



BIG IDEAS

ENDING THE HIV EPIDEMIC —
SUPPORTING ALL PEOPLE WITH HIV AND REDUCING NEW TRANSMISSIONS

SUPPORTING HIV PROGRAMS THROUGH COVID-19 AND BEYOND IS CRITICAL TO IMPROVING HEALTH EQUITY

HIV LEADERSHIP HAS BEEN THE UNDERPINNING OF THE RESPONSE TO THE COVID-19 PANDEMIC.

While other partners and parts of the health system also have contributed greatly, the extent to which the HIV workforce and infrastructure have been at the forefront of responding to COVID-19 is striking. HIV community-based organizations have been among the first to respond to this new crisis, and HIV activists have been at the forefront of educating the public on issues such as basic concepts of epidemiology and the process of conducting clinical trials. In health departments, COVID-19 has produced an all-hands-on-deck moment, but it is the infectious disease programs, including HIV, hepatitis, and sexually transmitted infection (STI) control divisions, that have been deployed because they have the essential skills and capacity to respond effectively.¹ Many of the published COVID-19 research studies are from leading global and domestic HIV researchers. In hospitals and clinics, infectious disease and HIV specialists who have spearheaded major advances in HIV care and treatment are leading the way against COVID-19.

HIV, STI, AND HEPATITIS STAKEHOLDERS CAN TAKE PRIDE IN THEIR ROLE IN THE COVID-19 RESPONSE, BUT THEY ALSO CONFRONT UNCERTAINTY. On the one hand, the COVID-19 crisis has expanded utilization of telehealth services, which creates opportunities to overcome persistent barriers to engagement in care. In both rural and urban areas, telehealth services can reduce the necessity for in-person clinic visits and has the potential to increase utilization of health services among people who face stigma, discrimination, and privacy concerns during in-person visits. COVID-19 relief funding can be used to address inequities in broadband internet access, which people need to take advantage of some telehealth services, and

THE HIV RESPONSE IS THREATENED BY CUTS IN FEDERAL OR STATE SUPPORT

As the Nation acknowledges large health inequities exposed by the COVID-19 crisis, experience shows that:

1. **HARD WON SUCCESSES ARE EASILY REVERSED**
2. **STRUCTURAL FACTORS DRIVE DISPROPORTIONATE RISK FOR HIV AND COVID-19**
3. **THE HIV RESPONSE CAN BE A MODEL FOR INCREASING HEALTH EQUITY**

to facilitate remote learning and provider training. On the other hand, the physical closure of clinics and programs, the pausing of research studies, the diversion of staff to other activities, and the economic crisis arising from mass joblessness have led to: 1) treatment delays for HIV care,² 2) fewer people being tested for HIV,² and 3) fewer people receiving adequate HIV and STI prevention services, including fewer new enrollments in PrEP services.^{3,4} Some HIV stakeholders have expressed frustration that they were not meaningfully engaged in the initial COVID-19 response. Looking ahead, we foresee growing state and local budget crises, the magnitude of which remains unclear. Progress made in improving HIV

outcomes is at risk, and HIV transmissions may begin to increase in specific populations.

In fighting COVID-19, improving equity, and sustaining momentum in responding to HIV, the HIV community's collective experience tells us that:

