacked training on women's health, people of trans experience, people with a mental health diagnoses, and people who use drugs.[155] These survey findings were used to inform an action plan to reduce intersecting stigmas in health care settings and improve training and skill-building among health care staff. However, continued and new efforts will be required to address explicit and implicit biases that undermine effective sexual health care, including HIV prevention and care.

Internalized, interpersonal and institutional racism persist in health and support service delivery, and the lack of systematic training in racial equity for members of the HIV service workforce hinders engagement and retention in services and optimal health outcomes. While NYC HD requires and supports funded agencies to adhere to the Office of Minority Health's National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (CLAS), designed to improve health care quality and advance health equity, understanding and implementation of the CLAS standards are inconsistent across agencies and specific standards are not enforceable by NYC HD. NYC HD partners and funded agencies have asked for more resources in this area, recognizing the critical importance of reducing racism and other forms of discrimination within workplace and health care settings in order to achieve EHE goals. Building upon its Racial Equity and Social Justice Initiatives Program, NYC HD is developing a training and capacity building program for NYC HD staff and the HIV workforce that includes new training content and technical support to funded contractors to advance racial equity 1) across their own workforce, through recruiting and supporting personnel that are reflective of the populations served in terms of their racial/ethnic identity, sexual orientation and gender identity, and lived experiences; and 2) in their service provision, through shifting practices and monitoring progress through data and reporting systems ensure priority populations are being adequately reached.

Additional identified workforce needs include greater support for individuals with limited English proficiency, such as translators, interpreters, and bilingual/multilingual health educators, navigators, and mental health providers.

As peer workers enter the workforce, especially in urban centers like NYC, it will be critical to ensure that they are paid a living wage, can shift to full time employment without immediately jeopardizing housing subsidies or other essential supports, and that they are able to identify sustainable placements that match their skills and that offer pathways for ongoing professional development.

Public Resources

---

[152] Laura Nyblade *et al.*, *Stigma in Health Facilities: Why It Matters and How We Can Change It*, 17(1) BMC MED. 25 (Feb. 15, 2019).

[153] Janice A. Sabin *et al.*, *Health Care Providers' Implicit and Explicit Attitudes Toward Lesbian Women and Gay Men*, 105(9) AM. J. PUB. HEALTH 1831-1841 (Aug. 7, 2015).

[154] Grayce Alencar Albuquerque *et al.*, *Access to Health Services by Lesbian, Gay, Bisexual, and Transgender Persons: A Systematic Literature Review*, 16 (2) BMC INT'L HEALTH & HUMAN RIGHTS (Jan. 14, 2016).

[155] COURTNEY AHMED *ET AL.*, MEASURING AND ADDRESSING STIGMA IN HEALTHCARE SETTINGS: KEY FINDINGS FROM STAFF SURVEY RESULTS AND STEPS TAKEN (last accessed Mar. 26, 2021), *available at* https://quality.aidsinstituteny.org/Areas/Stigma/Files/2019/d_20190401/4-1-19-1.d.Stigma%20Poster%20for%20Ryan%20White%202018_Final.pdf.

Though NYC HD has developed numerous online resources for both providers and the public on HIV epidemiology, testing, prevention, and care as well as behavioral health and social support needs; increasing awareness and use of these resources remains an ongoing challenge. Working with stakeholders to increase dissemination and evaluation of these resources with stakeholders will be imperative to supporting their ongoing utility.

Challenges Faced by Priority Populations

Based on HIV surveillance data, documented HIV health disparities, and community input, NYC HD identified seven priority populations for HIV prevention and care interventions under PS19-1906: 1) Black MSM, including Black cisgender MSM and Black transgender MSM; 2) Latino/Hispanic MSM, including Latino/Hispanic cisgender MSM and Latino/Hispanic transgender MSM; 3) Black women, including Black cisgender women and Black transgender women; 4) Latina/Hispanic women, including Hispanic/Latina cisgender women and Latina/Hispanic transgender women; 5) All people of trans experience and people who identify as gender nonconforming, gender non-binary, or genderqueer (referred to collectively in this document as people of trans experience); 6) PWH ages 50 years and older; and 7) Youth and young adults ages 13 to 29 years. People may have multiple, intersecting identities and, therefore, these seven categories are not mutually exclusive nor exhaustive and may include additionally impacted sub-populations. These include people who have partners with HIV; those experiencing homelessness or housing instability; people with mental health challenges; people who use drugs and/or have a substance use disorder; people who exchange sex for money, drugs, housing, or other resources; people born outside the U.S., especially persons without a settled or "adjusted" immigration status;[156] people who live in medium-, high- and very high-poverty NYC neighborhoods; people with limited access to ongoing, high-quality primary health care; people who have experienced intimate partner violence; and people recently released from incarceration and other justice-involved people. These are intersecting and overlapping complexities experienced by New Yorkers in a variety of contexts, which call for multisectoral collaboration and investment, integrated services, and meaningful collaboration with affected communities.

Black and Latino/Hispanic MSM, including Cisgender and Transgender MSM

Black and Latino/Hispanic MSM experience the highest estimated rates of new HIV diagnoses and significant disparities in HIV-related health outcomes. In 2019, Black and/or Latino/Hispanic MSM comprised 80% of all MSM newly diagnosed with HIV in NYC, and 56% of all newly diagnosed men. In the Bronx and Queens, the largest number of MSM diagnoses was among Latino/Hispanic MSM, whereas in Manhattan and Brooklyn, the largest number was among Black MSM. Compared to White MSM, Black and Latino/Hispanic MSM also have lower rates of viral load suppression and higher age-adjusted death rates.[157]

The CDC demonstration project, Project THRIVE, seeks to improve testing, referral, linkage, and navigation to prevention and care services for Black and Latino/Hispanic MSM in Brooklyn. The Project THRIVE community advisory body (CAB) meets monthly with NYC HD to discuss and make recommendations on how to improve the health and well-being of their communities. Recommendations from THRIVE[158] and other community engagements with Black and Latino MSM indicate that interventions must move upstream towards dismantling stigma, building resilience, and

[156] Individuals who do not yet have legal residence or citizenship, sometimes referred to as "undocumented" status.
[157] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV SURVEILLANCE ANNUAL REPORT, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.
[158] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, PROJECT THRIVE COMMUNITY ADVISORY BOARD, PROJECT THRIVE COMMUNITY ADVISORY BOARD RECOMMENDATIONS: EXECUTIVE SUMMARY (2020).

creating more non-traditional, inclusive community spaces and venues that focus on addressing social determinants of health. This includes services such as professional development and leadership and employment opportunities for Black and Latino MSM; mandating trainings on cultural sensitivity and systems of bias and oppression for funded service providers; increasing access to and awareness of affirming primary care and affordable mental health services for Black and Latino MSM; and integrated service models such as collaborations between HASA and other benefits programs with workforce development programs.

The report from the Summit on *The Sexual Health of Immigrant Latino Gay & Bisexual Men In NYC,* held in 2019 with NYC HD support, sets out the unique challenges faced by immigrant Latino MSM, who must "negotiate … different sexual worlds within other health and social needs related to legal status, inconsistent employment, lack of health insurance, or discrimination."[159] Participants highlighted the need, for services informed by a deeper understanding of immigrant health, diversity, and ongoing experiences as migrants; sexual health interventions developed specifically for and with Latino MSM; amelioration of the structural inequalities creating and/or exacerbating their sexual health vulnerabilities, including access to primary health care, particularly for undocumented immigrants; and funding for mental health and harm reduction services.

It is important to note that a meaningful proportion of individuals in NYC identify as both Black and Latino/a/x, meaning that they may face multiple forms of marginalization, related to racism, colorism, xenophobia, intra-community stigma, as well as stigma and discrimination based on HIV status, sexual orientation or other marginalized identities.

Black and Latina/Hispanic Cisgender Women, including Cisgender and Transgender Women

In 2019, 91% of cisgender women newly diagnosed with HIV in NYC were Black or Latina/Hispanic. Many cisgender and transgender women face HIV vulnerabilities including cultural and language barriers to accessing services, difficulty in assessing personal HIV vulnerability, HIV stigma, lack of familiarity with PrEP and PEP—in part due to lack of familiarity among their health care providers, power differentials and risk of violence within sexual partnerships, and disproportionate exposure to incarceration; but these challenges are particularly exacerbated among Black and Latina/Hispanic women. The 2017 NYC HD Sexual Health Survey – a street intercept survey of Black and Latina women in high-HIV-burden NYC neighborhoods – found that only 34% of respondents had ever heard of PrEP and 60% felt they would not benefit from taking PrEP or PEP.[160] In 2019, NYC women received less than 9% of PrEP prescriptions despite comprising 21% of all new diagnoses.[161] Many Black and Latina women in NYC live in high prevalence neighborhoods that place them at increased exposure to HIV due solely to their sexual networks; this can contribute to, low self-perceived vulnerability to HIV and delayed or diminished engagement in testing or prevention services.

People of Trans Experience[162]

[159] DANIEL CASTELLANOS *ET AL.*, THE SEXUAL HEALTH OF IMMIGRANT LATINO GAY AND BISEXUAL MEN IN NYC: 2019 SUMMIT PROCEEDINGS (last accessed Mar. 26, 2019).

[160] MARNE GARRETSON *ET AL.*, KNOWLEDGE, ATTITUDES, AND BEHAVIORS SURROUNDING PREP AMONG BLACK AND LATINA CISGENDER WOMEN: FINDINGS FROM THE 2017 NEW YORK CITY SEXUAL HEALTH SURVEY, 2019 APHA (Nov. 2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/apa-2019-prep-among-black-latina-cisgender.pdf.

[161] Ending the Epidemic Dashboard (last accessed Mar. 26, 2021), *available at* http://etedashboardny.org.

[162] As noted above, NYC HD data systems currently gather information on people who identify as transgender, but not on people who identify as gender nonconforming, gender non-binary, or genderqueer; here we discuss vulnerabilities among the broader group of people of trans experience.

