


**When Pandemics Collide:
The Impact of COVID-19 on
Ending the US HIV Epidemic**

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**Financial Relationships With Ineligible Companies
(Formerly Described as Commercial Interests by the
ACCME) Within the Last 2 Years**

Dr Thompson has received research support paid to her institution from Bristol Myers Squibb, Cepheid Inc., CytoDyn Inc., Frontier Biotherapeutics, Gilead Sciences, GlaxoSmithKline, Merck & Co., and ViiV Healthcare. Dr Thompson has served on the independent data monitoring committee for Excision Biotherapeutics. (Updated 12/6/22)

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Learning Objectives

After attending this presentation, learners will be able to:

- List 4 strategies and 2 goals of the federal Ending the HIV Epidemic initiative
- Discuss the disruptions to HIV testing and diagnosis that occurred during the first 2 years of COVID-19
- List 3 policy suggestions to address issues impacting our ability to end the HIV epidemic

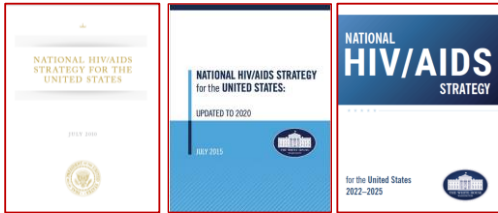
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Strategies and Goals for Ending the US HIV Epidemic

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The National HIV/AIDS Strategy: 2010-2025



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Ending the HIV Epidemic Initiative, 2019

Phase I Jurisdictions: 48 counties, 7 states, D.C., San Juan, PR

- Goal: end the US HIV epidemic by 2030
- Targeted toward "hot spot" areas accounting for >50% of new diagnoses & states with "substantial" rural prevalence
- 4 jurisdictions identified as "Jump Start" sites
- Primary funding streams
 - CDC to state, local health departments
 - HRSA: HIV/AIDS Bureau (Ryan White) and Bureau of Primary Care (health centers)
 - NIH: Centers for AIDS Research; NIMH ARC
 - Indian Health Service



<https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview>

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Four Key Ending the HIV Epidemic Strategies

- Diagnose** all people with HIV as early as possible.
- Treat** people with HIV rapidly and effectively to reach sustained viral suppression.
- Prevent** new HIV transmissions by using proven interventions, including pre-exposure prophylaxis (PrEP) and syringe services programs (SSPs).
- Respond** quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them.

https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/key-strategies

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Ending the HIV Epidemic

GOAL:

- 75% reduction in new HIV infections by 2025
- and at least 90% reduction by 2030.

<3,000 per year

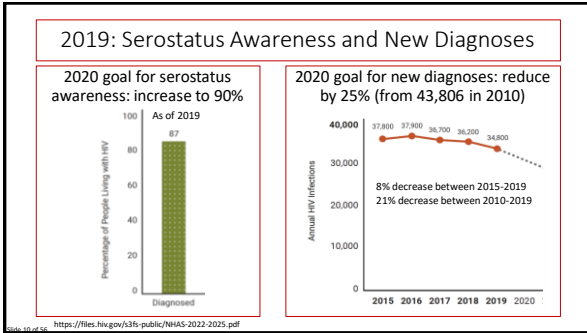
www.hiv.gov

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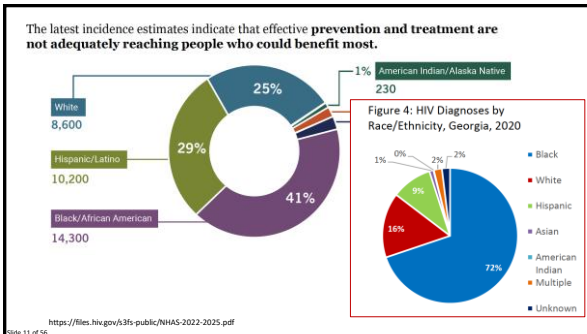
**Where Were We Before COVID?
Where Are We Now?**

- How has COVID impacted our efforts to end the HIV epidemic?
- What must we do now to end the US HIV epidemic?