1. HARD WON SUCCESSES ARE EASILY REVERSED

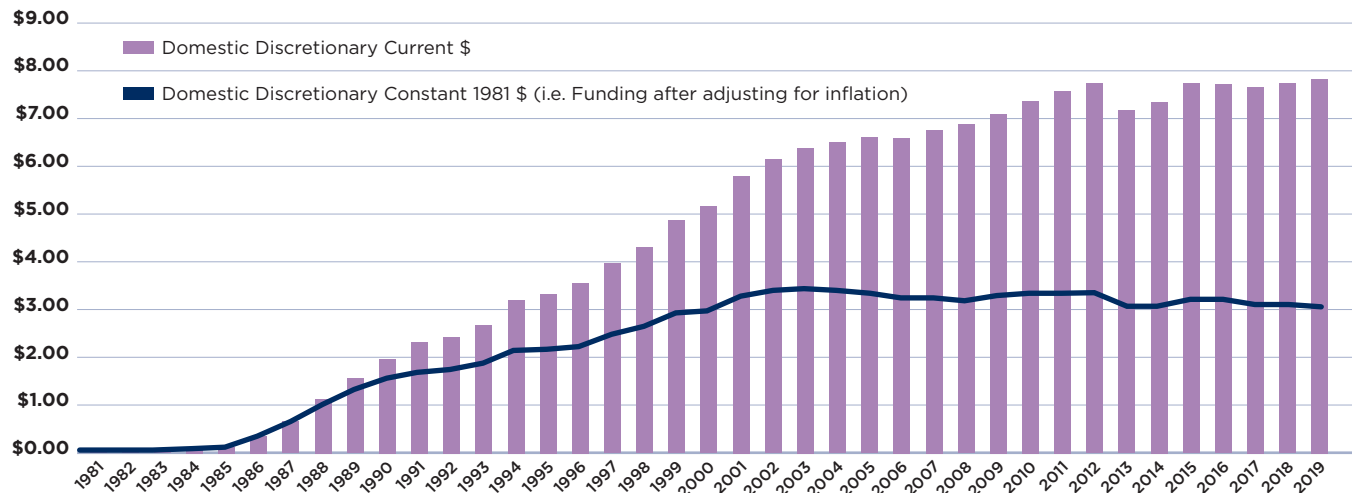
While the size of the federal investment in HIV may seem large (\$7.8 billion in domestic discretionary funding for fiscal year (FY) 2019),⁵ it has never been sufficient to meet the needs of all communities. In recent years, most funding increases have been through mandatory entitlement programs, and the Affordable Care Act (ACA) provided significant new mandatory resources for HIV care. Funding for discretionary programs had been relatively flat until President Trump launched the Ending the HIV Epidemic (EHE) Initiative in February 2019, pledging to reduce the annual number of new HIV transmissions by 90% over the next decade. With an initial focus on 48 counties, the District of Columbia, and San Juan, Puerto Rico (which account for more than half of all new HIV diagnoses in the US), as well as seven rural states, the EHE Initiative is intended to provide the first substantial and sustained increase in discretionary HIV funding in decades. In FY 2019, the Administration reprogrammed \$34.7 million to launch the EHE Initiative, and in FY 2020, Congress appropriated \$266 million in new funding, including \$140 million for the Centers for Disease Control and Prevention (CDC), \$70 million for the Ryan White HIV/AIDS Program,

\$50 million for the Health Center Program, and \$6 million for the National Institutes of Health (NIH).⁶ For FY 2021, the Administration proposed \$716 million in total funding for the EHE Initiative, but it appears unlikely that this level of funding will be appropriated by Congress in part due to funding being diverted to the COVID-19 response. Early action by the House of Representatives Appropriation Committee would allocate \$55 million in new funding for the EHE Initiative above the FY 2020 level, but this amount is well below the Administration's request for increased funding and calls into question the ability to meet the EHE Initiative's targets.⁷

The stalemate over another COVID-19 emergency appropriation highlights growing concern over federal spending levels and exacerbates state revenue shortfalls. During the last recession, states cumulatively reduced their contributions to their AIDS Drug Assistance Programs (ADAPs), the largest component of the Ryan White Program, by \$96 million or 30% from 2008-2009.⁸ Even though federal assistance increased, the cutbacks led to waiting lists for lifesaving HIV medications that took more than five years to eliminate.⁹ Troublingly, amid the COVID-19 crisis, while the federal Coronavirus Aid, Relief, and Economic Security (CARES) Act provided \$90 million for the Ryan White Program and \$65 million for the Housing Opportunities for People with AIDS (HOPWA) Program, a number of states have already reduced state funding for HIV programs or instituted cost containment measures, and this number is expected to grow if Congress does not provide COVID-19-related state fiscal relief.¹⁰ Policy action is needed to:

FEDERAL DOMESTIC DISCRETIONARY HIV FUNDING HAS BEEN RELATIVELY FLAT FOR MANY YEARS

FY1981-FY2019 FUNDING IN BILLIONS



SOURCE: Kaiser Family Foundation analysis of data from OMB, CBJs, Congressional Appropriations Bills, personal communication. Constant 1981 \$ based on Consumer Price Index for all urban consumers (CPI-U).