In 2019, 3% of new HIV diagnoses in NYC were among transgender individuals, 96% of whom were transgender women. From 2015-2019 Black or Latina women made up roughly 90% of new diagnoses among transgender women in NYC.[163] National estimates of HIV prevalence are 22-28% among transgender women.[164] Stigma and discrimination contribute to HIV vulnerability among people of trans experience, which is amplified by related contextual factors such as poverty, unemployment, homelessness, experience of IPV and gender-based violence, immigration status, sex work and condom confiscation, mental health needs, substance use, and poor access to health care and affirming providers.[165]

Recent qualitative interviews with service providers found that at the health systems level, perceived barriers to engagement and retention of New Yorkers of trans experience in HIV care included lack of care accessibility and security, providers' misunderstanding of the transgender community, and lack of cultural competency among staff, and shortcomings of information systems. At the community level, barriers included HIV stigma. At the family level, barriers included rejection and housing instability. At the individual level, barriers included conflicts between HIV and transgender care, medication side effects, competing priorities, mental health issues and substance use disorder, and low health literacy. Facilitators of healthcare engagement included provider competence in the health of people of trans experience, improved access to care, and patient empowerment.[166]

Lack of a safe place to recover health after experiencing violence is a significant barrier affecting the health and well-being of New Yorkers of trans experience, and lack of safe stable housing can present barrier to gender affirmation procedures. The intersectional experiences of gender, race/ethnicity, and class also shape harm against people of trans experience. For example, Grant and colleagues found that discrimination in health settings was higher amongst people of color of trans experience.[167] At the community level, prevention strategies must take an intersectional approach and promote healthy relationships, reduce conflict and social isolation, improve economic and housing opportunities and increase inclusive cultures in school and work settings.[168]

Participants in a High Impact Community Engagement Series meeting held in April 2018 with women of color leaders of trans experience noted some areas of progress, such as collection and reporting of disaggregated surveillance data on transgender women, NYC HD social marketing campaigns targeting women of trans experience, and improved cultural competency of non-clinical and clinical providers in serving women of trans experience. Recommendations for future NYC programming included the need for clinic signage and security to create safe spaces for women of trans experience, increased access to housing assistance regardless of HIV status, improved access to hormone therapy, especially for undocumented and uninsured women, collaboration with law enforcement to end “walking while trans”

[163] N.Y.C. Dep’t of Health & Mental Hygiene, HIV Among People Identified as Transgender in New York City, 2015-2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-among-transgender-people-2019.pdf.
[164] Centers for Disease Control & Prevention, HIV Among Transgender People (last reviewed Nov. 12, 2019), *available at* https://www.cdc.gov/hiv/group/gender/transgender/index.html.
[165] Tonia Poteat, *et al*., *HIV Prevention among Transgender Populations: Knowledge Gaps and Evidence for Action*, 14(4) Current HIV/AIDS Rep. 141–152 (Aug. 2017).
[166] Walter Bockting *et al*., *Engagement and Retention in HIV Care for Transgender Women: Perspectives of Medical and Social Service Providers in New York City*, 34(1) AIDS Patient Care & STDs 16-26 (Jan. 2020).
[167] Jaime M. Grant *et al*., Injustice at every turn: A Report of the National Transgender Discrimination Survey (2011), *available at* https://www.thetaskforce.org/wp-content/uploads/2019/07/ntds_full.pdf.
[168] Amanda Babine *et al*., Dismantling Stigma in the Transgender and Gender Non-Conforming Community (Mar. 2019), *available at* https://static1.squarespace.com/static/5b05b943697a98664e663ab4/t/5d162f60b5eba8000164797b/1561735009693/NYTAG DismantlingStigma_Final.pdf.

harassment of women of trans experience accused of being engaged in sex work; increased resources for trans-led organizations; culturally appropriate behavioral health care and increased education and economic opportunities.[169]

PWH Ages 50 Years and Older

At the end of 2019, people aged 50 and older accounted for more than half of PWH in NYC (59%), underscoring the importance of addressing the complex service needs of older PWH (OPWH). Older PWH generally have high rates of linkage to care and viral suppression, but racial/ethnic disparities persist in viral suppression rates, morbidity, and death rates, with Black and Latino/Hispanic OWPH experiencing worse outcomes. Focus groups have been held in collaboration with the community-based Long-Term Survivors Wellness Coalition to assess and address the unmet needs of OPWH. These focus groups revealed the following findings: mental health resources are limited despite increased need, especially in Black and Latinx communities; and inconsistent knowledge of and access to resources revealed a need for better resource consolidation to support accessibility and utilization across the care continuum. Spanish-speaking participants identified a need for additional support services/programs as well.[170]

Youth and Young Adults Ages 13 to 29 Years

Young New Yorkers who are MSM or of trans experience, especially young people of color, continue to be disproportionately affected by HIV. In 2019, 51% of all MSM and 62% of all transgender people newly diagnosed with HIV in NYC were between the ages of 13-29. Among all individuals aged 13-29 newly diagnosed in 2019, 87% were Black or Latino.[171]

Despite policy changes that improve access to HIV prevention and treatment, providing PrEP and PEP for adolescents and young adults (13-29 years) is still a challenge, especially for Black and/or Latino/Latina adolescents who are LGBTQ due in part to factors described above. In addition to structural barriers to PrEP and ART access, medication nonadherence in adolescents is common and may be attributed to the youth culture of independence and peer influence; to their stage of psychological/cognitive development; lack of independent resources; experiences of violence; and privacy and disclosure concerns. Studies with adolescents have recommended an augmented visit schedule to increase adherence and to place an emphasis on delivering culturally-responsive and age-appropriate support in adolescent PrEP programs.[172] To best reach adolescents and young adults (13-29 years), service providers must understand youth culture, including the role of technology and social media in communication, the importance of easy access to care (e.g., flexible appointment times, transportation vouchers, etc.), and support minors' right to confidential services. The NYC Unity Project is the first citywide commitment to expand services for LGBTQ youth.[173] The PrEP for Adolescents program is one

[169] N.Y.C. Dep't of Health & Mental Hygiene, unpublished High Impact Community Engagement Series Meeting with Transgender Women of Color data (Sept. 2019).

[170] GRAHAM HARRIMAN *ET AL.*, ASSESSING THE NEEDS OF OLDER PERSONS LIVING WITH HIV IN NEW YORK CITY: WHAT'S NEEDED, AND WHAT'S NEXT? 2020 ENDING THE EPIDEMIC SUMMIT (Dec. 2020).

[171] N.Y.C. DEPT. OF HEALTH & MENTAL HYGIENE, NEW YORK CITY HIV/AIDS SURVEILLANCE TABLES (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/ah/surveillance2019-tables-all.pdf.

[172] Sybil Hosek *et al.*, *An HIV Pre-Exposure Prophylaxis (PrEP) Demonstration Project and Safety Study for Young MSM*, 74 J. AIDS 21-29 (Jan. 1, 2017).

[173] NYC Unity Project (last accessed Mar. 26, 2021), *available at* https://growingupnyc.cityofnewyork.us/generationnyc/topics/lgbtq/.

of many commitments in the NYC Unity Project that will deliver services to address the health, safety and well-being of LGBTQ youth.[174]

III. Pillar One: Diagnose

In 2019, an estimated 91,500 PHW were living in NYC.[175] In 2019, 14% of newly diagnosed people were diagnosed during the early, acute stage of HIV infection, up from 11% of new diagnoses in 2015.[176]

Policy Context

Strengths

NYS public health law related to HIV testing has evolved over the years to keep pace with changes in the epidemic and evidence-based clinical best practices. Key provisions were enacted in 2010, 2014, 2015, and 2016, to eliminate the requirement of prior written consent for HIV testing in all settings, including correctional facilities; mandate the offer of HIV testing to all patients over the age of 13 as a routine part of health care services in most settings; and remove the upper age limit for offering the test. As of 2016, providers must, at a minimum, orally advise the patient that an HIV test is to be performed. Patients may refuse the test, and the provider must note the advisement (and objection, if applicable) in the patient's record. When testing indicates a diagnosis of HIV infection, the person ordering HIV testing or their representative is required by law to provide the patient the final interpretation of diagnostic testing, and, with the patient's consent, schedule an appointment for follow-up HIV medical care.[177] There is evidence that these changes in HIV testing are acceptable to patients[178] and have increased testing.[179]

Other NYS laws and policies facilitate and reduce barriers to testing. NYS's regulatory framework for preventing mother-to-child transmission of HIV requires the offer of HIV testing during pregnancy, and all newborns are routinely tested for HIV through the NYS Newborn Screening Program.[180] NYS has no HIV-specific criminal statutes that impose criminal penalties or sentence enhancements on PWH who potentially expose others to HIV, which is important since evidence shows such laws discourage people from being tested for HIV.

Challenges and Gaps

The NYS testing law requirement of oral notification that an HIV test will be performed is cited as a continued barrier to routine opt-out testing, especially in emergency department settings, where such additional requirements can affect the number of tests performed and, ultimately, the detection of

---

[174] Press Release, Office of Mayor Bill de Blasio, First Lady Chirlane McCray Announces New $9.5 Million Investment to Prevent and Address homelessness Among Young LGBTQ New Yorkers (May 30, 2018), *available at* https://www1.nyc.gov/office-of-the-mayor/news/275-18/first-lady-chirlane- mccray-new-9-5-million-investment-prevent-address.

[175] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, CARE AND CLINICAL STATUS OF PEOPLE WITH HIV/AIDS IN NYC, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-related-medical-care-2019.pdf.

[176] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV SURVEILLANCE ANNUAL REPORT, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.

[177] N.Y.S. PUB. HEALTH LAW § 2781 (2020).

[178] Zoe R. Edelstein *et al.*, *HIV Testing Experience in New York City: Offer of and Willingness to Test in the Context of New Legal Support of Routine Testing*, 68(1) J. AIDS 545-553 (Jan. 1, 2015).

[179] Remle Newton-Dame *et al.*, *Evaluating the 2010 New York State HIV Testing Law in NYC Ambulatory Practices Using Electronic Health Records*, 68(S1) J. AIDS S15-S20 (Jan. 1, 2015).

[180] RODNEY L. WRIGHT WITH THE MEDICAL CARE CRITERIA COMMITTEE, HIV CLINICAL GUIDELINES PROGRAM, N.Y.S. DEP'T OF HEALTH, HIV TESTING DURING PREGNANCY, AT DELIVERY, AND POSTPARTUM (updated Jul. 2020), *available at* https://cdn.hivguidelines.org/wp-content/uploads/20201005130230/NYSDOH-AI-HIV-Testing-During-Pregnancy-at-Delivery-and-Postpartum_10-5-20_HG.pdf.

HIV.[181] [182] The existing requirement to offer HIV testing to all people 13 and older in most health care settings is not monitored nor enforced, resulting in suboptimal implementation, and Pharmacists are not permitted to perform HIV testing per their scope of practice in NYS.

Service Delivery

Current Programs and Initiatives

NYC service delivery and support are implemented through an inclusive HIV status-neutral framework that views HIV testing as the gateway to both HIV prevention and treatment, as well as to ancillary services and health education.[183]

Interventions to support implementation of routine opt-out HIV testing including electronic prompts in electronic medical records (EMRs) which have been shown to improve provider HIV testing behavior.[184] NYC HD public health detailing can also be effective to change clinical practice behavior,[185] and there are numerous trainings and collaborative learning networks available to support providers in upholding current HIV testing requirements and best practices. NYC HD's *New York Knows*[186] represents a partnership between the NYC HD and CBOs, community health centers, hospitals, colleges and universities, faith-based organizations, and businesses to provide a voluntary HIV test to every New Yorker; routinize HIV testing in health care; identify undiagnosed HIV-positive people and link them to care; and connect people who may benefit to comprehensive prevention services. *New York Knows* works towards these goals by supporting partners to strategically plan and coordinate their work, and by providing assistance to agencies to reach these collective goals. More than 4.9 million HIV tests have been performed collectively since 2008 through the *New York Knows* initiative, with over 546,000 tests conducted in 2018.[187]

NYC offers free HIV testing in a variety of settings. NYC's eight Sexual Health Clinics conduct approximately 57,000 HIV tests annually and offer the option of anonymous testing. The NYC HD also provides integrated, opt-out HIV testing at its tuberculosis clinics. Using City funds, the NYC Department of Correction Riker's Island facility offers opt-out testing at intake, and for jail detainees those who refuse a test, RWHAP- and CDC-funded services support outreach and follow-up that increases uptake of testing at a later date.

