HIV in Rural America
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Epidemiology of HIV in the USA: epidemic burden, inequities, contexts, and responses

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The US HIV epidemic is characterized by ongoing disparities, with a higher impact among people who are Black or Hispanic people, people who live in the US South, men who have sex with men (MSM), and people who inject drugs, compared with the general population.
HIV disparities in the South are probably driven by co-occurring gaps in health insurance coverage (perpetuated by the absence of the expanded Medicaid program), health-care provider shortages in general, low levels of health literacy, high rates of sexually transmitted infections, and stigma associated with seeking HIV care and prevention services.
Profound disparities in risk of HIV by geography, race, risk and gender.
Responses: Translating epidemiology to improvements in public health

- Medicaid expansion in the South
- Address other risks for poor health in the South: provider shortages, health literacy, stigma associated with seeking HIV care, treatment and prevention
- Using data to direct public health and policy responses
- Using data to improve response to emerging outbreaks
- Focusing resources to address inequities, especially among Hispanic and Black MSM, transgender women and men, Black women, and people who inject drugs
- Promoting the use of local data to guide evidence-based responses to local epidemics
Translating epidemiology to improvements in public health

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HIV And Women in the USA: What We Know And Where to Go From Here

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Distribution of HIV Among US Women

- **Incidence** of new HIV diagnoses ↓ among US cis women overall (21% from 2010-2016); Black (↓ 25%) and Hispanic (↓ 20%).
- **2018 prevalence** estimates for trans women (14%) vary by race: Black 44%, Hispanic 25%
- Marked **disparities** exists, with links between race, geography, poverty, and HIV
  - Per CDC: 93% of the 4900 new infections among Black women in 2016 would not have occurred if HIV incidence were the same among Black and White women
  - 50% of women with HIV live in the South, 29% in NE; fewer in Midwest and West
- Most (85%) women with HIV acquire it from **sex with men**
  - >50% of infections in women 2010-2015 acquired from sex with men with previous dx
- HIV incidence among women who **inject drugs** has remained relatively stable, but IDU epidemic presents potential for rapid spread to women
HIV Among US Women: A Snapshot

• HIV suppression among women varies by region and, within regions, by race;
  • These **differences reflect** women’s access to care, social and economic forces, and the adequacy and distribution of public health efforts and resources, which in turn result from **political and economic decisions**

• Distinct **subgroups** of women with HIV in the US
  • E.g., those who are of reproductive age, older, or trans women;
  • Each subgroup has unique experiences, challenges, and types and distributions of comorbid conditions

• Among the most frequent and severe **comorbid conditions** among women with HIV in the US are those associated with aging – including obesity, CVD, and neurocognitive impairment; conditions already **more prevalent in rural** areas.
Where to Go From Here

• All clinical trials for prevention and treatment of HIV should enroll cis and trans women, including US women, in sufficient numbers to permit meaningful analysis by sex and gender

• Sustained, high-quality healthcare coverage and universal access to health care

• Unfettered access to behavioral health care, housing, food security, child care, and other supportive services that allow women to exercise agency in their own HIV prevention and care

• Eliminate race, class, and gender inequities; discrimination; and structural violence that have promoted and maintained the distribution of HIV in the US and that will, if unchecked continue to fuel the epidemic in the future
The Persistent and Evolving HIV Epidemic in American Men who Have Sex with Men

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The American HIV Epidemic Disproportionately Affects MSM

- American MSM were first diagnosed with AIDS in 1981, and continue to be the US population with the greatest disease burden
- 69% of new HIV infections in the US in 2018 were among gay and bisexual men
- Of the diagnoses among MSM, 37% were among Black and 30% among Latino MSM
- 25% of those diagnosed with HIV were 13-24 years old; 39% were 25-34 years old.
- New HIV infections are increasing most among younger MSM of color in the US
MSM: Diverse Drivers, but Common Pathways Affecting Risk

• The increased susceptibility of the anal mucosa to HIV transmission and acquisition plus role versatility make MSM at uniquely high risk for HIV.

• Other drivers of HIV transmission are diverse, and include social, structural, network, and individual behavioural factors, requiring multifaceted prevention interventions.