- **Provide federal COVID-19 relief to states to minimize harmful health and social services cuts:** Most states are required to balance their budgets, and economic crises require states to reduce support for critical programs. Since these revenue shortfalls do not reflect mismanagement, Congress should help states to minimize the harm from the COVID-19 crisis. As states make difficult budget cuts, they need to protect HIV services to ensure that people living with HIV are engaged in care and to ensure that people at risk for HIV are provided with comprehensive HIV prevention services, including pre-exposure prophylaxis (PrEP) and syringe services programs (SSPs).
- **Maintain the commitment to funding the EHE Initiative:** The EHE Initiative is a phased ten-year initiative that is demonstrating early success,¹¹ but is just getting started. To achieve the established goals and to reduce disparities across populations and states, Congress needs to fully fund this initiative, and the Administration must expand it to all states, territories, and tribal nations.
- **Strengthen the healthcare system and increase reliable financing for public health:** Secure, quality health coverage underpins recent progress at improving HIV outcomes, yet the ACA has been undermined by the Administration and Congress and is currently at risk of being struck down as unconstitutional by the Supreme Court. The Administration and Congress must support the ACA and defend its constitutionality. Public health programs also have long been underfunded and reflect a small share of national health spending. A 2018 report by a range of public health leaders calls for a new federal financing source of mandatory spending to fill an estimated \$4.5 billion gap in annual funding for foundational public health activities, with additional increases in state and local public health investments.¹² Congress and states must provide sufficient long-term financing for public health programs. Additionally, all states must adopt the option to expand Medicaid up to 138% of poverty, and Congress must strengthen its commitment to Medicaid by enacting automatic stabilizers that increase federal Medicaid support when states experience economic downturns.

2. STRUCTURAL FACTORS DRIVE DISPROPORTIONATE RISK FOR HIV AND COVID-19

Data indicate that persons with HIV on effective treatment are not at greater risk of acquiring COVID-19 or experiencing a more serious clinical course,¹³ but only about half of people with HIV in the US are virally suppressed. As COVID-19 cases initially were proliferating across the country, however, it quickly became apparent that racial and

ethnic minorities were disproportionately affected and that there was substantial overlap between the communities most heavily impacted by COVID-19 and HIV. These disparities are underpinned by structural racism, which refers to broad disadvantages of one racial group compared to others and encompasses disadvantage in terms of policy, law, governance, and culture.¹⁴ These inequities are influenced by social determinants of health, which are the conditions and environments in which people live, including education, employment, health systems and services, housing, income and wealth, the physical environment, public safety, social environments, and transportation.

Researchers have identified overlapping structural factors leading to heightened vulnerability to COVID-19 and HIV. For example, in a recent commentary on COVID-19 risks and vulnerabilities among Black communities, the authors highlight high rates of pre-existing conditions that play a role in poor COVID-19 clinical outcomes, fierce resistance to Medicaid expansion in the South where the majority of Black people reside, lack of accessible testing options in low-income neighborhoods, and an over-representation among “essential workers” as factors that explain elevated risks for COVID-19.¹⁵ Many of these same factors also contribute to poor HIV-related health outcomes. Another study linking HIV and COVID-19 pointed to the importance of residential segregation in both epidemics.¹⁶ Trauma is also a structural driver of health outcomes for HIV and COVID-19. In addition to people in the communities most heavily impacted by COVID-19 and HIV having trauma histories, they may experience each epidemic or both epidemics as traumatic experiences, and in turn, those trauma histories and traumatic experiences associated with the COVID-19 and HIV epidemics can negatively affect physical health and mental health.^{17, 18, 19} To expand our policy responses beyond simply extending access to health care, policy action is needed to:

- **Sustain the community-based response:** HIV advocacy has transformed the role of communities in identifying policy priorities and delivering services. The networks of people living with HIV, large and small HIV community-based organizations, and other community partners are critical for addressing social determinants of health and improving health equity. While many networks and organizations were not fully included by federal agencies and state and local governments in the COVID-19 response, they nonetheless acted to provide emergency housing assistance, food assistance, and other services that people in their communities needed. These networks and organizations must be meaningfully engaged and bolstered now and in the future.
- **Prioritize equitable access and public investments in human and social services:** Congress and federal agencies should conduct an analysis and

STRUCTURAL INEQUITIES LINK THE HIV AND COVID-19 EPIDEMICS

Racial and ethnic health disparities are consistently observed across many health conditions in the US. For HIV, the largest population disparities are for men who have sex with men (MSM) and transgender women, but across all risk groups, Black and Latinx people are especially impacted.