HIV self-testing is a way to provide access to testing for individuals who may not be reached by other HIV testing efforts. Self-testing can help address barriers to getting an HIV test, like concerns about privacy and difficulty with travel, but the self-test kits can be expensive (approximately $40 per kit) and relatively hard to find. To address these barriers, NYC HD has been giving away HIV self-test kits online

[181] Douglas A. E. White *et al*., *A Comparative Effectiveness Study of Two Nontargeted HIV and Hepatitis C Virus Screening Algorithms in an Urban Emergency Department*, 72 ANNALS EMERGENCY MED. 438-448 (Oct. 2018).
[182] Laura N. Medford-Davis *et al*., *Unintended Adverse Consequences of Electronic Health Record Introduction to a Mature Universal HIV Screening Program*, 28 AIDS CARE 566-573 (2016).
[183] Julie E. Myers *et al.*, *Redefining Prevention and Care: A Status-Neutral Approach to HIV*, 5(6) OPEN FORUM INFECTIOUS DISEASES 1-4 (Jun. 2018).
[184] Uriel R. Felson *et al*., *An Expanded HIV Testing Strategy Leveraging the Electronic Medical Record Uncovers Undiagnosed Infection among Hospitalized Patients*, 75(1) J. AIDS 27–34 (May 1, 2017).
[185] Michelle G. Dresser *et al*, *Public Health Detailing of Primary Care Providers: New York City's Experience, 2003–2010*, 102(Supp. 3) AM. J. PUB. HEALTH S342–S352 (Jun. 2012).
[186] N.Y.C. Dep't of Health & Mental Hygiene, HIV Testing Initiatives: New York Knows (last accessed Mar. 29, 2021), *available at* https://www1.nyc.gov/site/doh/providers/health-topics/aids-hiv-new-york-knows.page.
[187] N.Y.C. Dep't of Health & Mental Hygiene, unpublished *New York Knows* data (last accessed Mar. 29, 2021).

since 2015, through our Online HIV Self-Test Giveaway, which uses dating apps and social media to reach MSM and people of trans experience, including those who may not have tested before or who face clinical barriers to testing.[188] Since 2017, NYC HD has also supported a Community Home Test Giveaway, which works with CBOs to offer free self-tests to priority populations who may lack consistent access to online resources and outreach.[189] Since the tests are taken at home and results are private, NYC HD conducts follow-up surveys to query participants on their testing experience and test results. Over seven waves of the Online HIV Self-Test Giveaway, NYC HD distributed over 16,700 tests. Among online giveaway participants of the first five ways of the Giveaway who took an HIV self-test and responded to a follow-up survey, 0.7% reported that they had a positive test result (0.6% reported that it was the first time they had a positive test result), 16% reported never testing for HIV before, and 21% reported not testing in the last year, meaning that the program reached a population that may not otherwise get an HIV test.[190] In April 2020, BHIV launched its adapted Community Home Test Giveaway Virtual Program, partnering with over 60 community-based organizations to provide free online access to HIV home tests delivered directly to New Yorkers during the COVID-19 pandemic. Since then, over 3,000 tests have been distributed, with the majority of participants identifying as Black and/or Latino/a MSM, women, or people of trans experience.

Prior to the COVID-19 public health emergency, HIV testing has also been offered in a variety of community-based non-clinical settings, including events, fairs, and through mobile units. NYC- and NYS-funded community-based agencies provide targeted HIV testing services focusing on MSM and people of trans experience and their partners, with particular attention to Latino or Black people under 29 years old; heterosexual Black and Latino women, particularly those over 30 years old or living in areas with a high prevalence of STIs; and other populations highly impacted by HIV.

Rates of ever-testing for HIV are high and increasing in priority populations; data from 2017 indicate that 95% of MSM report ever testing (compared to 66% of all New Yorkers), and 62% report testing in the past 12 months (compared to 34% overall).[191] Black and Latino New Yorkers have relatively high rates of testing, as do people living in high-poverty areas.[192] Evidence from a blinded serosurvey conducted in a Bronx emergency department (ED) indicates that the proportion of undiagnosed HIV patients in NYC is low and likely decreasing.[193] Analysis of CD4 at diagnosis shows that the time from seroconversion to diagnosis is decreasing, indicating people are being tested and diagnosed earlier after transmission.[194]

Challenges and Gaps

---

[188] Paul Kobrak *et al.*, Motivations and Barriers to Frequent HIV Testing among Young Men Who Have Sex with Men in New York City, manuscript prepared for submission.

[189] STEPHANIE HUBBARD, #TESTATHOME: IMPLEMENTING HIV SELF-TESTING THROUGH CBO PARTNERSHIPS IN NYC, 2019 NAT'L HIV PREVENTION CONFERENCE (Mar. 18-21, 2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/testathome-implementing-hiv-self-testing-cbo-partnerships.pdf.

[190] ZOE EDELSTEIN ET AL., FIVE WAVES OF AN ONLINE HIV SELF-TEST GIVEAWAY IN NEW YORK CITY, 2015-2018, 2019 NAT'L HIV PREVENTION CONFERENCE (Mar. 19, 2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/five-waves-of-an-online-hiv-self-test-giveaway.pdf.

[191] N.Y.C. Dep't of Health & Mental Hygiene, Community Health Survey, 2017 (last accessed Mar. 26, 2021), *available at* https://a816-health.nyc.gov/hdi/epiquery/visualizations?PageType=ps&PopulationSource=CHS.

[192] N.Y.C. Dep't of Health & Mental Hygiene, Community Health Survey, 2017 (last accessed Mar. 26, 2021), *available at* https://a816-health.nyc.gov/hdi/epiquery/visualizations?PageType=ps&PopulationSource=CHS.

[193] Lucia V. Torian *et al.*, *Undiagnosed HIV and HCV Infection in a New York City Emergency Department, 2015*, 108(5) AM. J. PUB. HEALTH 652-658 (May 2018).

[194] McKaylee M. Robertson *et al.*, *Estimates of the Time from Seroconversion to ART Initiation among People Newly Diagnosed with HIV from 2006 to 2015, New York City*, 71(8) CLINICAL INFECTIOUS DISEASES e308-e315 (Dec. 9, 2019).

The evolving HIV testing policy context and methodologies can be a challenge for some NYC health care providers, and provider knowledge and implementation of current testing policies and best practices are not regularly monitored. Ongoing workforce needs include HIV testing detailing for providers on the current NYS testing law and NYS DOH guidance, clinical training on identifying acute HIV infection, technical training on HIV testing technologies as they evolve, and professional development opportunities and clinical supervision for frontline staff to addressing stigma, discrimination and other social determinants of health that present structural barriers to HIV testing. As with other aspects of HIV prevention and care, there is a need to continue to recruit and support peer workers with lived experience to support innovative HIV testing programs.

Evidence indicates that routine HIV testing by NYC health care systems remains suboptimal,[195] even among patients with a diagnosed STI.[196] Time constraints, prioritization of other issues/services, and poor follow-up of laboratory results, especially in EDs, are all health systems factors that present barriers to testing.[197] Competing priorities and time limitations are particular barriers in the ED, which often represents the only part of the health care system touched by the most vulnerable New Yorkers. Despite efforts to increase HIV testing, a recent blinded serosurvey in the Bronx revealed that more than 80% of patients with undiagnosed HIV were not tested during their ED visit, indicating the need for strategies to further improve implementation of HIV screening to avoid missed opportunities for diagnosis in the ED.[198]

Routinizing testing in large health care systems requires dedicated funding, staff, and leadership for system-level implementation and change. Many health care facilities do not have dedicated champions in leadership positions who will mandate and oversee implementation of routine HIV testing, including changing EMR systems to automate testing prompts and alerts. Without funding beyond what can insurers reimburse, health care facilities may not be able to invest in staff and systems changes to sustain universal and routine screening.

In 2019, 17% of people newly diagnosed with HIV in NYC were diagnosed with AIDS within 31 days ("late diagnosis"),[199] a percentage that has remained relatively stable in NYC over the past five years.[200] Rates of concurrent HIV/AIDS diagnosis in 2019 were highest among multiracial and Asian/Pacific Islander women (50% and 43%, respectively),and women diagnosed at age 60 or older (35%).[201] Late diagnosis is often the product of long delay between infection and diagnosis, and indicates the need to promote regular HIV testing in these groups. That more than one in six newly diagnosed New Yorkers receive a concurrent HIV/AIDS diagnosis indicates a need to make the required opt-out offer of HIV screening

---

[195] Alisha Liggett *et al.*, *Missing the Mark: Ongoing Missed Opportunities for HIV Diagnosis at an Urban Medical Center Despite Universal Screening Recommendations*, 33(6) FAMILY PRACTICE 1-17 (Dec. 2016).
[196] Shashi N. Kapadia *et al.*, *Missed Opportunities for HIV Testing of Patients Tested for Sexually Transmitted Infections at a Large Urban Health Care System From 2010 to 2015*, 5(7) OPEN FORUM INFECTIOUS DISEASES (Jul. 19, 2018).
[197] JASON ZUCKER *ET AL.*, USING INDIVIDUALIZED PROVIDER FEEDBACK TO IMPROVE HIV SCREENING IN A HIGH-VOLUME EMERGENCY DEPARTMENT, 2019 ADHERENCE (Jun. 2019).
[198] Uriel R. Felsen *et al.*, *An Expanded HIV Screening Strategy in the Emergency Department Fails to Identify Most Patients with Undiagnosed Infection: Insights from a Blinded Serosurvey*, 30 AIDS CARE 202-208 (Feb. 2020).
[199] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV SURVEILLANCE ANNUAL REPORT, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.
[200] Qiang Xia *et al.*, *The High Proportion of Late HIV Diagnoses in the USA is Likely to Stay: Findings from a Mathematical Model*, 27(2) AIDS CARE 206-212 (2015).
[201] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV SURVEILLANCE ANNUAL REPORT, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf. Note that there were only 11 total new diagnoses among multiracial or Asian/Pacific Islander women in 2019.

more routine, and to redefine HIV testing as a regular and important check of everyone's health status independent of preconceived notions of risk.

Diagnosis in the acute phase of HIV infection (AHI) is the other extreme ("very early diagnosis"). While 2019 NYC data indicate a modest increase since 2015 in very early diagnosis of HIV (from 11 to 14% of all new diagnoses),[202] a recent study indicates little or no awareness of AHI among the public or among primary care patients or providers. Thus many patients may not seek or be offered testing when they are symptomatic, resulting in missed opportunities for early treatment to reduce morbidity and onward transmission.[203]

Ever-testing rates are lower in certain populations, such as Asian/Pacific Islanders (API), multiracial and indigenous people, and in parts of NYC, such as Queens, and may still be insufficient for other priority populations given the disproportionate burden of new diagnoses among people of color, and particularly among Black and Latino New Yorkers. For example, only 43% of API New Yorkers report ever testing for HIV, compared to 66% of New Yorkers overall and 79% of Black and Hispanic New Yorkers.[204] Among sexually-active MSM in NYC in 2018, past-year testing was 86%, which may be adequate for some but not all MSM per CDC and local guidance. Similar data about recent testing are not available for other priority populations.[205]

A NYC HD qualitative study found that barriers to testing for MSM include stigma associated with HIV and with sex between men, fear of provider judgment, and low perceived benefits of regular testing.[206] Stigma, medical distrust and insufficient HIV knowledge and/or access to resources may hinder testing uptake in some immigrant communities.[207] There is a need to identify creative strategies to enhance HIV education and testing accessibility for immigrant populations who are not engaged in formal clinical or government-affiliated services and may not feel safe doing so. Qualitative evidence from young, Black MSM and women of trans experience in NYC points to the need to continue to increase awareness of and access to newer testing options (such as mobile unit testing, at-home testing and couples testing and counseling) to increase consistent testing among priority populations.[208]

As described earlier, the COVID-19 public health emergency appeared to significantly decrease HIV testing based on reported laboratory volumes of diagnostic tests. Furthermore, HIV testing offered

---

[202] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV SURVEILLANCE ANNUAL REPORT, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.