• Growing up in non-affirming environments can lead to internalised stigma and developmental challenges, which can be exacerbated if other adversity occurs (e.g. poverty, childhood abuse, familial exclusion)

• Experiencing societal homophobia and other stressors can lead to depression and other behavioural health concerns, including substance use, which are associated with increased sexual risk taking, decreased engagement in care, and decreased medication adherence, potentiating new transmission cycles
RURAL AMERICA IS HOME TO MANY LGBT PEOPLE

LGBT people are a fundamental part of the fabric of rural communities, working as teachers, ministers, small business owners, and more. For many of these millions of LGBT people, living in a rural community may be just as or more important to their identity as is being LGBT. Rural America is where many LGBT people choose to call home.

MANY REASONS FOR LIVING IN RURAL COMMUNITIES:

- Closeness to family
- Strength of local communities
- Connection to the land
- Rural way of life

STRENGTHS, STRUCTURES, AND CHALLENGES: HOW RURAL LIFE AMPHILIES THE IMPACT OF ACCEPTANCE AND REJECTION

- Increased visibility
  Fewer people in rural communities means any difference is more noticeable.

- Ripple effects
  When communities are tightly interwoven, rejection and acceptance in one area of life (such as church) can ripple over into others (such as work or school).

- Fewer alternatives
  In the face of discrimination, the already limited number of rural service providers can be limited even further.

- Less support structure
  More social and geographic isolation means less ability to find supportive resources, build supportive community, and endure challenges or discrimination.

IMPACTING MANY AREAS OF LIFE:

- Family, Faith, & Community
- Education
- Employment & Economic Security
- Housing & Homelessness
- Public Places & Businesses
- Health Care
- Legal System
Addressing the Diversity of American MSM

• The demographic and gender diversity of MSM require tailored approaches
• The disproportionate HIV epidemic among Black & Latino MSM is potentiated by poverty, racism, partnership dynamics, requiring culturally appropriate programs
• Rural MSM may be socially isolated and need programs that recognize their unique cultural needs.
• Younger MSM may be prone to engage in risk, and more comfortable engaging with digital media, which can create risky, as well as supportive, environments
• Older MSM may need tailored programmes, which can support resilience. Chronic HIV infection may interact with age-associated morbidities
• Transgender MSM have unique health challenges, ranging from obtaining optimal gender-affirmative care to negotiating sex with cisgender MSM
• In the pre-exposure prophylaxis and Undetectable=Untransmissable era, healthcare professionals can play a unique role through supportive, informed care
The Opioid Crisis and HIV in the US: Deadly Synergies

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Steffanie A. Strathdee
Key Findings

- recent HIV outbreaks among PWID have occurred in rural and urban settings where there is limited or no access to HIV prevention interventions
- medication for Opioid Use Disorder (MOUD) is associated with HIV risk reduction but <15% receive MOUD
- syringe services programs (SSPs) decrease HIV transmission and increase entry into care, but barriers to SSPs exist in many areas that have the greatest need
- HIV pre-exposure prophylaxis is recommended for PWID, but few receive it
- fragmented health care, lack of insurance and stigma are barriers to both substance use disorder treatment and HIV prevention interventions
- integrated strategies are required that address comorbid conditions: mental health disorders, prevention and treatment of infectious diseases

HIV Diagnoses Among Women, 2018, USA
CDC. HIV Surveillance in Women. HIV Resource Library.
Recommendations

• Diminish stigma
• Provide comprehensive health insurance for all, including PWID
• Health care, substance use treatment, and harm reduction services must be integrated and easy to access and primary care clinics must be leveraged
• The continued war on drugs that relies on incarceration rather than treatment must end-- evidence-based approaches are required
• The social and structural determinants of health must be addressed
• Root causes of why so many persons have turned to opioids and the use of other substances must be identified and effectively addressed
Insurance coverage and financing landscape for HIV treatment & prevention in the USA

Jennifer Kates, PhD

Co-authors: Lindsey Dawson, Tim H Horn, Amy Killelea, Nicole C McCann, Jeffrey S Crowley, Rochelle P Walensky
• Before the ACA, people with and at risk for HIV faced substantial barriers to health-care access and coverage in the USA

• ACA has led to a drop in uninsurance, but the USA still trails other high-income countries in key HIV-specific metrics, including in viral suppression

• System of HIV care and prevention is a complex patchwork of payers, providers, and financing mechanisms, and coverage varies substantially across the country