HIV

THE LIFETIME RISK OF ACQUIRING HIV:

BLACK/AFRICAN AMERICAN

MSM: 1 in 2
Transgender Women: 1 in 2
Men: 1 in 22
Women: 1 in 54

HISPANIC/LATINX

MSM: 1 in 5
Transgender Women: 1 in 6
Men: 1 in 51
Women: 1 in 256

AMERICAN INDIAN/ALASKA NATIVE

MSM: 1 in 12
Transgender Women: N/A
Men: 1 in 131
Women: 1 in 403

WHITES

MSM: 1 in 11
Transgender Women: 1 in 6
Men: 1 in 140
Women: 1 in 941

COMMON FACTORS THAT ELEVATE RISK FOR HIV AND COVID-19

RACISM

TRAUMA

POVERTY

STIGMA/LACK OF TRUST

RESIDENTIAL SEGREGATION

HOUSING INSECURITY

(BOTH LESS ACCESS AND GREATER HOUSING DENSITY)

LESS ACCESS TO HEALTH CARE AND PREVENTIVE SERVICES

INCARCERATION

IMMIGRATION STATUS

COVID-19

ELEVATED RISK COMPARED TO WHITE AMERICANS:

BLACK/AFRICAN AMERICAN

Cases: 2.6x higher
Hospitalizations: 4.7x higher
Deaths: 2.1x higher

HISPANIC/LATINX

Cases: 2.8x higher
Hospitalizations: 4.6x higher
Deaths: 1.1x higher

AMERICAN INDIAN/ALASKA NATIVE

Cases: 2.8x higher
Hospitalizations: 5.3x higher
Deaths: 1.4x higher

NOTE: HIV lifetime risk for transgender women uses different data source and time period than for other populations.

SOURCES: (1) US Census Quick Facts. July 2019. <https://www.census.gov/quickfacts/fact/table/US/PST045219>. (2) Hess KL, et al. Lifetime risk of a diagnosis of HIV infection in the United States. *Ann Epidemiol* 2017;27(4):238-243. (3) Herbst JH, et al. Estimating HIV prevalence and risk behaviors in transgender persons in the United States: A systematic review. *AIDS Behav* 2008;12(1):1-17. (4) CDC. COVID-19 Hospitalization and Death by Race/Ethnicity. August 2020. <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html>.

establish goals for strengthening equity across federal programs in terms of age, race/ethnicity, income, gender, geography, and other factors.²⁰ Such an analysis should consider best practices for addressing social determinants of health (such as living wage standards, labor protections for immigrant workers, and provision of employment

services) and for integrating health and non-health programs (such as collaborations between the Department of Housing and Urban Development and the Department of Health and Human Services to integrate housing and health care services for people with HIV).

PROGRAMS AND POLICIES CREATE A PATH TO ENDING THE HIV EPIDEMIC

ACHIEVING MORE RESILIENT COMMUNITIES

and improving equity requires that we construct and maintain a network of laws, policies, and programs to support these communities. While HIV disparities remain widespread, significant progress has been made in the national HIV response. From 2014-2018, HIV diagnoses were down 7% among gay and bisexual men and down 10% among heterosexuals. It is estimated that more than 100,000 HIV transmissions were averted from 2008-2017 compared to prior decades, saving \$4.58 billion in lifetime medical costs. Viral suppression, a key metric for assessing the effectiveness of HIV treatment and care, has also improved. In 2010, CDC estimated that 28% of all people with HIV in the US were virally suppressed, rising to over 50% by 2016. The Ryan White HIV/AIDS Program underpins the HIV care system, and nearly 9 in 10 of its clients were virally suppressed in 2018, highlighting the impact of critical investments in the program.

People with HIV also have gained greater access to health insurance coverage due to the ACA. From 2012-2014, Medicaid coverage of people with HIV increased nationally from 36% to 42%, and the share of people with HIV without insurance decreased from 18% to 14%. In 2018, just 11% of people with HIV were uninsured. While most states have expanded Medicaid coverage to persons up to 138% of poverty, twelve states have not taken up this option, and uninsured people with HIV are concentrated in these states.