[203] Javier Lopez-Rios *et al*., *Limited Knowledge and Lack of Screening for Acute HIV Infection at Primary Care Clinics in High-Prevalence Communities of New York City*, 23(10) AIDS BEHAVIOR 2870-2878 (Oct. 2019).

[204] N.Y.C. Dep't of Health & Mental Hygiene, Community Health Survey, 2017 (last accessed Mar. 26, 2021), *available at*. https://a816-health.nyc.gov/hdi/epiquery/.

[205] N.Y.C. Dep't of Health & Mental Hygiene, unpublished Sexual Health Survey data (2018) (last accessed Mar. 26, 2021).

[206] Paul Kobrak *et al*., Motivations and Barriers to Frequent HIV Testing among Young Men Who Have Sex with Men in New York City, manuscript prepared for submission.

[207] ANISHA G. GANDHI, AMOR DE LEJOS, ¿FELICES LOS CUATRO? SOCIAL ENVIRONMENT, SEXUAL PARTNERSHIPS, AND HIV TESTING IN A CENTRAL AMERICAN IMMIGRANT COMMUNITY IN NYC, PRESENTATION TO HIV CENTER FOR CLINICAL AND BEHAVIORAL STUDIES AT THE NEW YORK STATE PSYCHIATRIC INSTITUTE AND COLUMBIA UNIVERSITY (Sept. 22, 2017); Michelle G. Shedlin *et al*., *Immigration and HIV/AIDS in the New York Metropolitan Area*, 83(1) J. URBAN HEALTH 45-58 (Jan 2006); LATINO COMM'N ON AIDS, HIV PREVENTION SERVICES FOR IMMIGRANT AND MIGRANT COMMUNITIES (last accessed Mar. 26, 2021), *available at* https://www.latinoaids.org/publications/HIV_Prevention_Immigrant_Migrants.pdf; Tonya N. Taylor *et al*., *Intersectional Stigma and Multi-Level Barriers to HIV Testing Among Foreign-Born Black Men From the Caribbean*, 7 FRONTIERS IN PUBLIC HEALTH 373 (Jan. 10, 2020).

[208] Victoria Frye *et al*., *Preferences for HIV Test Characteristics among Young, Black Men Who Have Sex with Men (MSM) and Transgender Women: Implications for Consistent HIV Testing* 13(2) PLOS ONE e0192936 (Feb. 20, 2018).

through in-person outreach events such as community health fairs, National HIV Testing Day, and other activities were put on hold from March 2020 onward to comply with social distancing measures and to reduce risk of COVID-19 transmission. NYC HD Sexual Health Clinics were temporarily closed; only half have reopened and remain at reduced capacity for HIV and STI testing. In addition to the existing HIV Home Test Giveaway programs offered, NYC may need to identify other creative alternatives to offset potential longstanding drops in HIV testing within clinical and outreach settings while the COVID-19 pandemic continues.

IV. Pillar Two: Treat

NYC has made significant strides in the successful treatment of PWH. As noted previously, 2018 and 2019 data show that NYC has achieved the UNAIDS 90-90-90 targets: 93% of PWH know their status, 90% of people diagnosed are on treatment, and 92% of people on treatment are virally suppressed.[209] Between 2004 and 2018, the all-cause mortality rate among PWH declined by 61%, while the rate of HIV-related deaths declined by 81%. Only 26% of deaths among PWH in 2018 were attributed to an HIV-related cause.[210] Significant disparities in HIV health outcomes persist for some priority populations, by race/ethnicity across all populations of PWH, and in certain NYC neighborhoods. Black people, multiracial people, transgender people and youth and young adults have the lowest rates of viral load suppression.[211]

Policy Context

Strengths

As noted above, NYS and NYC have established comprehensive service delivery systems for PWH that ensure access to HIV treatment, regardless of ability to pay or immigration status; additional Medicaid-funded programs that provide supports and care coordination for vulnerable PWH; and RWHAP services to address multiple needs and barriers to care for PWH. The HIV Health and Human Services Planning Council of New York has legislatively mandated authority over setting priorities and ranking service categories to guide annual spending plans.

HASA provides a single point of access to public benefits for low-income PWH in NYC, including intensive case management, assistance to secure available public benefits and services, supplemental transportation and nutritional allowance, and emergency, transitional, and permanent housing assistance and meaningful rental assistance.[212] NYC HD also administers housing and rental assistance programs for low-income PWH, including the HOPWA program and RWHAP-funded short-term and transitional housing assistance.[213]

Recent policy activity has facilitated "data to care" efforts to engage and retain PWH in effective treatment. In 2014, NYS enacted legislation allowing health departments to share HIV-related data with

[209] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, CARE AND CLINICAL STATUS OF PEOPLE WITH HIV/AIDS IN NYC, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-related-medical-care-2019.pdf.
[210] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV SURVEILLANCE ANNUAL REPORT, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.
[211] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV SURVEILLANCE ANNUAL REPORT, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.
[212] N.Y.C. ADMIN. CODE § 21-128.
[213] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, Health Topics: Housing Services for New Yorkers Living with HIV/AIDS (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/site/doh/health/health-topics/aids-hiv-care-housing.page.

health care providers for the purpose of linking PWH clients to care and ensuring continued engagement in care. 2017 NYS regulatory amendments expanded upon this by allowing health departments to share these data with care coordinators for the same purpose.[214] In 2016, the Statewide Health Information Network for New York (SHIN-NY) approved a change in the policy governing Regional Health Information Organizations (RHIOs) in NYS to allow social service programs such as HASA to participate in RHIOs to facilitate exchange of information on a patient's housing status and other social determinants of health with the patient's health and care coordination team following the patient's consent.

Challenges and Gaps

As described above, racism, sexism, homophobia, transphobia, poverty, food insecurity, housing instability, criminal justice involvement, intimate partner violence, stigma, mental health issues, substance use disorders, and all contribute to HIV-related health inequities.

As described above, the hostile policy environment regarding immigration, including the public charge rule changes, exacerbates existing challenges to engaging and retaining immigrants in HIV care, especially those without a settled or "adjusted" immigration status who fear that accessing services may result in negative consequences, including deportation. Even though this public charge rule has since been blocked, it has had a chilling effect and poses significant ongoing communication challenges.

Service Delivery

Current Programs and Initiatives

In 2019, NYS DOH HIV Clinical Guidelines were updated to recommend as the standard of care rapid initiation of ART, preferably on the same day or within 96 hours of HIV diagnosis.[215] In parallel, to foster this strategy, NYS's UCP includes a Rapid Access to Treatment Program to ensure immediate access to care and ART for people who are newly diagnosed or re-engaging in care. An October 2019 joint NYC HD/NYS DOH Dear Colleague letter further clarified the recommendation to initiate treatment on the day of the first reactive HIV test or the first clinic visit for HIV care.[216] NYC HD supports providers citywide to implement immediate ART (iART) (defined as treatment initiation from 0-4 days of diagnosis) through the Dear Colleague letter, clear and concise web-based guidance for immediate initiation of treatment,[217] and trainings that outline the rationale and best practices for enacting a community-wide call to action, including benefits navigation, to promote iART for all newly diagnosed PWH. NYC HD will also conduct e-virtual public health detailing ("e-detailing") to provide tailored support to clinical providers to increase capacity to provide iART services; these sessions will be supported by the distribution of comprehensive action toolkits. NYC HD-funded status-neutral navigation programs in clinical sites enabled 436 people to access iART from January to October 2019. Vetted providers able to offer same day/next day appointments for HIV treatment are listed in the online NYC HealthMap.

Through the JumpstART program, NYC HD Sexual Health Clinics offer iART to people newly diagnosed with HIV or PWH who have never engaged in treatment; linkage to care and partner services are also

[214] N.Y. COMP. CODES R. & REGS. tit. 10, § 63.6.
[215] N.Y.S. DEP'T OF HEALTH, HIV CLINICAL GUIDELINES PROGRAM, WHEN TO INITIATE ART, WITH PROTOCOL FOR RAPID INITIATION (Jan. 2020), *available at* https://www.hivguidelines.org/antiretroviral-therapy/when-to-start-plus-rapid-start/.
[216] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE & N.Y. DEP'T OF HEALTH AIDS INSTITUTE, RAPID INITIATION OF HIV ANTIRETROVIRAL THERAPY (Oct. 30, 2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/ah/hiv-iart-letter.pdf.
[217] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, IMMEDIATE INITIATION OF HIV TREATMENT – GUIDELINES FOR MEDICAL PROVIDERS (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/ah/hiv-immediate-art-guidance.pdf.

provided on the day of the HIV test or clinic visit. From January 2018 to July 2019, the Sexual Health Clinics started 326 patients on immediate ART through the JumpstART program.

Health and service providers have access to a wealth of HIV care trainings and resources, and NYC HD works to develop new materials on an ongoing basis, such as a project to develop a training and referral guide to improve physical and mental wellness among OPWH, which will be informed by key informant interviews with providers and consumers. NYC HD is currently updating its *Living Positively* booklet.[218]

NYC HD BHIV has taken the lead in promoting the evidence-based finding that PWH who have a suppressed viral load cannot transmit HIV through sex. NYC HD continues to promote this "Undetectable = Untransmittable" (U=U) message through provider education,[219] NYC HD web content,[220] *Made Equal* sexual health marketing, and other public-facing materials.[221,222] Promotion of the U=U message aims to encourage HIV testing and treatment; clarify the goal and benefits of HIV treatment; reduce HIV-related stigma; and redefine what it means to live with HIV.