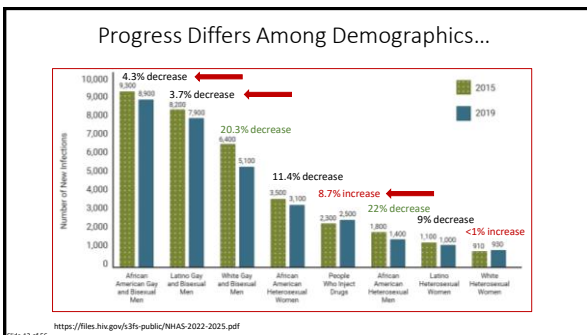
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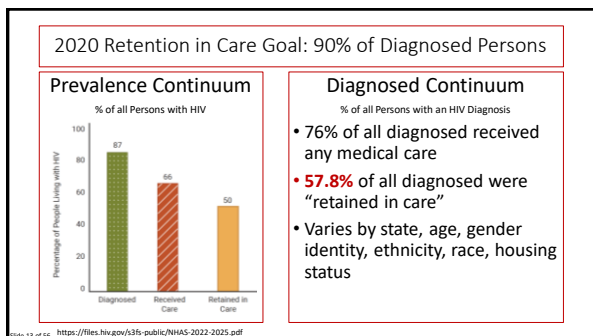
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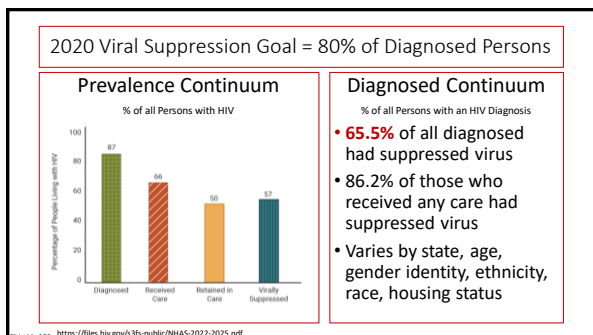
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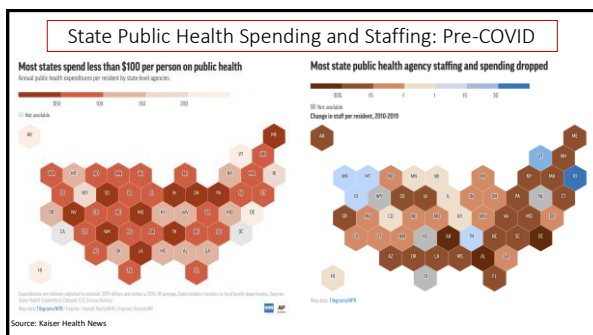
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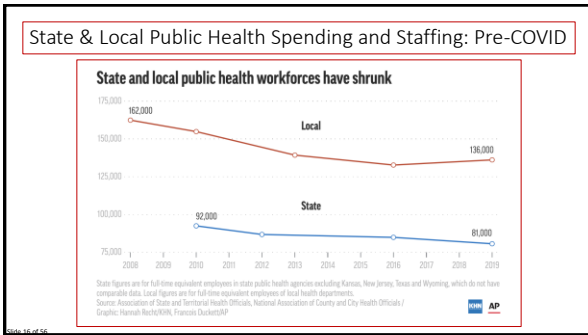
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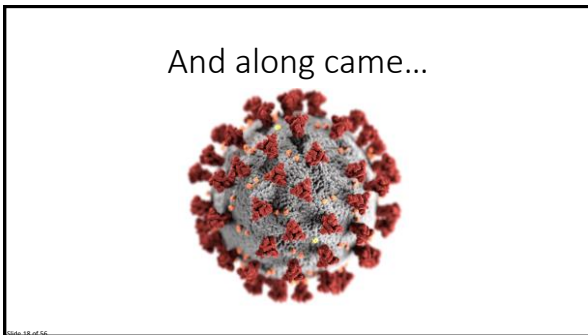
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Our HIV Workforce Was Inadequate Pre-COVID

- Urban-rural disparity in South (pre-COVID)¹
 - 81% of counties had no experienced HIV clinician
 - 4% of experienced HIV clinicians in rural areas
 - > 20,000 PWH lived in counties without an experienced HIV clinician
- 80% of counties had no ID specialist (2017)²
 - 2022 ID match: 56% of programs & 74% of positions filled³
- Quality gap between HIV experts (<20 pts/yr) and others in NY state (2015)⁴
 - Need to increase baseline HIV expertise among primary care, ID clinicians
 - Need to incentivize HIV medicine