Addressing social determinants to improve health outcomes requires that we take action outside of the health system. Some examples include:

Housing. Programs and services that enable people with HIV to obtain an adequate income and meet other basic needs are critical to achieving good health outcomes. Housing has been shown to be associated with a 41% reduction in emergency room visits and a 23% reduction in detectable viral load among people with HIV.

Civil Rights. Throughout the HIV epidemic, people with HIV have experienced discrimination in many domains of life, including employment, housing, education, health care, and public services. The Americans with Disabilities Act of 1990 (ADA) and other laws give people rights to counter discrimination. Recent research into the impact of state laws and policies found that states with high or increasing levels of protection for sexual minorities had reductions in new HIV diagnoses, late diagnoses, and AIDS-related mortality compared to other states. It is important to combat discrimination based on health status, sex, race, sexual orientation, and gender identity.

Criminal Law. While thirty-two states have HIV-specific criminal laws to penalize people with HIV for HIV non-disclosure, exposure, or transmission, and many states also rely on general criminal laws for that purpose, HIV criminalization reform efforts have made progress in recent years. Eight states have reformed or repealed one or more parts of their HIV-specific criminal laws. Most public health leaders believe that these laws are harmful and undermine the trust needed for marginalized individuals to seek HIV testing and services. Disturbingly, laws have been proposed to criminalize people for exposing others to COVID-19, and state legislators have sought to extend HIV criminal statutes to Hepatitis C and other infectious diseases. States must enact laws and policies to end criminalization of health status.

THE SUCCESSES OF HIV PROGRAMS ARE SUBSTANTIAL, BUT TENUOUS.

Reduced testing, fewer prevention services (including PrEP), and interruptions in HIV care caused by COVID-19-related clinic closures, staffing redeployments, or funding cuts in health care and human services programs could cause a resurgence of HIV transmissions.

SOURCES: (1) HIV in the United States and Dependent Areas. <https://www.cdc.gov/hiv/statistics/overview/ata glance.html>. (2) CDC's HIV Work Saves Lives and Money. <https://www.cdc.gov/nchhstp/budget/infographics/hiv.html>. (3) Ending the HIV Epidemic: HIV Treatment Is Prevention. <https://www.cdc.gov/vitalsigns/end-hiv/index.html>. (4) HRSA. *Ryan White HIV/AIDS Program Annual Client-Level Data Report 2018*. December 2019. (5) Dawson L and Kates J. *Insurance Coverage and Viral Suppression among People with HIV, 2018*. September 24, 2020. (6) Kidder D. The housing and health study: Background, methods, and outcomes. Presented at: National AIDS Housing Coalition Conference; 2009. (7) Hatzenbuehler ML et al. Trends in state policy support for sexual minorities and HIV-related outcomes among men who have sex with men in the United States, 2008-2014. *J Acquir Immune Defic Syndr* 2020;85(1):39-45. (8) Center for HIV Law and Policy. *HIV Criminalization in the United States*. July 2020. (9) Center for HIV Law and Policy, Harm Reduction Coalition, and the National Viral Hepatitis Roundtable. *Punishment Is Not a Public Health Strategy: Criminalization of Viral Hepatitis in the United States*. August 2018.

3. THE HIV RESPONSE CAN BE A MODEL FOR INCREASING HEALTH EQUITY

Given these structural barriers to health, improving equity requires an array of policy responses within and outside of the health system. Part of the success of the HIV response can be attributed to leveraging multiple programs to promote HIV prevention or improved health outcomes. One aspect of the HIV response that is particularly noteworthy is the Ryan White HIV/AIDS Program. The Ryan White Program creates the glue to hold together an otherwise fragmented health and social support system consisting of public and private health insurance and health programs, Social Security income support programs, and housing, workforce training, nutrition, and other programs, along with legal services and civil rights enforcement.

