The HIV/AIDS Epidemic in the United States: The Basics

Key Facts

- The first cases of what would later become known as AIDS were reported in the United States in June of 1981.1 Today, there are more than 1.1 million people living with HIV and more than 700,000 people with AIDS have died since the beginning of the epidemic.2,3
- HIV continues to have a disproportionate impact on certain populations, particularly racial and ethnic minorities and gay and bisexual men and other men who have sex with men.5,6
- HIV testing is important for both treatment and prevention efforts. Yet, 14% of those infected with HIV are unaware they are infected.7
- Antiretroviral therapy (ART) has substantially reduced AIDS-related morbidity and mortality and improved long-term outcomes for people with HIV. Treatment guidelines recommend initiating treatment as soon as one is diagnosed with HIV.8 According to the U.S. Centers for Disease Control and Prevention (CDC), when an individual living with HIV is on antiretroviral therapy and the level of HIV in their body is undetectable, there is “effectively no risk” of sexual transmission.9 Still, many people with HIV are not in care, on treatment, or have their virus under control.10
- Numerous federal and local government departments and agencies are involved in the domestic HIV/AIDS response, which together provide disease surveillance, prevention, care, support services, and health insurance coverage. Additionally, the private sector and community-based organizations, provide services for people with HIV and those at risk for HIV.

Overview

- As people are living longer with the disease, new infections continue to occur, and diagnoses surpass deaths each year, more people are living with HIV than ever before.11,12
- There have been some promising trends, as the number of new HIV infections declined 8% between 2010 and 2015. Still, 38,500 people were newly infected with HIV in the U.S. in 2015, and infections have increased among some populations.13

Box 1: Key Snapshot of the U.S. Epidemic

- Number of new HIV infections: 38,500
- Number of people living with HIV: 1.1+ million
- Percent of people infected with HIV who don’t know it: 14%
- Percent of people with HIV who are virally suppressed: 51%
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- HIV-related mortality rates, which rose steadily through the 1980s and peaked in 1995, have declined significantly; the age-adjusted HIV death rate has dropped by more than 80% since its peak. This is largely due to ART, but also to decreasing HIV incidence after the 1980s. Still, more 6,000 people died of HIV/AIDS in 2016. While HIV is not a leading cause of death for Americans overall, it remains a leading cause of death for certain age groups – in 2016, HIV was the 9th leading cause of death for those ages 25-34, and for those ages 35-44.

- HIV transmission patterns have shifted over time. In 2017, most newly diagnosed cases of HIV occurred through male-to-male sexual contact (66%). An additional 3% of diagnoses occurred among gay and bisexual men with a history of injection drug use. Diagnoses attributable to injection drug use alone have declined significantly over time and accounted for 6% of new diagnoses in 2017. Transmission through heterosexual sex now accounts for more cases than at the beginning of the epidemic – 24% of new diagnoses in 2017 – but diagnoses attributable to heterosexual sex have declined 16% between 2012 and 2017.

- HIV testing is important for both treatment and prevention efforts and rapid testing is now much more widely available. Yet, as of 2015 14% of those infected with HIV are unaware they are infected. Routine HIV testing is recommended for all people ages 13-64, and several recent policies have expanded health insurance coverage of HIV testing.

- Current U.S. HIV treatment guidelines recommend initiating ART as soon as one is diagnosed with HIV, and new research (including the Strategic Timing of Antiretroviral Treatment study or START) has underscored the importance of starting treatment early. Engaging in treatment early and consistently affords individuals with HIV the best possible care outcomes.

- Further, recent research has confirmed the preventive benefits of treatment; when an individual with HIV is consistently engaged with antiretroviral therapy and the level of HIV in their body is undetectable, there is effectively no risk of sexual transmission.

- However, looking across the spectrum from HIV diagnosis to viral suppression reveals missed opportunities for addressing the epidemic. According to the Centers for Disease Control and Prevention (CDC), while many people with HIV are diagnosed (86%), far fewer receive medical care (63%), and fewer still are virally suppressed (51%). Viral suppression is greater among those who are in medical care.

Impact Across the Country

- Although HIV has been reported in all 50 states, the District of Columbia, and U.S. dependencies, the impact of the epidemic is not uniformly distributed.