¹Bono R, et al. HIV-Experienced Clinician Workforce Capacity: Urban-Rural Disparities in the Southern US. CID. Online Mar 25, 2020.
²Walensky, R et al. "Where is the ID in COVID-19?" Annals of Internal Medicine. 173(7), Oct 2022.
³National Residency Matching Program. <https://www.nrmp.org/wp-content/uploads/2022/11/Medicine-and-Peds-Specialties-MRS-Report.pdf>
⁴Yip H, et al. The HIV Workforce in New York State: Does Patient Volume Correlate with Quality? CID. 2015;61(11):1473-7

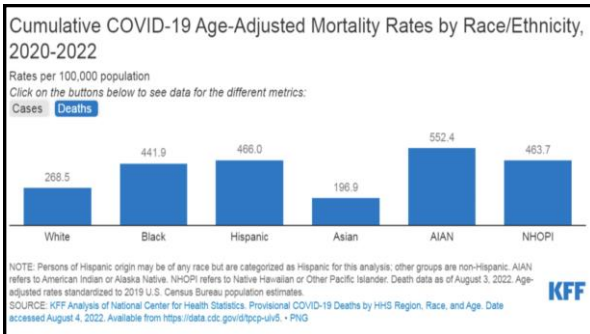
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It is going to take a while to sort out the impact of COVID-19

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Causes of Disproportionate Impact of COVID-19

- Structural racism
- Underlying health comorbidities
- Living in high density neighborhoods
- Employment in public-facing occupations
- Societal inequities such as limited access to COVID testing
- Disparities in COVID vaccination rates

INVISIBLE PEOPLE:
A Retrospective Report on the Impacts of
COVID & HIV in the United States

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COVID-19 Impact on US Health Departments

“The COVID-19 response has taken time, attention, and personnel away from all other unrelated health priorities as underfunded and understaffed health departments respond to this incredible crisis.

However, in doing so, existing services are strained or paused, with health impacts that will ripple through communities.”

- National Association of County and City Health Officials

Spinewer, T. Report from the Field: The Impact of COVID-19 on Local Health Department HIV, STI, and Hepatitis Programs. National Association of County and City Health Officials. Apr 15, 2020. <https://www.naccho.org/blog/articles/report-from-the-field-the-impact-of-covid-19-on-local-health-department-hiv-sti-and-hepatitis-programs>

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COVID-19 Impact on US Health Departments

- Suspended or reduced services for HIV, STI, viral hepatitis to shift staff to manage COVID-19 response and comply with social distancing needs
 - Some local HDs closed entirely or closed for walk-in visits
 - Some STI clinics offered services only for symptomatic persons or known contacts of persons diagnosed with STIs
 - Many local HDs suspended community outreach, education, prevention services
 - Some HDs stopped HIV PrEP initiation for new clients
- Syringe service programs: some closed; some reduced services
- Concern about consequences of new and untreated infections
- Disparate effect on smaller health departments; less ability to rebound

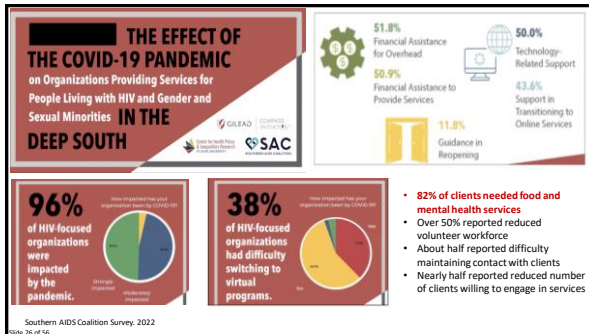
Spinewer, T. Report from the Field: The Impact of COVID-19 on Local Health Department HIV, STI, and Hepatitis Programs. National Association of County and City Health Officials. Apr 15, 2020. <https://www.naccho.org/blog/articles/report-from-the-field-the-impact-of-covid-19-on-local-health-department-hiv-sti-and-hepatitis-programs>