Administered by the Health Resources and Services Administration (HRSA), the Ryan White Program seeks to ensure a system of care for uninsured and underinsured people living with HIV. Research shows that the program is making strides at increasing viral suppression and reducing disparities in viral suppression in terms of race, age, and region of the country.^{21, 22} The program serves as a payer of last resort, filling in gaps in services, often by assisting with costs related to health insurance, or providing HIV care to persons without other coverage. The program, however, is more than a payer for health services. It also establishes HIV clinical practice standards, trains the clinical and non-clinical workforce, and strengthens the engagement of people living with HIV. The Minority AIDS Initiative (MAI) component of the Ryan White Program provides targeted funding to reduce the disproportionate impact of HIV on racial and ethnic minority populations. For example, MAI funding currently supports leadership training for people of color living with HIV and development of digital and other tools to enable their meaningful participation on HIV planning bodies, on care teams, in organizations, and on boards of directors.

Improving health equity requires focused and tailored HIV programs, but these programs and related programs also need continued investment and must focus on better meeting the needs of communities of color. Policy actions are needed to:

- **Bolster support for HIV programs, COVID-19 programs, and other health and mental health programs:** HIV programs have demonstrated success, but their work is not finished. Large disparities remain in who is most heavily impacted, the opioid crisis is increasing new HIV transmissions that require more services and attention, and economic hardship creates demand for services. Increasing health equity in the US cannot happen unless we continue to invest in the Ryan White HIV/AIDS Program, CDC's HIV prevention programs, and critical HIV

programs across the federal government, as well as broader health and mental health programs. It is also important to invest in COVID-19 prevention, care, treatment, and research. The COVID-19 Prevention Trials Network (COVPN) is a key research program for identifying safe and effective vaccines and prevention strategies against COVID-19 and is built on the HIV Vaccine Trials Network and the HIV Prevention Trials Network, which have been leaders in developing clinical trial protocols with responsive community participatory processes, good informed consent processes, and appropriate plans for enrolling and supporting trial participants.

- **Expand leadership opportunities for people of color in the HIV and COVID-19 responses and promote accountability of governments, funders, and community leaders:** Government agencies, non-governmental funders, and HIV organizations often do not have Black, Latinx, or Indigenous people and other people of color in senior leadership roles. While some funders and organizations have taken steps to ensure equitable representation on their board of directors, in their executive teams, and throughout their staff, more work is needed. People of color, especially those who are gay and bisexual men, women, or transgender persons, must have a seat at the leadership table and be able to select and hold accountable the leadership at government agencies, funders, and community organizations for failing to live up to their commitments or to meet the needs of those they serve.
- **Focus on the aging population:** More than half of people living with HIV in the US are aged 50 and older. Compared to HIV-negative age peers, older people living with HIV have higher rates of comorbid conditions, such as cardiovascular disease, liver disease, diabetes, cancer, and neurocognitive impairment, and have higher rates of geriatric syndromes, such as falls and frailty.²³ Many older people living with HIV also face challenges related to mental health, social isolation, and stigma. Aging is a critical health equity issue in the context of HIV and COVID-19. Greater attention must be given to meeting the needs of people aging with HIV and protecting older people from COVID-19.

THE TIME IS NOW

The sudden onset of the COVID-19 crisis has exposed fissures in society and weaknesses in our public health response. Our continuing work to end the HIV epidemic offers a path forward. Part of the success of the HIV response has been the sustained commitment from the American people combined with the bold willingness of HIV stakeholders to demand structural change. To improve the health of the Nation, we must maintain and strengthen our commitment to ending the HIV epidemic as we strive to increase health equity and work to end the COVID-19 pandemic.