• Although the EHE provides new funding, focus, and political will, an uneven playing field in treatment and prevention coverage threatens its progress

• Curbing the national HIV epidemic depends on an uncertain future of health-care financing, care and prevention coverage, and safety-net programmes; curtailing high HIV drug costs; and addressing complex inequalities and stigma/discrimination
HIV Viral Suppression Rate in the U.S. Lowest Among Peer

Rates of Viral Suppression Among People with HIV, by Country, 2018

- Unite...: 84%
- Switzerland: 84%
- Sweden: 83%
- The...: 77%
- Germany: 76%
- Japan: 75%
- France: 74%
- Australia: 74%
- Austria: 74%
- Canada: 70%
- Belgium: 68%
- Unite...: 56%

SOURCE: KFF analysis.
Insurance Coverage Among People with HIV & General Population

Figure 1: Insurance coverage among adults with HIV and the general population in the USA, 2018

Values might not add to 100% due to rounding.
The Role of Medicaid Expansion for People with HIV

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<thead>
<tr>
<th></th>
<th>Non-Expansion State</th>
<th>Medicaid Expansion State</th>
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</thead>
<tbody>
<tr>
<td>Uninsured*</td>
<td>20%</td>
<td>6%</td>
</tr>
<tr>
<td>Medicare + Other</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>Medicaid*</td>
<td>30%</td>
<td>46%</td>
</tr>
<tr>
<td>Private</td>
<td>36%</td>
<td>34%</td>
</tr>
</tbody>
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NOTE: * Coverage rates in Medicaid expansion vs non-expansion states significantly different (p<.001)

Percent of Non-Elderly Adults Uninsured By State, 2019

Health Insurance Coverage of Nonelderly 0-64: Uninsured, 2019

SOURCE: Kaiser Family Foundation’s State Health Facts.
The Lancet HIV in the USA Series
A Call to Action

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Call to Action: A Social Ecological Model of HIV Risk and Vulnerability in the USA

LEVEL 1. INDIVIDUAL-LEVEL FACTORS
- Correlates of viremia
  Mental health, substance use, unstable housing, criminal justice involvement, self stigma, poverty, younger age
- Correlates of acquisition risk
  Status awareness, substance use, low condom use, STI, PrEP adherence

LEVEL 2. NETWORK-LEVEL FACTORS
HIV prevalence in network, viremia, role versatility (MSM), syphilis in network, high levels of association, younger age of network members, rates of acute/recent infection

LEVEL 3. COMMUNITY-LEVEL FACTORS
Stigma (HIV, LGBTQ, intersectional), poverty, racism, level of services provision, enabling environments for prevention, needle and syringe exchange, policing.

LEVEL 4. SOCIAL AND STRUCTURAL-LEVEL FACTORS
Medicaid expansion, illicit drug laws and policies, LGBTQ protections or discrimination, educational policies for HIV, PrEP availability, ARV drug costs

LEVEL 5. EPIDEMIC STAGE
Prevalence, population levels of viremia, force of infection
What Will it Take for EHE to Succeed?

• Although the EHE initiative promises to offer new resources, focus, and political will, uneven treatment and prevention coverage threatens its progress.

• The epidemiology of HIV infections and the epidemiology of prevention access, should drive and focus EHE, including in rural areas and the 7 rural affected states.

• The US HIV epidemic is most severe in the South, which represents 37% of the US population but 51% of people living with HIV and 47% of new HIV diagnoses in the USA in 2018.

• The drivers of HIV transmission are diverse necessitating multifaceted approaches to HIV prevention and engagement in care.

• The ability to curb the national HIV epidemic will require universal access to quality health care, safety net programs, and curtailing high HIV drug costs.
Urgency Required

• Access to PrEP needs to be enhanced and made available at considerably lower cost or at no cost for individuals most in need

• The US must sustain investment in research and development of additional options to ensure a durable end to the epidemic

• Better estimates of HIV diagnoses in transmen and transwomen are still needed to fully depict the impact of HIV in these communities

• Data on the genetic traits of HIV viruses are available to health departments to better understand transmission clusters and improve programmatic responses but should be used with attention to confidentiality and human rights

• To end HIV in the USA and globally, a vaccine or a curative strategy, or both, are needed: HIV research efforts must be sustained by the next generation of researchers, advocates, funders, and other stakeholders
Thank You

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