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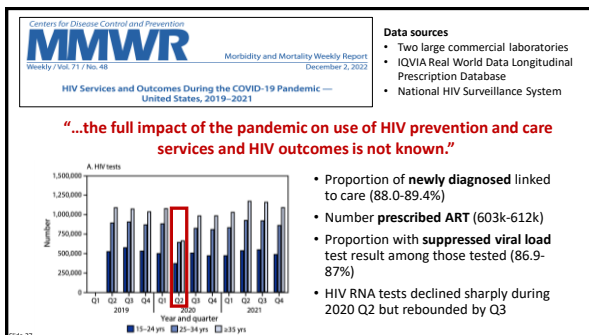
Pandemic Solutions by Local Health Departments

- Telemedicine: screening, counseling, case management, partner services
- Express STI testing: limiting face-to-face provider contact
- Home testing programs, including for HIV
- Syndromic management and presumptive treatment: CDC guidance
- Syringe service programs
 - Make appointments by phone for syringe pick up
 - Increased number of syringes per visit
 - Mailing naloxone to clients

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CDC: HIV Diagnoses Decreased 17% in 2020

The steep reduction in diagnoses in 2020 is likely due to **disruptions in clinical care services, patient hesitancy in accessing clinical services, and shortages in HIV testing reagents/materials**, which causes concern regarding underdiagnosis.

Data for the year 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions.

Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2020. *HIV Surveillance Supplemental Report 2022*;27(No. 3). <https://www.cdc.gov/hiv/data/2022-03-01>

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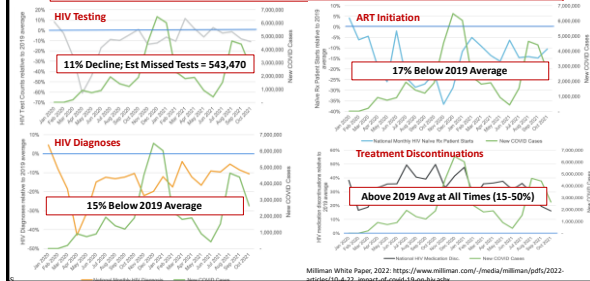
Disruptions in HIV Testing, Diagnosis, Treatment, PrEP Use According to Claims Data: Mar 2020 – Oct 2021 Analysis by Milliman, Funding from Gilead Sciences

- Based on IQVIA Longitudinal Access and Adjudicated Data (LAAD)
 - Includes private insurance, Medicare, Medicaid: 80% of HIV pharmacy claims, 60% of medical claims
- Excludes uninsured patients
- Does not track patients moving from one type of coverage to another or from one geographic location to another
- Overlap with Ryan White not specified

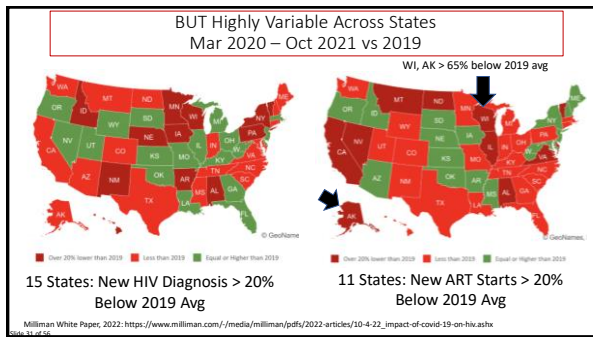
Milliman White Paper, 2022: https://www.milliman.com/media/milliman/pdf/2022-articles/10-4-22_impact-of-covid-19-on-hiv.ashx

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HIV Testing, Diagnoses, ART Starts, Treatment Interruption During COVID-19: Mar 2020 – Oct 2021 vs 2019



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COVID Disruptions: Major Metropolitan Statistical Areas
14 MSAs with Testing, Diagnosis & New Treatment Initiation < 2019 Levels

Atlanta-Sandy Springs-Alpharetta, Georgia
Baltimore-Columbia-Towson, Maryland
Cambridge-Newton-Framingham, Massachusetts
Columbus, Ohio
Denver-Aurora-Lakewood, Colorado
Fort Worth-Arlington-Grapevine, Texas
Memphis, Tennessee-Mississippi-Arkansas
Nassau County-Suffolk County, New York
Philadelphia, Pennsylvania
Pittsburgh, Pennsylvania
Rochester, New York
Sacramento-Roseville-Folsom, California
Seattle-Bellevue-Kent, Washington
Tampa-St. Petersburg-Clearwater, Florida