Several NYC HD programs aim to improve engagement and retention in care. The NYC HD Care Status Report (CSR) program is a secure, web-based application that enables facilities to electronically submit eligible out-of-care patients (more than six months) to NYC HD for a query against the HIV registry for return of limited outcome information on the patients' current HIV care status in NYC.[223] NYC HD's Assess Connect Engage Unit (ACE) team works to engage people recently diagnosed with HIV and those who have fallen out of care, as well as their partners, with a goal of linkage to ART and prevention and care services, as appropriate. The ACE team conducts assessments to identify and link clients to agencies to address their unmet needs for primary care and ancillary services, including housing, benefits, nutrition, substance use services, mental health care, and legal assistance, and transportation, among other services.[224]

NYC HD has been at the forefront of innovative strategies to identify and engage out of care PWH, including strategic collaboration with the broader HIV workforce in NYC. While many clinical HIV providers are aware of PWH who are out of care, but others may not be as easily identified, including individuals returning to NYC from state and federal correctional facilities, migrants from other jurisdictions and countries, and people who have not received care for many years. A recent innovative enhanced data to care (eD2C) NYC HD collaboration with a hospital-based HIV clinic leveraged NYC HD and clinic data and human resources, significantly increasing the odds of re-engaging participants in HIV

[218] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, [+] LIVING: YOUR GUIDE TO HEALTHY LIVING (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/ah/positive-living-booklet.pdf.
[219] N.Y.C. Dep't of Health & Mental Hygiene, HIV Undetectable = Untransmittable (U = U) – Information for Providers (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/site/doh/providers/health-topics/hiv-u-u.page.
[220] N.Y.C. Dep't of Health & Mental Hygiene, HIV: Undetectable Equals Untransmittable (U=U) (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/site/doh/health/health-topics/hiv-u-u.page.
[221] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, MAKING HIV UNDETECTABLE (Jun. 2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/public/dohmhnews121.pdf.
[222] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, U = U (Jun. 2018), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/ah/hiv-u-u-handout.pdf.
[223] N.Y.C. Dep't of Health & Mental Hygiene, HIV Care Status Reports System (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/site/doh/health/health-topics/aids-hiv-care-status-reports-system.page.
[224] In 2018, NYC HD's ACE Team located 707 PWH who had been out of care for >13 months or had never been in care; 486 (69%) were re-engaged or linked to HIV care, and 39 referrals were made to address unmet needs (e.g., housing, health benefits, transportation). N.Y.C. Dep't of Health and Mental Hygiene, unpublished ACE Team data (last accessed Mar. 26, 2021).

care.[225] NYC HD is working to expand eD2C collaborations between the NYC HD and clinical sites in communities with a high burden of HIV and poor HIV outcomes, to provide technical assistance, capacity building and access to data to support the community-based HIV workforce in engaging and re-engaging PHW in care.

NYC HD systems also monitor services to continuously improve HIV care. The HIV Care Continuum Dashboards (HIV CCDs) use NYC HD HIV surveillance data to depict the performance of providers who give HIV care to the majority of New Yorkers with HIV. The CCDs contain information on how quickly New Yorkers newly diagnosed with HIV are linked to care and how well their viral load is controlled. Currently, data are available for 62 NYC HIV care providers.[226] Primary Care Status Measures (PCSM)-based data are shared at provider meetings and also shared via quarterly reports that display line-level coded data with the ART status of clients who are overdue for a viral load test result update or who were not virally suppressed as of their last viral load test. The Agency-level Viral Suppression Reports (AVSR) aggregate all agency-specific viral load suppression data and compare it to all RWHAP clients in NYC; as of 2019, the AVSR also disaggregates viral suppression among 1) OPWH, 2) Black and Latino cisgender MSM, 3) young cisgender MSM, 4) transgender women, and 5)Black and Latina cisgender women within each RWHAP-funded agency.

Innovative NYC HD-funded ART support models have been shown to improve rates of viral load suppression and address health inequities among PWH served. These include, the RWHAP HIV Care Coordination Programs (CCP),[227] and the *Undetectables,* an ART support model for PWH who face demonstrated social and structural barriers to adherence, combining a social marketing campaign with a toolkit of evidence-based adherence supports, including client-centered care planning and financial incentives for achieving viral suppression.[228] [229]

The RWHAP effectively targets support services to priority populations, reaching them above their level of prevalence. Support for housing, food and nutrition services, and mental health services are all critical to address barriers to viral load suppression. A new service category for Psychosocial Support Services for Transgender, Intersex, Gender Non-Confirming and Non-Binary Individuals will be implemented in the NY EMA in 2021.

Community-based agencies employ a range of NYC HD and other funding sources to provide case management, care coordination and harm reduction services to support PWH in care engagement and retention. In 2018, the NYC HD Care and Treatment Program also launched several workgroups—including the Youth, Transgender Women of Color, and Black and Latina Women workgroups—in an effort to more systematically identify strategies for reducing disparities.

Through a planned clinic-based "BE InTo Health" program, the NYC HD will support the implementation of up to six evidence-informed interventions designed to increase engagement in care among Black and

[225] Chi-Chi Udeagu *et al*., *Health Department-HIV Clinic Integration of Data and Human Resources to Re-Engage Out of Care HIV-Positive Persons into Clinical Care in a New York City Locale*, 31(11) AIDS CARE 1420-1426 (Nov. 2019).
[226] N.Y.C. Dep't of Health & Mental Hygiene, HIV Care Continuum Dashboard 2018 (last accessed Mar. 26, 2021), *available at* https://www1.nyc.gov/site/doh/health/health-topics/care-continuum-dashboard.page.
[227] Mary K. Irvine *et al.*, *Improvements in HIV Care Engagement and Viral Load Suppression following Enrollment in a Comprehensive HIV Care Coordination Program*, 60(2) CLINICAL INFECTIOUS DISEASES 298–310 (Jan. 15, 2015).
[228] Toorjo Ghose *et al*., *Effectiveness of a Viral Load Suppression Intervention for Highly Vulnerable People Living with HIV*, 23(9) AIDS & BEHAVIOR 2443-2452 (Sept. 2019).
[229] Gina F. Gambone *et al*., *Integrating Financial Incentives for Viral Load Suppression into HIV Care Coordination Programs: Considerations for Development and Implementation*, 26(5) J. PUB. HEALTH MGMT. PRACTICE 471-480 (Sept./Oct. 2020).

Latino/Hispanic MSM, Black and Latina/Hispanic women, women of trans experience, youth and young adults ages 13 to 29 years, and Black and/or Latino/Hispanic OPWH. These programs will utilize strategies to reduce racial/ethnic inequities in HIV outcomes such as employing community health workers or peers, integrating primary care and behavioral health, utilizing mobile-based technologies, or offering tailored care management services. As of March 2021, awards have been issued to meet the needs of 1) Black and/or Hispanic/Latina Women with HIV, including Black and/or Hispanic/Latina cisgender, transgender, non-binary and/or genderqueer women; and 2) Black and/or Hispanic/Latino OPWH. The Bureau of HIV will re-release the BE InTo Health Requests for Proposals in 2021 to meet the needs of the remaining priority populations detailed for the BE InTo Health awards.

NYC HD HIV programming also addresses HIV/HCV co-infection. Project SUCCEED is an HRSA SPNS project that aims to eliminate HCV in PWH in NYC. To achieve this goal, NYC HD has developed, implemented and is currently evaluating a data-to-care model to increase HCV diagnosis, and access to HCV curative treatment among PWH in the NY EMA where over 82% of PWH are people of color. As of November 2019, NYC HD staff reached out to 778 people with coinfection, interviewed 234 (30%), and linked 178 (76%) to HCV care. By June 2019, of 3,357 eligible patients, 1,440 (43%) were HCV RNA negative (likely cured), and 1,917 (57%) remained HCV RNA positive as of last lab report to surveillance.

NYC HD has also planned several activities to support the provision of long-acting injectable ART (LAI ART), following the approval of Cabenuva (cabotegravir, rilpirivine) in January 2021. In addition to a "Dear Colleague" letter, formative and implementation science research is planned to better understand and address provider, institution, and policy level challenges in expanding patient access to this treatment option. Already, consumer and stakeholder questions are being addressed by BHIV leadership through ongoing virtual planning body, advisory board, and other community-facing meetings.

In the wake of the COVID-19 public health emergency, RWHAP leveraged CARES act funding to expand food and nutrition services, emergency financial assistance, and short-term housing and rental assistance programs for PWH. NYC HD also issued guidance to providers to inform the continuity of HIV care amid evolving public health guidance and regulations.[230]

Challenges and Gaps

Despite broad access to HIV care and strong systems of support to meet basic needs such as housing, food and care coordination, 2019 data reveal significant and persistent inequities in HIV treatment outcomes. Lower proportions of newly diagnosed women, Black people, API people, youth ages 13 to 19 years, and adults ages 60 and older, are linked to care within 30 days. Lower proportions of Black individuals and those with a history of IDU are virally suppressed within three months of HIV diagnosis.[231] Inequities in survival by race/ethnicity persist in NYC, with Black, Native American, and multiracial individuals experiencing a higher age-adjusted death rate compared to other groups.

Results of a recent NYC HD clinic survey revealed that despite high levels of knowledge around the clinical and public health benefits associated with iART, it is not yet the standard of care across NYC clinics; and that clinics serving a majority of people of color were less likely to meet the benchmark of

[230] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, MAINTAINING HIV AND STI SERVICES DURING COVID-19 (Aug. 4, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/imm/covid-19-maintain-hiv-sti-services.pdf.
[231] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV SURVEILLANCE ANNUAL REPORT, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.

ART initiation within zero to four days of diagnosis.[232] The proven benefits of iART warrant further efforts to overcome barriers to implementation, with a focus on achieving health equity.

A NYC HD HIV Clinic Survey also indicates that clinics with higher proportions of Black/African-American clients or higher proportions of Latino/Hispanic clients were less likely to report a VLS rate of ≥85% in 2016, as were clinics that reported caring for clients with criminal justice involvement "often" or "very often."[233] These results indicate that clinics with low rates of viral load suppression require more resources for staff and services, as well as hands-on technical assistance to implement evidence-based strategies to engage and care for priority populations.

Continued development of data to care strategies is needed to reduce the number of out of care PWH, and to quickly engage patients based on real-time lab results or other health indicators, as well as increased and better uses of technology to reach patients not engaged in care or struggling with medication adherence.

Health reform initiatives are fueling growing demand for care coordination services, with providers citing "promoting treatment adherence" and "improving patient engagement" as two of the most important functions of care coordination staff. There is a need to expand the HIV workforce of patient navigators, community health workers, peer workers and others in HIV care settings, to support engagement and retention in HIV care.

Cultural and language barriers can be challenging for both patients and health care systems to surmount. NYC is home to speakers of more than 200 languages – with half of New Yorkers speaking a language other than English, including monolingual and multilingual individuals. The NYC HD requires the use of standards for Culturally and Linguistically Appropriate Services in Health and Health Care (CLAS Standards) among providers, but more attention and training is needed to ensure robust implementation, especially among clinics serving a high proportion of patients with limited English proficiency.

Unmet subsistence needs continue to drive NYC HIV health inequities. Among 1,004 PWH in NYC who participated in the interviews and/or chart abstraction as part of the Medical Monitoring Project (MMP) in the 2015, 2016 and 2017 cycles, nearly half (48%) reported at least one need for a service not received in the past year. The top unmet needs included dental care, food assistance, transportation, shelter and mental health services. Greater proportions of non-White participants reported any unmet needs.[234] As noted previously, housing instability and food insecurity remain significant issues among PWH despite existing supports.

Co-morbidities complicate care for many PWH, contributing to poor overall health and premature mortality. At the end of 2018, roughly 11% of PWH in NYC were also diagnosed and living with chronic HCV infection. HIV/HCV co-infection can lead to higher viral loads and accelerate the onset of HCV-

---

[232] SAIGANESH RAVIKUMAR *ET AL*., ASSOCIATION BETWEEN HIV CLINIC CASELOADS AND VIRAL LOAD SUPPRESSION IN NEW YORK CITY, 2019 CONFERENCE ON RETROVIRUSES & OPPORTUNISTIC INFECTIONS (Mar. 4-7, 2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-clinic-caseloads-and-viral-load-suppression.pdf.

[233] Craig Hayes *et al.*, *Clinic-Level Factors Associated with Antiretroviral Prescription Rates*, 6(Supp. 2) OPEN FORUM INFECTIOUS DISEASES S478 (Oct. 23, 2019).

[234] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV SURVEILLANCE ANNUAL REPORT, 2018 (Dec. 1, 2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.

related complications, including cirrhosis and end-stage liver failure, particularly among those whose HIV is not well-managed.