- Ten states accounted for about two-thirds (64%) of HIV diagnoses among adults and adolescents in 2017 (Table 1). Regionally, the South accounted for about half of HIV diagnoses in 2017.

- Rates of HIV diagnoses per 100,000 provide a different measure of the epidemic’s impact, since they reflect the concentration of diagnoses after accounting for differences in population size across states. The District of Columbia has the highest rate in the nation, compared to states, nearly 4 times the national rate (Table 1). Eight of the top 10 states by rate are in the South.
New HIV diagnoses are concentrated primarily in large U.S. metropolitan areas (80% in 2017), with Miami, Orlando, and Atlanta topping the list of the areas most heavily burdened.36

<table>
<thead>
<tr>
<th>State</th>
<th>New HIV Diagnoses, Number (%)</th>
<th>State/Area</th>
<th>New HIV Diagnoses, per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>4,800 (12%)</td>
<td>District of Columbia</td>
<td>46.3</td>
</tr>
<tr>
<td>California</td>
<td>4,500 (12%)</td>
<td>Georgia</td>
<td>24.9</td>
</tr>
<tr>
<td>Texas</td>
<td>4,364 (11%)</td>
<td>Florida</td>
<td>22.9</td>
</tr>
<tr>
<td>New York</td>
<td>2,772 (7%)</td>
<td>Louisiana</td>
<td>22.1</td>
</tr>
<tr>
<td>Georgia</td>
<td>2,595 (7%)</td>
<td>Maryland</td>
<td>17.0</td>
</tr>
<tr>
<td>North Carolina</td>
<td>1,315 (3%)</td>
<td>Nevada</td>
<td>16.5</td>
</tr>
<tr>
<td>Illinois</td>
<td>1,265 (3%)</td>
<td>Texas</td>
<td>15.4</td>
</tr>
<tr>
<td>New Jersey</td>
<td>1,109 (3%)</td>
<td>Mississippi</td>
<td>14.3</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>1,094 (3%)</td>
<td>South Carolina</td>
<td>14.3</td>
</tr>
<tr>
<td>Louisiana</td>
<td>1,033 (3%)</td>
<td>New York</td>
<td>14.0</td>
</tr>
<tr>
<td>Subtotal</td>
<td>27,847 (72%)</td>
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</tr>
<tr>
<td>U.S. Total</td>
<td>38,739 (100%)</td>
<td>U.S. Rate</td>
<td>11.8</td>
</tr>
</tbody>
</table>

NOTES: Mississippi’s new HIV diagnosis rate for 2017 was 14.34, and South Carolina’s new HIV diagnosis rate for 2017 was 14.29. Table includes data on HIV diagnoses among adults and adolescents and reflects data from U.S. dependent areas.

SOURCE: CDC. HIV Surveillance Report, Diagnoses of HIV Infection in the United States and Dependent Areas, 2017, Vol. 29; November 2018. HIV diagnosis data are estimates from 50 states, the District of Columbia, and 6 U.S. dependent areas. Estimates for 2017 are preliminary and are not included in trend calculations.

Impact on Racial and Ethnic Minorities

- Racial and ethnic minorities have been disproportionately affected by HIV/AIDS since the beginning of the epidemic, and represent the majority of new HIV diagnoses, people living with HIV disease, and deaths among people with HIV.37,38
- Blacks and Latinos account for a disproportionate share of new HIV diagnoses, relative to their size in the U.S. population (see Figure 1).39,40 Blacks also account for more people living with HIV than any other racial group – an estimated 468,800 of the more than 1.1 million people living with HIV in the U.S. are black.41
- Blacks also have the highest rate of new HIV diagnoses, followed by Latinos – in 2017, the rate of new HIV diagnoses per 100,000 for Blacks (41.1) was about 8 times that of whites (5.1); Latinos (16.1) had a rate 3 times that of whites.42
- Blacks accounted for close to half (43%) of deaths among people with an HIV diagnosis in 2016.43
- Survival after an AIDS diagnosis is lower for Blacks than for most other racial/ethnic groups, and Blacks have had the highest age-adjusted death rate due to HIV disease throughout most of the epidemic.44,45 HIV ranks higher as a cause of death for Blacks and Latinos, compared with whites.46
  Further, HIV was the 5th leading cause of death for Black women ages 35-44 in 2016.47
Impact on Women