As of Oct 2021:

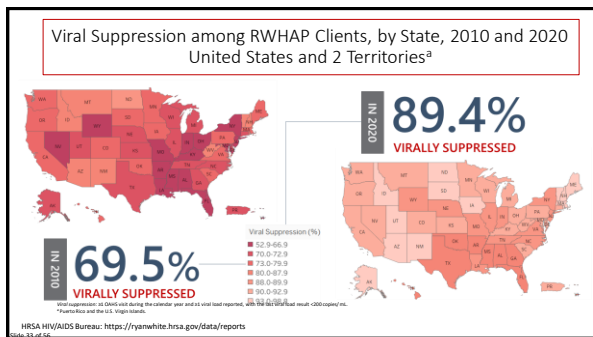
Testing
• Only 7 MSAs had levels \geq 2019

Diagnosis
• 13 MSAs \geq 20% below 2019
• Rochester - 50% below 2019

Treatment
• 10 MSAs \geq 20% below 2019

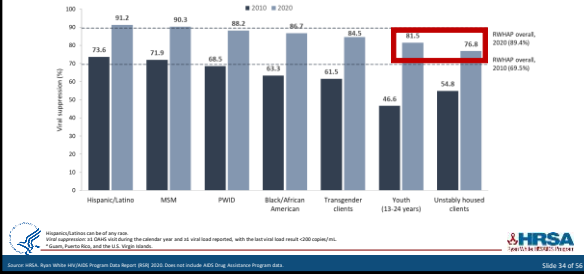
Milliman White Paper, 2022: https://www.milliman.com/f/media/milliman/pdfs/2022-articles/10-4-22_impact-of-covid-19-on-hiv.aspx

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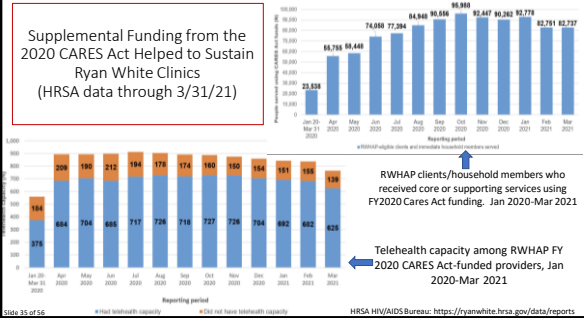
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Viral Suppression among Priority Populations Served by the Ryan White HIV/AIDS Program, 2010 and 2020—United States and 3 Territories^a



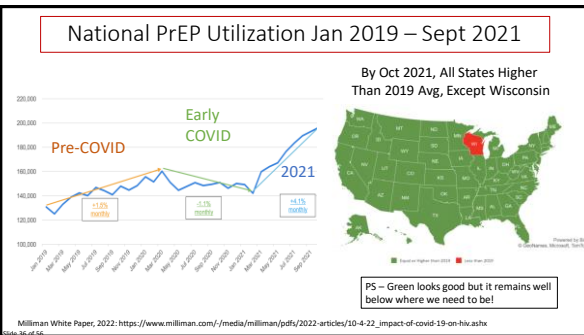
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Supplemental Funding from the 2020 CARES Act Helped to Sustain Ryan White Clinics (HRSA data through 3/31/21)



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National PrEP Utilization Jan 2019 – Sept 2021



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Disruptions in PrEP Access Fenway Clinic, Boston, Jan – Apr, 2020

Total number of patients with an active PrEP prescription decreased by 18.3%

Month	PrEP Lapses	New Starts	Start of Month Cohort Size
Jan-20	140	141	281
Feb-20	147	147	294
Mar-20	161	161	322
Apr-20	174	174	348

- PrEP refill lapses \uparrow 191%
- New PrEP starts \downarrow 72.1%
- Patients with active PrEP Rx \downarrow 18.3%

Krakauer, D., et al., Impact of COVID-19 on HIV preexposure prophylaxis care at a Boston community health center. Journal of the International AIDS Society. 2020; p. 176-177