ENDNOTES

- 1 National Coalition of State STD Directors. *COVID-19 and the State of the STD Field*. May 2020. https://www.ncsddc.org/wp-content/uploads/2020/05/STD-Field.Survey-Report.Final_5.13.20.pdf.
- 2 Sanchez TH, et al. Characterizing the impact of COVID-19 on men who have sex with men across the United States in April 2020. *AIDS Behav* 2020;24(7):2024-2032.
- 3 Browley S, et al. Impact of shelter in place orders on PrEP access, usage, and HIV risk behaviours in the United States. Presented at: 23rd International AIDS Conference; 2020. Abstract OADLB0101.
- 4 Krakower D, et al. Impact of COVID-19 on HIV pre-exposure prophylaxis care at a Boston community health center. Presented at: 23rd International AIDS Conference; 2020. Abstract OACLB0104.
- 5 Kaiser Family Foundation. *U.S. Federal Funding for HIV/AIDS: Trends Over Time*. March 2019. <https://www.kff.org/global-health-policy/fact-sheet/u-s-federal-funding-for-hivaids-trends-over-time/>.
- 6 Kaiser Family Foundation. *Ending the HIV Epidemic (EHE) Funding Tracker*. August 2020. <https://www.kff.org/hivaids/issue-brief/ending-the-hiv-epidemic-ehe-funding-tracker/>.
- 7 Johnson C. House declines new money for Trump's HIV plan - but it's complicated. *Washington Blade*. August 5, 2020. <https://www.washingtonblade.com/2020/08/05/house-declines-new-money-for-trumps-hiv-plan-but-its-complicated/>. The \$10 million for NIH is not new money, but rather reprogrammed money.
- 8 NASTAD. *National ADAP Monitoring Project Annual Report*. February 2014. https://www.nastad.org/sites/default/files/resources/docs/NASTAD_National_ADAP_Monitoring_Project_AnnualReport_February2014.pdf.
- 9 NASTAD. *National ADAP Monitoring Project Annual Report*. February 2014. https://www.nastad.org/sites/default/files/resources/docs/NASTAD_National_ADAP_Monitoring_Project_AnnualReport_February2014.pdf.
- 10 McCloskey E, NASTAD, Personal communication following an informal survey of NASTAD members, September 15, 2020.
- 11 Centers for Disease Control and Prevention. EHE in Action. <https://www.cdc.gov/endhiv/action/jumpstart.html>.
- 12 Public Health Leadership Forum. *Developing a Financing System to Support Public Health Infrastructure*. October 2018. <https://www.resolve.ngo/docs/developing-a-financing-system-to-support-foundational-public-health-capabilities-final-draft-10.2.pdf>.
- 13 United States Department of Health and Human Services. Interim Guidance for COVID-19 and Persons with HIV. Updated June 19, 2020. <https://clinicalinfo.hiv.gov/en/guidelines/covid-19-and-persons-hiv-interim-guidance/interim-guidance-covid-19-and-persons-hiv>.
- 14 National Academies of Sciences, Engineering, and Medicine. *Communities in Action: Pathways to Health Equity*. 2017: Chapter 3, Box 3-1. <https://www.nap.edu/catalog/24624/communities-in-action-pathways-to-health-equity>.
- 15 Poteat T, et al. Understanding COVID-19 risks and vulnerabilities among Black communities in America: The lethal force of syndemics. *Ann Epidemiol* 2020;47:1-3.
- 16 Millett G, et al. White counties stand apart: The primacy of residential segregation in COVID-19 and HIV diagnoses [published online ahead of print August 19, 2020]. *AIDS Patient Care STDS*. doi: <https://doi.org/10.1089/apc.2020.0155>.
- 17 LeGrand S, et al. A review of recent literature on trauma among individuals living with HIV. *Curr HIV/AIDS Rep* 2015;12(4):397-405.
- 18 Machtinger EL, et al. Recent trauma is associated with antiretroviral failure and HIV transmission risk behavior among HIV-positive women and female-identified transgenders. *AIDS Behav* 2012;16(8):2160-2170.
- 19 Zvolensky MJ, et al. Psychological, addictive, and health behavior implications of the COVID-19 pandemic. *Behav Res Ther* 2020;134:103715.
- 20 See, for example, H.R. 8178, the Anti-Racism in Public Health Act of 2020, introduced by Congresswoman Pressley and co-sponsors in September 2020.
- 21 Doshi RK, et al. For many served by the Ryan White HIV/AIDS Program, disparities in viral suppression decreased, 2010-14. *Health Aff* 2017;36(1):116-123.
- 22 Mandsager P, et al. Reducing HIV-related health disparities in the Health Resources and Services Administration's Ryan White HIV/AIDS Program. *Am J Public Health* 2018;108(S4):S246-S250.
- 23 Sundermann EE, et al. Current challenges and solutions in research and clinical care of older people living with HIV: Findings presented at the 9th International Workshop on HIV and Aging. *AIDS Res Hum Retroviruses* 2019;35(11-12): 985-998.