Overview of the HIV Epidemic: What Do the Data Say?

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PACHA

Ending the HIV Epidemic

Understanding the Impact of HIV: Diagnoses, Incidence, and Prevalence

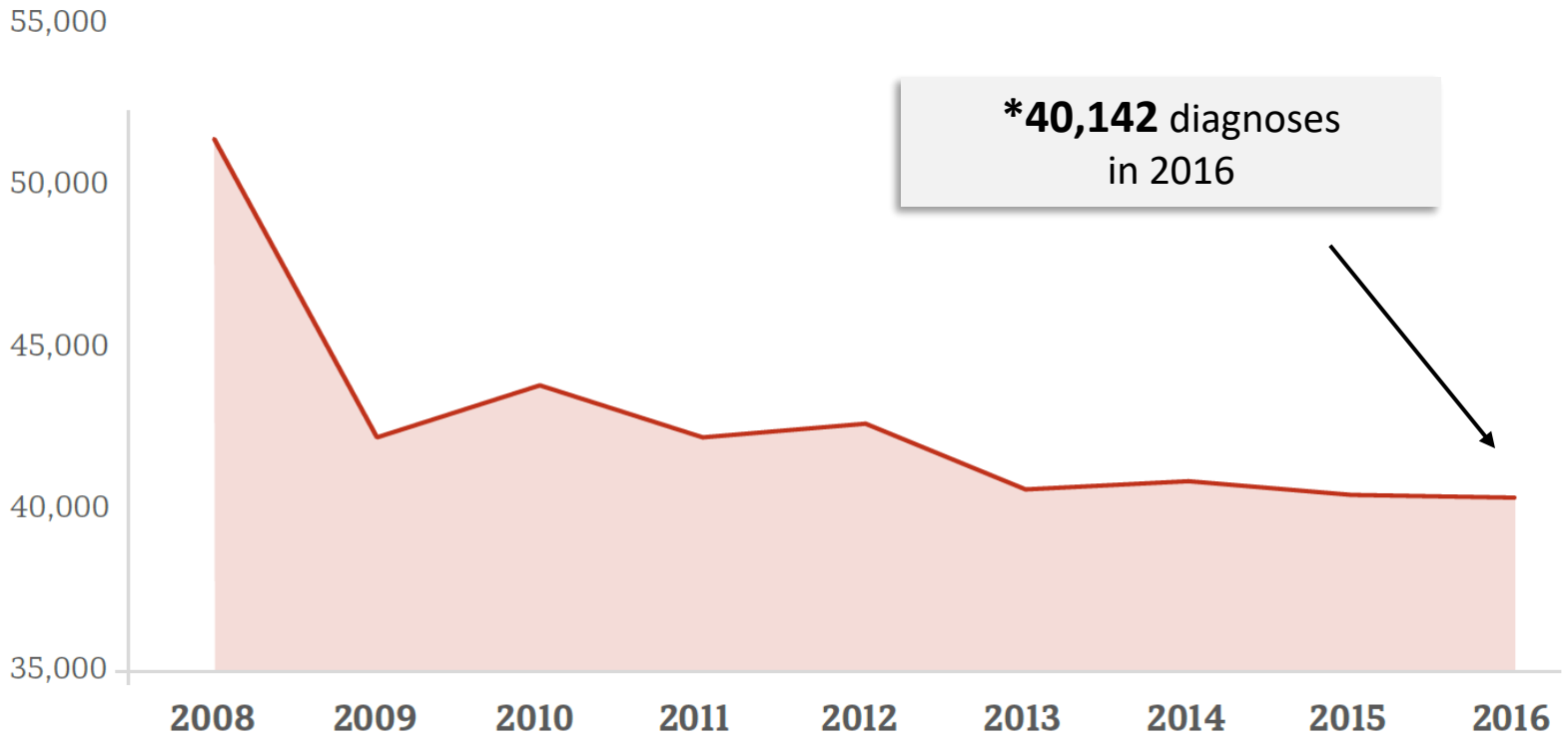
National HIV surveillance data are critical for tracking progress against HIV and informing the development, implementation, and evaluation of prevention and treatment programs. To use these data, it's critical to understand three related, but distinct, concepts: HIV diagnoses, incidence, and prevalence.