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PrEP Refill Lapses Were Associated with Age, Race, Ethnicity

	Refill lapse (N = 407) n (%)	Active prescription (N = 2011) n (%)	% Lapse	
Age, yrs				$p=0.001$
≤ 26	87 (21.3)	395 (15.1)	18.0	
27+	320 (78.6)	2216 (84.8)	12.6	
Race				$p=0.001$
White	275 (67.2)	1943 (74.4)	12.4	
Black/African-American	25 (6.1)	151 (5.8)	14.2	
Asian	26 (6.4)	155 (5.9)	14.4	
AI/AN + Other	33 (8.1)	205 (7.9)	13.9	
Multiracial	25 (6.1)	91 (3.5)	21.6	
Unknown/Not Reported	23 (5.6)	66 (2.5)	25.8	
Ethnicity				$p=0.04$
Hispanic	68 (16.7)	324 (12.4)	17.3	
Non-Hispanic	301 (74.0)	2060 (78.9)	12.7	
Unknown/Not Reported	38 (9.3)	227 (8.7)	14.3	

Krakauer, D., et al., Impact of COVID-19 on HIV preexposure prophylaxis care at a Boston community health center. Journal of the International AIDS Society. 2020; p. 176-177

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Open Forum Infectious Diseases
HIV/AIDS | hivmo

Projected Effects of Disruptions to Human Immunodeficiency Virus (HIV) Prevention Services During the Coronavirus Disease 2019 Pandemic Among Black/African American Men Who Have Sex With Men in an Ending the HIV Epidemic Priority Jurisdiction

Each additional 25% decrease in HIV testing & PrEP initiation was associated with

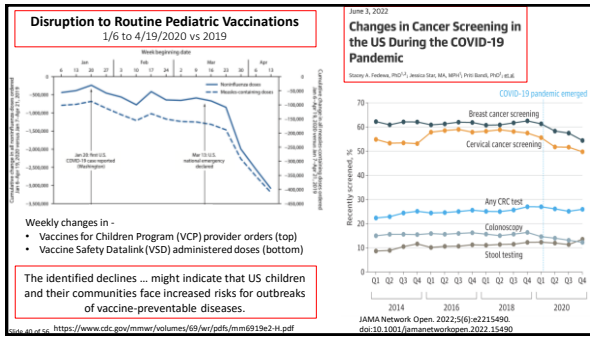
- 20% decrease in diagnoses
- 15% increase in HIV incidence from 2020 to 2022 that gradually declines but remains elevated through 2025

Projected Annual Number of New HIV Diagnoses Among Black MSM in Jackson, MS Based Upon Extent of Prevention Service Disruption Due to COVID-19

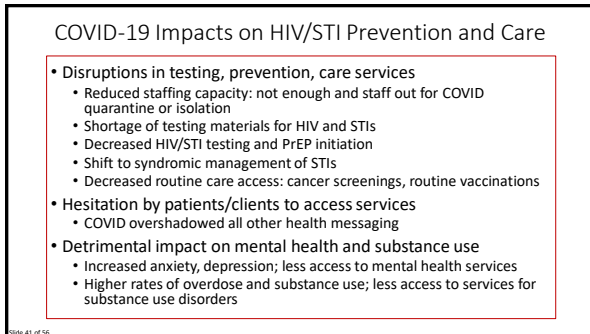
Labo, et al. ORF. doi.org/10.1093/ofid/ofac274

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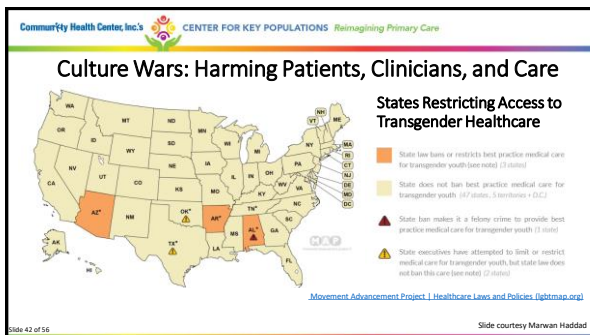




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What Will It Take?