- More than 256,500 women are living with HIV in the U.S.\(^48\)
- Between 2010 and 2015, HIV incidence among women decreased 21%.\(^49\)
- Women of color are particularly affected, and in 2017, Black women accounted for 6 in 10 (59%) of new HIV diagnoses among women; white women accounted for 20% and Latinas accounted for 16%.\(^50\)

Impact on Young People

- Teens and young adults continue to be at risk, with those under 35 accounting for 56% of new HIV diagnoses in 2017 (those ages 13-24 accounted for 21% and those ages 25-34 accounted for 35%).\(^51\)
- Most young people are infected sexually.\(^52\)
- Among young people, gay and bisexual men and minorities have been particularly affected.\(^53\)
- Perinatal HIV transmission, from an HIV-infected mother to her baby, has declined significantly in the U.S., largely due to increased testing efforts among pregnant women and ART which can prevent mother-to-child transmission.\(^54,55,56\)
- A recent survey of young adults (18-30) found that HIV remains a concern for young people, especially for young people of color.\(^57\)

Impact on Gay and Bisexual Men

- While estimates show that gay and bisexual men comprise only about 2% of the U.S. population,\(^58\) male-to-male sexual contact accounts for most new HIV infections (68% in 2015, with an additional 3%
occurring in gay and bisexual men with a history of injection drug use) and most people living with HIV (56% in 2015, with an additional 5% occurring in gay and bisexual men with a history of injection drug use).59,60,61

- Annual new infections among gay and bisexual men overall and among Black gay and bisexual men have remained stable in recent years. However, there have been increases among certain groups of gay and bisexual men, including Latinos and young males 25-34.62

- Blacks accounted for the largest number of new diagnoses (10,069) among gay and bisexual men in 2017, followed by whites (7,607).63 Additionally, according to a recent study, Black gay and bisexual men were found to be at a much higher risk of being diagnosed with HIV during their lifetimes compared with Latino and white gay and bisexual men.64 Young Black gay and bisexual men are at particular risk – Black gay and bisexual men ages 20-29 accounted for 52% of new diagnoses.65

- A study in 20 major U.S. cities found that about 1 in 5 (22%) men who have sex with men is living with HIV, and, of those, 1 in 4 are unaware of their infection.56 Prevalence among Blacks was higher (36%) and awareness of infection was lower (67%), compared with men who have sex with men in the study overall.67

The U.S. Government Response

- In FY 2017, U.S. federal funding to combat HIV totaled $32.8 billion, of which $26.3 billion was for domestic HIV efforts; of the funds dedicated to the domestic epidemic, the largest share ($19.6 billion) was for care, $3.0 for cash and housing assistance, $2.7 billion for research, and $0.9 for prevention.68

- Numerous federal departments and agencies are involved in the domestic HIV/AIDS response and key government programs that provide health insurance coverage, care, and support to people with HIV in the U.S. include Medicaid, Medicare, the Ryan White HIV/AIDS Program, and the Housing Opportunities for Persons with HIV/AIDS Program (HOPWA). Social Security’s income programs for those who are disabled (SSI and SSDI) are important sources of support. The Centers for Disease Control and Prevention (CDC) leads U.S. surveillance and prevention activities, which are carried out in conjunction with state and local health departments. In addition to government efforts, a wide range of community and other organizations provide services for people with HIV and those at risk for HIV.

- The passage of the Affordable Care Act (ACA) in March 2010 provided new opportunities for expanding health care access, prevention, and treatment services for millions of people in the U.S., including many people with or at risk for HIV. Importantly, for people living with HIV, there also new protections in the law that make access to health coverage more equitable. In particular, the expansion of the Medicaid program (in states that have elected to expand their programs) has been an important source of new coverage for people with HIV.69 There are also new opportunities in the private market, through the creation of health insurance marketplaces with subsidies available to those on low and moderate incomes. The law also included non-discrimination policies, including a prohibition on rate setting tied to health status, elimination of preexisting condition exclusions, and an end to lifetime and annual caps.70,71
Endnotes