PWH also had significantly higher rates than the general population of STIs, mental health issues, substance use disorder, and tobacco dependence.[235, 236, 237, 238, 239] In 2019, among PWH, rates of chlamydia per 100,000 people were nearly double that of the general population (907.2 vs. 1738.7), rates of gonorrhea were quadruple (1206.1 vs. 344.9), and rates were nearly 10 times as high for syphilis (209 vs 23.6).[240] Among NYC RWHAP enrolled and served in 2019, 25% screened positive for depression, 24% screened positive for anxiety, and 18% reported hard drug use (i.e., cocaine, heroin, methamphetamine, and/or prescription drugs).[241] Women with HIV also report higher rates of intimate partner violence than the general population,[242] which is associated with worse HIV health outcomes.[243]

Older PWH (OPWH), those age 50 or older, represented 18% of new HIV diagnoses in 2019 and 57% of all PWH.[244] The rate of viral load suppression in this group was higher than among under 50, but racial/ethnic disparities persist between OPWH with respect to new HIV infections and mortality.[245] Even for those with optimal HIV health management, there is a need for enhanced services for OPWH, given the medial complexity presented by aging, prevalence of co-morbidities, post-traumatic stress disorder and social isolation among long-term survivors.[246]

Other areas for additional focus include support for and engagement with people with disabilities, to increase the accessibility of services and both consumer and provider knowledge of disability rights; increased resources and programs to address income as a social determinant of HIV health outcomes, including job training, vocational rehabilitation and employment assistance for PWH ready to join the workforce or return to work; programs and approaches to meet the needs of OPWH. For this and other priority populations, "one-stop-shop" clinical settings may be optimal settings to provide comprehensive, affirming care for priority populations including people of trans experience, methamphetamine users, and women seeking reproductive health services that dove-tail with both HIV prevention and care. Adequate access to quality mental health and substance use treatment services is needed, including greater access to medication assisted treatment (MAT) for managing opioid

[235] Substance Abuse & Mental Health Services Admin., 2018-2019 National Survey On Drug Use And Health: 50 States & the District of Columbia (Dec. 15, 2020), *available at* https://www.samhsa.gov/data/report/2018-2019-nsduh-state-prevalence-estimates.
[236] Columbia University, Mailman School of Public Health, unpublished CHAIN data (last accessed Jul. 9, 2020).
[237] N.Y.C. Dep't of Health & Mental Hygiene, Community Health Survey, 2017 (last accessed Mar. 26, 2021), *available at* https://a816-health.nyc.gov/hdi/epiquery/visualizations?PageType=ps&PopulationSource=CHS.
[238] N.Y.S. Dep't of Health, BRFSS Brief: Number 1802 (last accessed Mar. 26, 2021), *available at* https://health.ny.gov/statistics/brfss/reports/docs/1802_brfss_smoking.pdf.
[239] Columbia University, Mailman School of Public Health, unpublished CHAIN data (last accessed Jul. 9, 2020).
[240] N.Y.C. Dep't of Health & Mental Hygiene, unpublished Bureau of Sexually Transmitted Infections Electronic Medical Record data (2019) (last accessed Jul. 7, 2020); Columbia University, Mailman School of Public Health, unpublished CHAIN data (accessed Jul. 9, 2020).
[241] N.Y.C. Dep't of Health & Mental Hygiene, unpublished Ryan White HIV/AIDS Program data (last accessed Jul. 16, 2020).
[242] Andrea Carlson Gielen *et al.*, *HIV/AIDS and Intimate Partner Violence: Intersecting Women's Health Issues in the United States*, 8(2) Trauma, Violence, & Abuse 178-198 (Apr. 2007).
[243] Edward L. Machtinger *et al*., *Recent Trauma is Associated with Antiretroviral Failure and HIV Transmission Risk Behavior among HIV-Positive Women and Female-Identified Transgenders*, 16(8) AIDS & Behavior 2160-2170, (Nov. 2012).
[244] N.Y.C. Dep't of Health & Mental Hygiene, HIV Surveillance Annual Report, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.
[245] N.Y.C. Dep't of Health & Mental Hygiene, HIV Surveillance Annual Report, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.
[246] Yoav Vardy *et al.*, CHAIN 2013-4 Report: HIV/AIDS and Aging: People Aged 50 and Older (Aug. 19, 2016), *available at* https://nyhivstg.wpengine.com/nyhiv-archive/pdfs/chain/CHAIN%202013-4%20Report_HIV%20and%20Aging.pdf.

dependence, as well as integration of these services with HIV medical care. Finally, the RWHAP cap on administrative expenses, fee for service reimbursement, and data reporting burden are challenges for smaller organizations without depth of infrastructure and other sources of funding, limiting the ability to reach and engage organizations led by and representative of priority populations.

V. Pillar Three: Prevent

Greater use of PrEP[247] and PEP[248], and increased viral suppression among PWH, are helping to steadily reduce new HIV infections in NYC. Between 2015 and 2019, new HIV diagnoses decreased by 25% overall,[249] and by 32% among MSM.[250] The marked increase in the use of PrEP over this interval (outlined below) is likely to have contributed substantially to this success.

Policy Context

Strengths

Several NYS legislative and regulatory changes to improve access to comprehensive HIV prevention services have occurred in recent years. These include: 2016 legislation allowing nurses to screen patients for chlamydia, gonorrhea, and syphilis[251] and allowing pharmacists to dispense seven-day PEP starter packs to people who may have been exposed to HIV, [252] both pursuant to non-patient-specific orders; 2017 regulatory amendments allowing minors to consent to HIV prophylaxis, including PrEP and PEP, without parental/guardian consent or notification; [253] and 2019 legislation requiring treating hospitals to offer and make available a full 28-day regimen of PEP for minors who are survivors of sexual assault and who may have been exposed to HIV.[254]

NYS DOH's PrEP-AP program covers costs associated with medical visits, tests, and labs for uninsured or underinsured patients who access PrEP medications through a manufacturer patient assistance program. Following the U.S. Preventive Services Task Force (USPSTF) issuing a Grade A recommendation for PrEP, NYS Department of Financial Services (DFS) released a letter clarifying that in accordance with NYS Insurance Law, all state-regulated health insurers must provide coverage for PrEP and related testing, services, and related follow-up and monitoring recommended by the USPSTF, without patient cost-sharing.[255]

While NYC HD continues to recommend daily use of PrEP as a safe and effective strategy to prevent HIV, in June 2019 it issued guidance for medical providers and a Dear Colleague Letter on the use of PrEP "on

---

[247] Paul Salcuni *et al*., *Trends and Associations with PrEP Prescription among 602 New York City (NYC) Ambulatory Care Practices*, *2014–2016*, 4(Supp. 1) OPEN FORUM INFECTIOUS DISEASES S21 (Oct. 4, 2017).
[248] ZOE R. EDELSTEIN *ET AL*., POST-EXPOSURE PROPHYLAXIS (PEP) IN NEW YORK CITY EMERGENCY DEPARTMENTS, 2002-2013, 2015 ADHERENCE (Jun. 28-30, 2015), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/edelstein-iapac-pep.pdf.
[249] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV IN NEW YORK CITY, 2015-2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-overall-2015-2019.pdf.
[250] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV AMONG MEN WHO HAVE SEX WITH MEN IN NEW YORK CITY (Dec. 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-among-men-sex-with-men-2019.pdf.
[251] N.Y. EDU. LAW § 6909-4(g).
[252] N.Y. EDU. LAW § 6527-7(a).
[253] N.Y. COMP. CODES R. & REGS. tit. 10, § 23.1.
[254] N.Y. PUB. HEALTH LAW § 2805-i(1)(c).
[255] N.Y.S. DEP'T OF FIN. SERVICES, SUPP. NO. 2 TO INS. CIRCULAR LETTER NO. 21 (2017): HEALTH INSURANCE COVERAGE FOR PREP FOR THE PREVENTION OF HIV INFECTION AND TESTING AND ONGOING FOLLOW-UP AND MONITORING RELATED THERETO (Oct. 8, 2020), *available at* https://www.dfs.ny.gov/industry_guidance/circular_letters/cl2020_s02_cl2017_21.

demand" with a 2-1-1 dosing schedule around the time of sexual activity as an off-label alternative for cisgender MSM.[256] This dosing strategy, supported by robust evidence, offers an alternative for patients unable or unwilling to take PrEP every day. In January 2020, following the FDA approval as of tenofovir alafenamide (TAF/FTC, or Descovy) as PrEP for HIV, NYC HD issued a Dear Colleague letter recommending tenofovir disoproxil fumarate/emtricitabine (TDF/FTC, or Truvada) as the first-line formulation for PrEP in all populations with increased vulnerability to HIV.[257]

Recent NYS policy changes have also addressed HIV prevention among people who use drugs. In 2015, NYS legislation decriminalized syringe possession for participants of the NYS Expanded Syringe Access Program (ESAP) or a medical provider-based program.[258] Effective July 2018, harm reduction services, not including syringe exchange, are available to eligible recipients in Medicaid managed care and fee-for-service Medicaid, and may be accessed through NYS DOH-authorized and waivered SSPs. And recent amendments to the regulations governing NYS Office of Addiction Services and Supports (OASAS)-licensed substance use disorder treatment programs provide for expansion of harm reduction modalities and require that all licensed programs provide access to MAT.[259]

While NYS does not require sexual health education in schools, NYC made sexual health education a required component of mandated health education courses in middle and high schools. Separately, schools are required to provide lessons on HIV each year to all students K-12 using the NYC Department of Education (NYC DOE)'s HIV/AIDS Curriculum,[260] which is currently undergoing an extensive revision. NYC DOE's HIV Advisory Council, comprised of NYC HD and other government and community stakeholders, is guiding this revision. A NYC mayoral task force is working with NYC DOE to implement the sexual health education recommendations it developed last year pursuant to local legislation enacted in 2017.[261]

Finally, in 2014, NYS legislation prohibited the use of condom possession to establish probable cause for arrest or prosecution for misdemeanor prostitution and loitering for the purpose of engaging in a prostitution offense, which, at the time, together represented approximately 90% of the arrests in NYC where condoms had been used as evidence of wrongdoing.[262]

Challenges and Gaps

The ability of pharmacists to dispense free PEP starter packs in pharmacies is largely unknown, limiting the usefulness of this strategy. Pharmacist scope of practice laws do not currently allow pharmacists to conduct HIV testing nor dispense PrEP without a prescription.[263] The 2019 NYS legislation requiring treating hospitals to offer and make available a full regimen of PEP for sexual assault survivors was originally intended to apply to survivors of all ages, but the final version signed into law was limited to

[256] N.Y.C. Dep't of Health & Mental Hygiene, 2019 Alert #15: An "On-Demand" Dosing Schedule for PrEP to Prevent HIV (Jun. 28, 2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/han/alert/2019/prep-to-prevent-hiv-alert.pdf.
[257] N.Y.C. Dep't of Health & Mental Hygiene, TDF-FTC is Still the First-Line Regimen for PrEP (Jan. 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/ah/first-line-regimen-prep.pdf.
[258] N.Y. Comp. Codes R. & Regs. tit. 10 § 80.137 (2020).
[259] N.Y. Comp. Codes R. & Regs. tit. 14 § 800.4 (2021).
[260] N.Y.C. Dep't of Education, HIV/AIDS Curriculum: 2012 Edition (2012), *available at* https://www.weteachnyc.org/resources/resource/hivaids-curriculum-2012-edition/.
[261] Sexual Health Education Task Force, Sexual Health Education in New York City: Findings and Recommendations (Jul. 17, 2018), *available at* https://www1.nyc.gov/assets/genderequity/downloads/pdf/Sex-Ed-Task-Force-Report-2018.pdf.
[262] N.Y. Crim. Proc. Law § 60.47.
[263] Julie E. Myers *et al.*, *Preexposure Prophylaxis Monitoring in New York City: A Public Health Approach*, 108(S4) Am. J. Pub. Health S251-S257 (Nov. 1, 2018).

minors. Hospitals need only provide seven days of PEP to adult survivors, many of whom may be unwilling or unable to seek follow-up care to obtain the remaining 21 days the of medication regimen.