COVID-19 disruptions in HIV testing and prevention highlight need for innovation and investment before the next public health emergency CDC MMWR 12/2/2022

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Call to Action: What is needed for the US Ending the HIV Epidemic Initiative to succeed?

The Lancet, Feb. 19, 2021

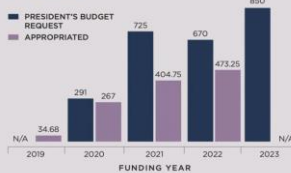
- Universal access to quality health care, safety net programs, and curtailing high HIV drug costs
- Culturally appropriate approaches for Black & Latinx men who have sex with men; more data on trans people, people who inject drugs
- All clinical trials for prevention/treatment of HIV should enroll women in sufficient numbers to permit meaningful analysis by sex and gender
- Eliminate race, class, gender inequities, discrimination, structural violence
- Access to affordable or no cost PrEP
- Promote the message: Undetectable = Untransmittable (U = U)
- Integrate mental health, substance use programs into clinical care

Beyrer C, Adimora A, Hodder S, et al. Call to Action: What is needed for the Ending the HIV Epidemic in the USA Initiative to Succeed? 2021 Mar 20;397(10279):1151-1156. doi: 10.1016/S0140-6736(21)00390-1. Epub 2021 Feb 19. [https://doi.org/10.1016/S0140-6736\(21\)00390-1](https://doi.org/10.1016/S0140-6736(21)00390-1)

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Appropriations Have Not Matched Funding Levels Needed to Meet EHE Goals

FALLING FURTHER BEHIND ENDING THE HIV EPIDEMIC INITIATIVE FUNDING: REQUESTED VERSUS APPROPRIATED (US\$ MILLIONS)



SOURCE: Ending the HIV Epidemic (EHE) Funding Tracker, Kaiser Family Foundation (Nov. 12, 2022); Domestic HIV Funding in the White House FY 2023 Budget Request, Kaiser Family Foundation (Mar. 30, 2022). Note: FY 2019 funding was re-allocated funds to launch the initiative, but not appropriated for this purpose. Congress has not yet appropriated funding for FY 2023.

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“Policy, public health, clinician, and community stakeholders must prioritise strategies that attend to the social inequities at the intersection of race, gender, class, age, and sexuality that compound the impacts of HIV and COVID-19 in Black communities.

The racial disparities that so rapidly emerged with COVID-19 are a reminder that until these inequities are addressed, disparities in HIV and COVID-19 outcomes will persist and ending the HIV epidemic will remain elusive.”

Errol L Fields, Ramiyah Copeland, Ernest Hopkins. Same script, different viruses: HIV and COVID-19 in US Black communities. The Lancet. Feb. 19, 2021. doi.org/10.1016/S0140-6736(20)32522-8

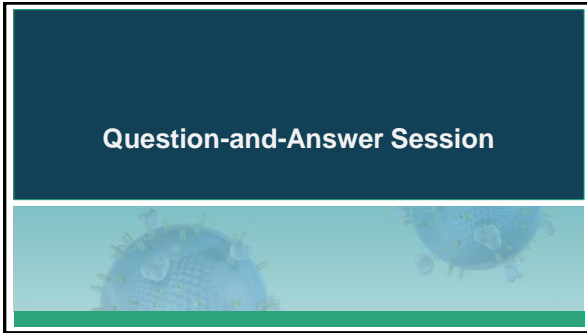
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Concrete Policy Suggestions: Advocacy Needed

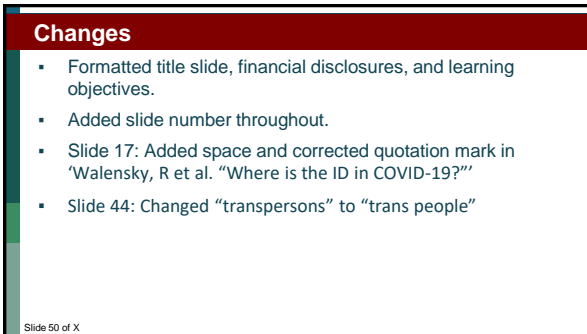
- **Expand Medicaid** in the remaining 11 states
- **Build diverse primary care, ID, and public health workforces** in urban and rural settings, especially in the South
 - Fund the **BIO Preparedness Workforce Pilot** as part of the **PREVENT Pandemics Act**, providing loan forgiveness for HIV/ID providers in underserved areas
 - Fully fund **HRSA's FY2023 \$2.1 billion workforce programs** budget request
 - Educate primary care providers to manage PrEP, initial ART, & care for people with HIV; maximize telehealth education and rapid access to HIV experts
- Fully fund **EHE, CDC HIV/STI/viral hepatitis, HRSA Ryan White**
- Fully fund the proposed President's **US PrEP Program at \$6.2B** over 10 years
- Fully fund innovative solutions adopted during COVID to sustain and expand **telehealth, flexibility with regulations, extended Rx fills, home HIV/STI testing**
- Eliminate **policies that stigmatize** minorities by sexual orientation, gender identity, race, ethnicity