1 CDC. MMWR, Vol. 30, No. 21; June 1981.
3 CDC. HIV Surveillance Report, Diagnoses of HIV Infection in the United States and Dependent Areas, 2017. Vol. 29; November 2018. HIV diagnosis data are estimates from 50 states, the District of Columbia, and 6 U.S. dependent areas. Estimates for 2017 are preliminary and are not included in trend calculations.
5 CDC. HIV Surveillance Report, Diagnoses of HIV Infection in the United States and Dependent Areas, 2017. Vol. 29; November 2018. HIV diagnosis data are estimates from 50 states, the District of Columbia, and 6 U.S. dependent areas. Estimates for 2017 are preliminary and are not included in trend calculations.
8 DHHS. Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents Living with HIV; updated October 2018.
9 CDC. HIV Treatment as Prevention; updated November 2018.
12 CDC. HIV Surveillance Report, Diagnoses of HIV Infection in the United States and Dependent Areas, 2017. Vol. 29; November 2018. HIV diagnosis data are estimates from 50 states, the District of Columbia, and 6 U.S. dependent areas. Estimates for 2017 are preliminary and are not included in trend calculations.
14 CDC. NCHS. Health, United States, 2017; September 2018.
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18 CDC. HIV Surveillance Report, Diagnoses of HIV Infection in the United States and Dependent Areas, 2017. Vol. 29; November 2018. HIV diagnosis data are estimates from 50 states, the District of Columbia, and 6 U.S. dependent areas. Estimates for 2017 are preliminary and are not included in trend calculations.
19 CDC. HIV Surveillance—Epidemiology of HIV Infection (through 2017); November 2018.
20 CDC. HIV Surveillance Report, Diagnoses of HIV Infection in the United States and Dependent Areas, 2017. Vol. 29; November 2018. HIV diagnosis data are estimates from 50 states, the District of Columbia, and 6 U.S. dependent areas. Estimates for 2017 are preliminary and are not included in trend calculations.
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22 CDC. *HIV Surveillance Report, Diagnoses of HIV Infection in the United States and Dependent Areas, 2017*, Vol. 29; November 2018. HIV diagnosis data are estimates from 50 states, the District of Columbia, and 6 U.S. dependent areas. Estimates for 2017 are preliminary and are not included in trend calculations.


26 DHHS. *Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents*; updated October 2018.

27 AIDSinfo, *Statement by the HHS Panel on Antiretroviral Guidelines for Adults and Adolescents Regarding Results from the START and TEMPRANO Trials*; July 2015.

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36 CDC. *HIV Surveillance Report, Diagnoses of HIV Infection in the United States and Dependent Areas, 2017*, Vol. 29; November 2018. HIV diagnosis data are estimates from 50 states, the District of Columbia, and 6 U.S. dependent areas. Estimates for 2017 are preliminary and are not included in trend calculations.

37 CDC. *HIV Surveillance Report, Diagnoses of HIV Infection in the United States and Dependent Areas, 2017*, Vol. 29; November 2018. HIV diagnosis data are estimates from 50 states, the District of Columbia, and 6 U.S. dependent areas. Estimates for 2017 are preliminary and are not included in trend calculations.


39 CDC. *HIV Surveillance Report, Diagnoses of HIV Infection in the United States and Dependent Areas, 2017*, Vol. 29; November 2018. HIV diagnosis data are estimates from 50 states, the District of Columbia, and 6 U.S. dependent areas. Estimates for 2017 are preliminary and are not included in trend calculations.

40 KFF. State Health Facts; accessed December 2018.

42 CDC. HIV Surveillance Report, Diagnoses of HIV Infection in the United States and Dependent Areas, 2017, Vol. 29; November 2018. HIV diagnosis data are estimates from 50 states, the District of Columbia, and 6 U.S. dependent areas. Estimates for 2017 are preliminary and are not included in trend calculations.

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52 CDC. Slide Set: HIV Surveillance – Adolescents and Young Adults (through 2017).

53 CDC. Slide Set: HIV Surveillance – Adolescents and Young Adults (through 2017).


57 KFF. National Survey of Young Adults on HIV/AIDS; November 2017.

58 KFF analysis of CDC data.

59 CDC. HIV in the United States: At a Glance; December 2018.


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