Currently, NYS prohibitions on condoms as evidence of criminal wrongdoing extend only to two crimes: misdemeanor prostitution and loitering for the purpose of engaging in a prostitution offense. Condoms are still subject to confiscation as contraband by law enforcement and may still be used as evidence of wrongdoing in cases involving all other prostitution-related offenses. The ambiguity created by the current law, inconsistent application by law enforcement, and the history of confiscation of condoms among people who may be profiled as sex workers, - particularly Black and Latina cisgender women and women of trans experience - still fuels fear related to carrying condoms.

Access to MAT is hampered by current NYS law and policy that allows the requirement of prior authorization for buprenorphine, methadone, and naltrexone in the Medicaid program, and MAT access is not required (so is inconsistently provided) in NYS prisons and NYC jails. The NYS Governor recently signed into law legislation prohibiting prior authorization requirements by commercial insurance carriers, but vetoed similar legislation relating to Medicaid, establishing a two-tier system in NYS.

Service Delivery

Current Programs and Initiatives

The NYC HD works to increase awareness and uptake of HIV prevention services, including PrEP and PEP. The PlaySure Network for HIV prevention (PlaySure Network), launched in 2016, is a citywide network of HIV testing sites, CBOs, and clinics working together to promote patient-specific approaches to sexual health and HIV prevention, increase access to PrEP and PEP, and link to care people who test positive for HIV. Currently, the PlaySure Network includes contracts with over 40 organizations across all five boroughs, with nearly 93,000 clients engaged from January to October 2019.

Although nearly all PlaySure Network sites are geared towards adults, four sites provide biomedical prevention services to young people ages 13 to 24 years, many of whom identify as LGBTQ. These sites deliver HIV screening, PrEP and PEP clinical services, and linkage and support services. To more effectively serve young people, the clinics offer co-located services, flexible appointment schedules and personalized communication with PrEP navigators, including by text message.[264] From April 2017 to December 2018, the original three sites engaged 1,336 young people to assess whether they might benefit from HIV prevention services. Of these, 347 enrolled to receive an array of services to reduce barriers to care and address factors related to increased HIV vulnerability. Of all enrollees, 99% received PrEP/PEP education, 72% attended a PrEP medical visit, and 67% initiated PrEP.

PEP service delivery in NYC has been streamlined through the PEP Centers of Excellence and 24-hour PEP hotline (844-3-PEPNYC/844-373-7692). NYC HD supports five PEP Centers of Excellence: brick-and-mortar sites using an urgent care model to ensure timely initiation of PEP and patient navigation and support services. The NYC HD's PEP hotline, available 24/7, links people who may have been exposed to

[264] BENJAMIN TSOI , MEETING PREP NEEDS OF ADOLESCENTS: LESSONS LEARNED FROM 3 ADOLESCENT PREP PROGRAMS IN NEW YORK CITY, 2019 NAT'L PREVENTION CONFERENCE (Mar. 18-21, 2019), *available at*: https://www1.nyc.gov/assets/doh/downloads/pdf/dires/meeting-prep-needs-of-adolescents.pdf.

HIV to these and other sites with expertise in PEP.[265] From January 2019 to November 2019, there were 2,328 PEP initiations through these NYC HD mechanisms.

NYC HD's Sexual Health Clinics provide PrEP navigation and initiation services and PEP for eligible patients, and from January 2018 to July 2019, the Sexual Health Clinics provided PrEP navigation services to over 8,900 patients and reported approximately 2,540 PrEP initiations and 2,275 PEP initiations. NYC HD's ACE team also offers access to PrEP to people notified through partner services of a recent HIV exposure.

NYC HD's PrEP and PEP public health detailing campaigns involve highly trained, full-time teams conducting one-on-one educational visits with providers, with the latest cycle focusing on women's health care providers. So far, NYC HD detailing campaigns have reached over 5,100 providers at more than 2,900 clinical sites and include training and technical assistance for clinical and non-clinical providers. A large and growing proportion of clinicians who receive PrEP detailing visits counsel on and/or prescribe PrEP.[266] [267]

PrEP is being prescribed in diverse clinical settings, including syringe service and other harm reduction programs; NYC supports public dissemination of a vetted list of PrEP/PEP providers (e.g. those meeting NYC HD-approved expectations) through the online NYC Health Map.[268]

NYC HD-funded programs such as the Re-Charge intervention for methamphetamine users bring an HIV status neutral and sex-positive harm reduction approach to MSM and people of trans experience who have sex with men, including promoting the use of PrEP and PEP. NYC HD qualitative research has found that PrEP is highly appealing to many MSM who use methamphetamine.[269]

As a result of these efforts, PrEP awareness and use have increased dramatically among priority populations in NYC, especially among MSM. NYC HD Sexual Health Survey data indicate that among sexually active MSM aged 18-40 who do not report HIV diagnosis, between fall 2012 and spring 2018, use of PrEP increased from 4% to 36% and awareness increased from 37% to 92%.[270] At least in the spring 2018 sample, differences in PrEP use by race/ethnicity were not observed.[271]

During the first peak of the COVID-19 public health emergency in March-April 2020, there was a dramatic decrease in enrollments in the PlaySure Network program. However, enrollments began to

---

[265] Carolina Alcala, Improving Access to PEP in the City that Never Sleeps: PEP Centers of Excellence In NYC, 2019 Nat'l HIV Prevention Conference (Mar. 18-21, 2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/improving-access-to-pep.pdf.

[266] Zoe Edelstein *et al.*, Getting Out of Our Comfort Zone: Detailing on PrEP & PEP in New York City, 2017 NARCAD (Nov. 6-7, 2017), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/getting-out-of-our-comfort-zone.pdf.

[267] Zoe Edelstein *et al.*, Early Adopters and Incident PrEP Prescribers in a Public Health Detailing Campaign, 2016 Conference on Retroviruses & Opportunistic Infections (Feb. 22-25, 2016), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/edelstein-croi.pdf

[268] Maria Ma, Ready to Serve: A Quality Assurance Initiative for NYC's PrEP/PEP Online Provider Directory, 2019 SYNChronicity (Apr. 14-16, 2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/ready-to-serve-qa-prep-pep.pdf.

[269] Paul Kobrak *et al.*, New York City's Public Health Approach to Crystal Meth, 2017 Biomedical Prevention Conference (Dec. 2017), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/nyc-crystal-meth.pdf.

[270] Zoe Edelstein *et al.*, Inequities in Awareness of Pre-Exposure Prophylaxis (PrEP) for HIV Prevention in a Large, Representative, Population-Based Sample, New York City, 2018 APHA (Nov. 12, 2018), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/inequities-in-awareness-of-pre-exposure-prophylaxis-fo-hiv-prevention.pdf.

[271] N.Y.C. Dep't of Health & Mental Hygiene, unpublished Sexual Health Survey data (2018) (last accessed Mar. 26, 2021).

rebound as NYS PAUSE restrictions were lifted; this rebound occurred even more swiftly among clinical sites. Still, these did not reach the level they did during the same months in 2019. Social media outreach and telehealth appointments became increasingly bigger proportions of services offered. Providers developed innovative mechanisms to promote and deliver services, including the use of mobile "phone booth" sites, for clients to conduct COVID-safe telehealth appointments if they lacked a convenient space from which to do so.[272] NYC HD supported continuity of services through publishing weekly updates to the online PlaySure Network provider directory to reflect the evolving services available in-person and virtually, alongside sharing guidance and technical assistance with NYC providers.

Social marketing campaigns have been integral to addressing specific concerns and countering specific stigmas among those who might benefit from PrEP. Specifically, with respect to the *StaySure* sexual health marketing campaign, 2017 NYC HD Sexual Health Survey data indicate that 71% of Black and Latino MSM surveyed and 80% of people of trans experience surveyed were exposed to the campaign, and over half of these survey participants who saw an ad reported considering or taking an action as a result. Further, data suggest that viewing the campaign may be associated with positive beliefs about PrEP efficacy.[273]

NYC HD's NYC Condom Availability Program (NYCAP) works to increase the availability, accessibility, and acceptability of safer sex products by providing access to free condoms and lubricant across NYC. NYCAP distributed over 30 million safer sex products in 2019, and over 15 million in 2020. In 2019, it was estimated that 87% of all safer-sex products were distributed to PWH, or to people with increased HIV vulnerability who were HIV-negative or status unknown, through distribution at over 3,500 traditional and non-traditional locations across the five boroughs, including but not limited to: CBOs, faith-based organizations, hospitals, clinics, bars, clubs, restaurants, nail salons, and barber shops and health fairs and community events. NYCAP's Condom Education Specialists also conducted over 1,300 condom education sessions and reached over 14,500 individuals at NYC HD's Sexual Health Clinics in the Bronx, Brooklyn, Manhattan, and Queens.

Following the closure and reduced traffic in both clinical and non-clinical venues throughout NYC during the COVID-19 pandemic, NYC HD launched Door 2 Door in June 2020, which allowed New Yorkers to order individual quantities of safer sex products to be delivered directly to them.[274] Door 2 Door has distributed over 300,000 safer sex products, in addition to NYCAP's ongoing distribution of condoms and lubricant to venues throughout the five boroughs.

Challenges and Gaps

Despite a dramatic increase in awareness and uptake of PrEP in NYC overall, there are marked inequities in awareness and use.[275] [276] Between July and December 2018, 19,835 individuals filled at least one PrEP prescription, up from 1,033 during the period January to June 2014. But only 1,524 (7.7%) of the 19,835

---

[272] SARAH RAMTEKE *ET AL.*, PLAYSURE NETWORK SERVICE DELIVERY DURING THE COVID-19 PANDEMIC IN NEW YORK CITY, FEBRUARY – AUGUST 2020, 2020 ENDING THE EPIDEMIC SUMMIT (Dec. 2020).

[273] KATHLEEN SCANLIN, EVALUATING STAYSURE: MEASURING THE POTENTIAL IMPACT OF A COMBINATION PREVENTION, SEX-POSITIVE MEDIA CAMPAIGN IN NEW YORK CITY, 2019 NAT'L HIV PREVENTION CONFERENCE (Mar. 2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/staysure-evaluation.pdf.

[274] N.Y.C. Dep't of Health & Mental Hygiene, Door 2 Door by NYC Condoms (last accessed Mar. 26, 2021), *available at* https://www.surveygizmo.com/s3/5571705/Door-2-Door&source=website.