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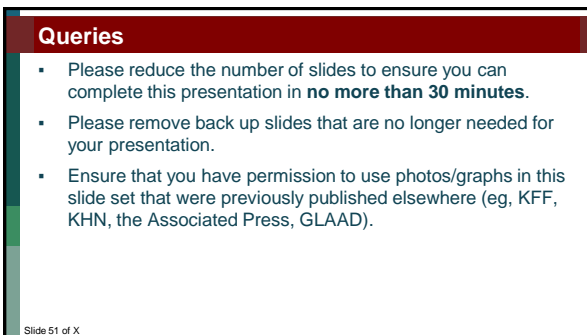
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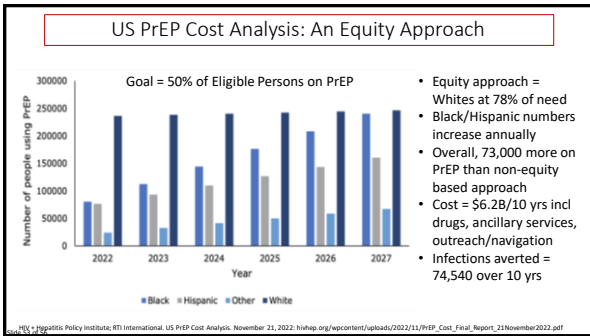
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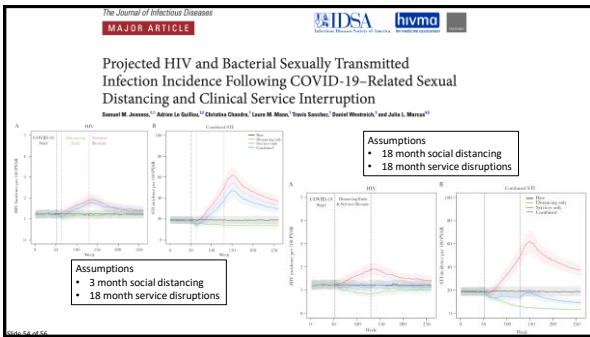
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Back-Up Slides

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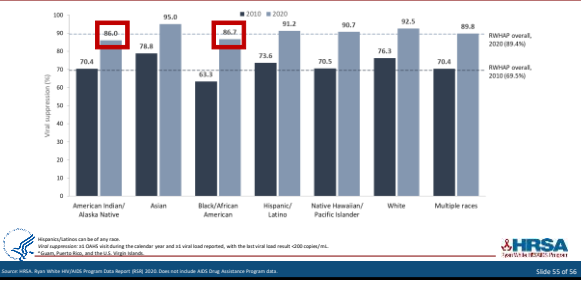
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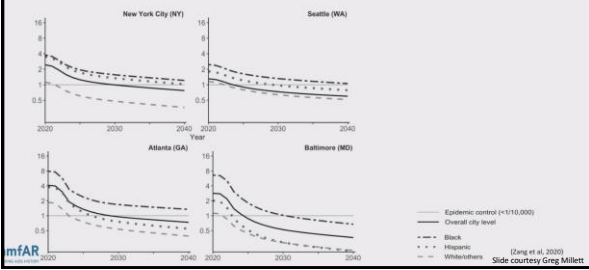


Viral Suppression among Clients Served by the Ryan White HIV/AIDS Program, by Race/Ethnicity, 2010 and 2020—United States and 3 Territories^a



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We are on track to end the HIV epidemic... with White Americans



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