[275] Paul Salcuni *et al.*, *Trends and Associations with PrEP Prescription among 602 New York City (NYC) Ambulatory Care Practices, 2014–2016*, 4(Supp. 1) OPEN FORUM INFECTIOUS DISEASES S21 (Oct. 4, 2017).

[276] ANISHA GANDHI *ET AL.*, PREP AWARENESS, INTEREST, AND USE AMONG WOMEN OF COLOR IN NEW YORK CITY, 2016, 2017 ADHERENCE (Jun. 2017), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/gandhi-iapac-prep.pdf.

were women, and PrEP use varied significantly by race/ethnicity and borough, with people who identified as White and those living in Manhattan comprising a greater number of those receiving prescriptions than those of other races/ethnicities and those residing in other boroughs, limitations in data regarding race/ethnicity notwithstanding.[277] A recent examination of pre-diagnosis PrEP use among newly diagnosed PWH in NYC underscored disparities by race/ethnicity, gender, age, and geography, finding lower rates of PrEP use among Blacks and Latinos, those under 30 years old, cisgender women, and residents of Queens.[278]

While Black and Latino MSM accounted for the majority of new HIV diagnoses among MSM in 2018, triangulation of data sources suggest that they are not equitably represented among PrEP users. According to NYC NHBS 2017 data: 31% of MSM surveyed report PrEP use in the last 12 months, with use lowest among Hispanic/Latino respondents (26%) and highest among Whites (35%). Relatively similar levels of PrEP use by race/ethnicity in this sample, and in NYC HD Sexual Health Survey data in 2018, may reflect inequities in appropriate PrEP coverage given that HIV incidence, and therefore need for PrEP, varies across racial/ethnic groups. PlaySure Network data indicate that once enrolled, Black and Latino MSM have high PrEP uptake, but the challenge of getting Black and Latino MSM "in the door" remains. More innovative and culturally responsive outreach and engagement strategies are needed to increase the numbers of Black and Latino MSM in PrEP care.

While NYC HD Sexual Health Survey data show an increasing awareness of PrEP among Black and Latina women surveyed in high diagnosis areas, from 45% in 2017 to 53% by the end of 2018, awareness remains significantly lower than reported by MSM.[279] Moreover, among the HIV-negative/status-unknown Black and Latina cisgender women surveyed, two-thirds did not think they would benefit from PrEP, and reported PrEP use in the past six months declined from 1.4% in 2017 to 0.5% in 2018. Concrete strategies are needed to increase PrEP awareness among Black and Latina cisgender women and women of trans experience and to address the gap between PrEP awareness and uptake in these groups, including to help identify those who might benefit most where they are already engaging with service providers and/or clinicians in ways that are practical for clinic flows and non-stigmatizing for patients.

PrEP awareness and use are also still suboptimal among the general population. For the NYC population as a whole, PrEP awareness among sexually active 2016 Community Health Survey respondents was 25%—substantially lower than detected in surveys among MSM. However, characterizing PrEP uptake across representative samples of multiple priority populations, especially women of transgender experience, is difficult, and we lack a comprehensive understanding of PrEP motivation, utilization and continuation behaviors.[280]

Adherence and ongoing engagement in PrEP use presents another area of opportunity and unique set of challenges. Scientific literature on PrEP uptake and persistence has found that many people (including

---

[277] Ending the Epidemic Dashboard (last accessed Mar. 26, 2021), *available at* https://etedashboardny.org/.
[278] Kavita Misra *et al*., *Ongoing Disparities in Prediagnosis Preexposure Prophylaxis Use Among Persons Recently Diagnosed With HIV in New York City, 2015-2017*, 109(9) AM. J. PUB. HEALTH 1212-1215 (Aug. 7, 2019).
[279] MARNÉ GARRETSON *ET AL.*, KNOWLEDGE, ATTITUDES AND BEHAVIORS SURROUNDING PREP AMONG BLACK AND LATINA CISGENDER WOMEN: FINDINGS FROM THE 2017 NEW YORK CITY SEXUAL HEALTH SURVEY, 2019 APHA (Nov. 2019), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/apa-2019-prep-among-black-latina-cisgender.pdf; N.Y.C. Dep't of Health & Mental Hygiene, unpublished Sexual Health Survey data (2018) (last accessed Mar. 26, 2021).
[280] Julie E. Myers *et al.*, *Preexposure Prophylaxis Monitoring in New York City: A Public Health Approach*, 108(S4) AM. J. PUB. HEALTH S251-S257 (Nov. 1, 2018).

cisgender women) quickly discontinue PrEP use after initiation. More research is needed to understand these patterns and what level of continued use is considered optimal. For MSM who still have increased HIV vulnerability yet no longer wish to continue daily PrEP, clinicians may offer PrEP on demand as an option. It is critical to support CBOs and clinical sites to provide navigation services to follow-up with those on PrEP to ensure that cost, other structural factors, side effects, PrEP-related stigma or life experiences do not undermine continuation of PrEP. Additional strategies and resources are also needed to address behavioral health needs in the context of PrEP provision; and to address poverty, homelessness, and other social determinants as barriers to PrEP uptake and continuation.

There is a need to bring more primary care providers and women's health providers and specialists (including OB/GYNs) as PrEP prescribers and PrEP champions. Barriers include ongoing perceptions that PrEP is for only certain groups of people who have increased HIV vulnerability, and that PrEP is unaffordable to most. The approval of Descovy® that excludes an indication for cisgender women will exacerbate challenges communicating options to patients and consumers. Additional practical barriers include the fact that PrEP navigation services are crucial to support the use of PrEP but are not discretely reimbursed by insurers. Unless insurance reimbursement changes, grant funding may be an ongoing need for PrEP providers. Finally, there will also be a need to develop and implement training and technical assistance materials for to support long-acting injectable PrEP provision once it is approved.

NYC's population-based Community Health Survey found that from 2012 to 2016, condom use declined among all groups of sexually active adult New Yorkers, with condom use at most recent sexual intercourse down from 32% to 29% over this interval. Condom use remained higher in some priority groups, including MSM (51% reported use at most recent sexual intercourse) and people reporting three or more sexual partners in the past 12 months (61%).[281]

Certain groups face unique prevention challenges, requiring targeted prevention programs and strategies. People who exchange sex for money or other resources have increased exposure to HIV, may experience violent or coercive sex, and may have partners who incentivize or demand sex without condoms. Greater access to affirming medical care may increase access to PrEP, PEP and HIV treatment, and reduce transmission among people who exchange sex and their sexual partners. Improving availability of and access to comprehensive, culturally sensitive services for those who exchange sex is imperative. NYC has historically attracted great numbers of immigrants and migrants, including MSM and transgender people. As these communities encounter new social environments and navigate the challenges of an unfamiliar city and unfamiliar sexual cultures, some may at increased risk for HIV exposure. Providing tailored HIV prevention and social supportive services to these communities is important to address their unique vulnerabilities.

VI. Pillar Four: Respond

NYC HD conducts molecular HIV surveillance (MHS) to identify possible transmission networks, and to identify PWH or people vulnerable to acquiring HIV who are within those networks who may need NYC HD assistance with linkage to or re-engagement in HIV care, HIV and STI partner services, HIV testing, referral for PrEP/PEP and other prevention services, or support service referrals.

Policy Context

[281] N.Y.C. Dep't of Health & Mental Hygiene, Community Health Survey, 2012-2016 (last accessed Mar. 26, 2021), *available at* https://a816-health.nyc.gov/hdi/epiquery/visualizations?PageType=ps&PopulationSource=CHS.

Strengths

NYS has no HIV-specific criminal statutes that impose criminal penalties or sentence enhancements on PWH who potentially expose others to HIV, and NYC HD may not share HIV-related information – including information collected as part of MHS – as part of a legal proceeding absent a court order.

Challenges and Gaps

Provider and community education and engagement around MHS in NYC is in the early phases. There is more work to be done, especially amidst an ongoing national conversation about legal and ethical implications of MHS and how to balance the public health value of this work with the potential for harm to PWH related to disclosure of sequence data to law enforcement.

Service Delivery

Current Programs and Initiatives

Comprehensive electronic laboratory reporting has been ongoing in NYC/NYS since 2005, including reporting of all HIV genotypes. NYC therefore has a very large, population-based HIV genotype database, with more than 170,000 sequences representing more than 74,000 unique individuals. NYC has been analyzing HIV genotype data since 2005, mainly for purposes of monitoring transmitted drug resistance but also, for the last several years, for MHS purposes.

NYC is among the first jurisdictions to pilot implementation of MHS – both analysis and outreach components. From 2016 to 2018, NYC HD conducted a proof-of-concept project to build capacity at the Public Health Laboratory (PHL) to conduct point-of-diagnosis genotyping for new HIV diagnoses at NYC HD's Sexual Health Clinics, and to perform cluster analyses and outreach to cluster members.

NYC is one of four jurisdictions funded for CDC PS17-1711, a demonstration project for high-impact prevention, including MHS/cluster identification and response, for Latino MSM. The project has allowed NYC HD to build its own capacity for cluster analysis and response. As part of this work, NYC HD established a community advisory board (CAB) comprised of Latino MSM and their providers. The Project Sol (Strengthening outreach and linkage) CAB works to ensure that high-impact HIV prevention activities and partner services for Latino MSM are addressing the needs of Latino MSM in an affirming and culturally responsive manner.

Since late 2018, NYC HD is gaining additional experience with MHS analysis and response via CDC PS18-1802, which has a citywide focus. The HD has a strong, well-established collaboration with scientists at the University of California San Diego (UCSD) to support MHS analytic work.

Challenges and Gaps

Less than 60% of newly diagnosed individuals get a baseline (within three months of diagnosis) HIV genotype,[282] which is key for MHS. In the future, this proportion may decrease as HIV treatment becomes more and more effective and providers' perceptions of the need to do resistance testing

[282] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV SURVEILLANCE ANNUAL REPORT, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.

decreases. There are inequities in the frequency of baseline genotyping, with certain groups (women, Black people, people identified as "other" race) being less likely to have one conducted.[283]

In general, MHS strategies are evolving; "best practices" are still being tried out and tested, and there are no known outcomes or effectiveness data yet. In general, there are challenges related to communicating and describing surveillance as a public health activity to stakeholders and community partners. There are also challenges related to low yield in outreaching to cluster and transmission network members who are virally suppressed and engaged in HIV care. NYC HD's Project Sol CAB has raised concerns about appropriate levels of transparency and how to communicate these complex interventions.

NYC HIV and STI partner services and surveillance systems are disparate which requires extensive manual review plus data sharing mechanisms, in order to establish named partners and enumerate clusters more fully.

Identified needs to advance this work include a dedicated mechanism and funding for research and evaluation on the effectiveness of MHS for stemming cluster growth and promoting other favorable outcomes. The NYC HD requires the ability to enforce clinical guidelines related to baseline genotyping, and/or to promote the public health value of baseline genotyping to the NYC provider community. Communication is needed from CDC to providers regarding MHS and its value and the NYC HD's role therein, as well as information about MHS for clinical and community-based partners that includes an explanation of the legal/immigration policies that need to be fully understood before being presented to patients or clients. Finally, the work will require analysts and disease investigation specialists with training and understanding of differences in partner services and contact tracing and notification within NYC HD's various units and surveillance systems.

[283] N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, HIV SURVEILLANCE ANNUAL REPORT, 2019 (Dec. 1, 2020), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-surveillance-annualreport-2019.pdf.