	HIV Diagnoses	HIV Incidence	HIV Prevalence
What question does it address?	How many people have received an HIV diagnosis?	How many new HIV infections have occurred, both diagnosed and undiagnosed?	How many people are living with HIV?
Definition	The number of people who have received an HIV diagnosis in a given time period, regardless of when they were first infected	The estimated number of people newly infected with HIV in a given time period, whether or not they have been diagnosed	The estimated number of people with HIV alive at a given time, regardless of when they were infected or whether they have received a diagnosis

https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-understanding-the-impact-of-HIV-Diagnoses.pdf

Diagnoses

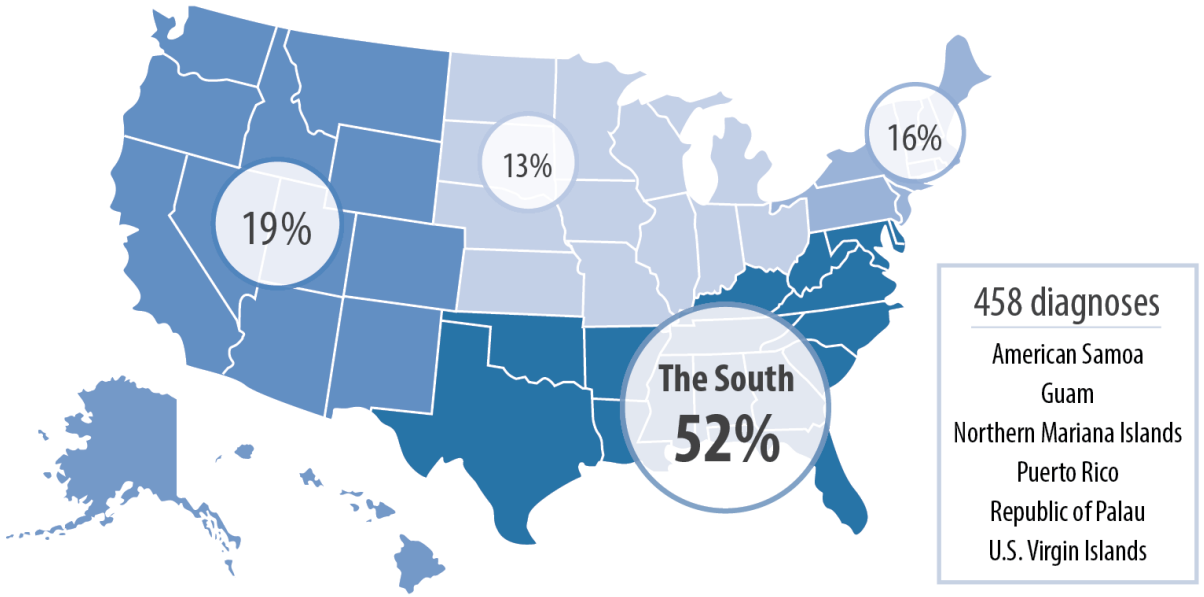
NEW HIV DIAGNOSES HAVE DECLINED SUBSTANTIALLY BUT PROGRESS IS STALLED

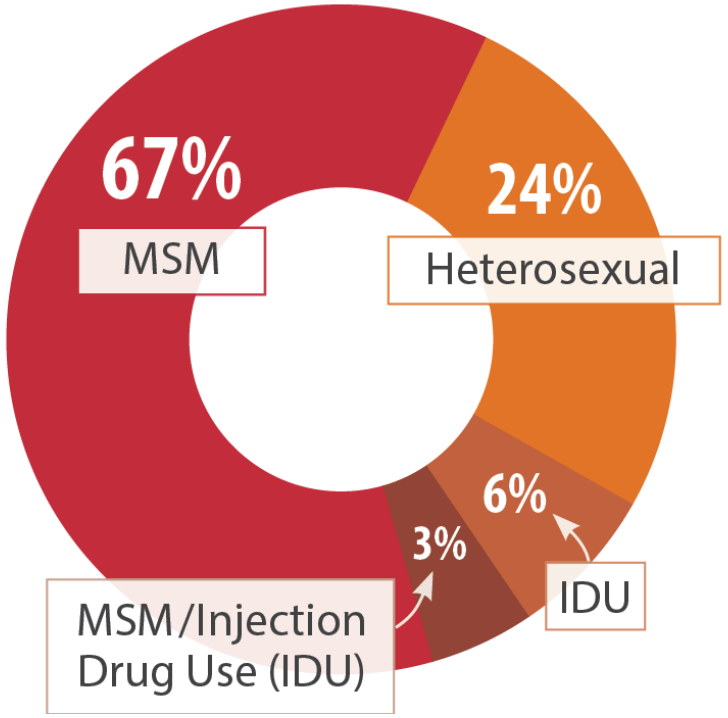


*Data includes diagnoses from the US and 6 dependent areas
Source: https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2017-vol-29.pdf

HIV DISPROPTIONATELY AFFECTS GROUPS

Percentage of HIV Diagnoses in 2017



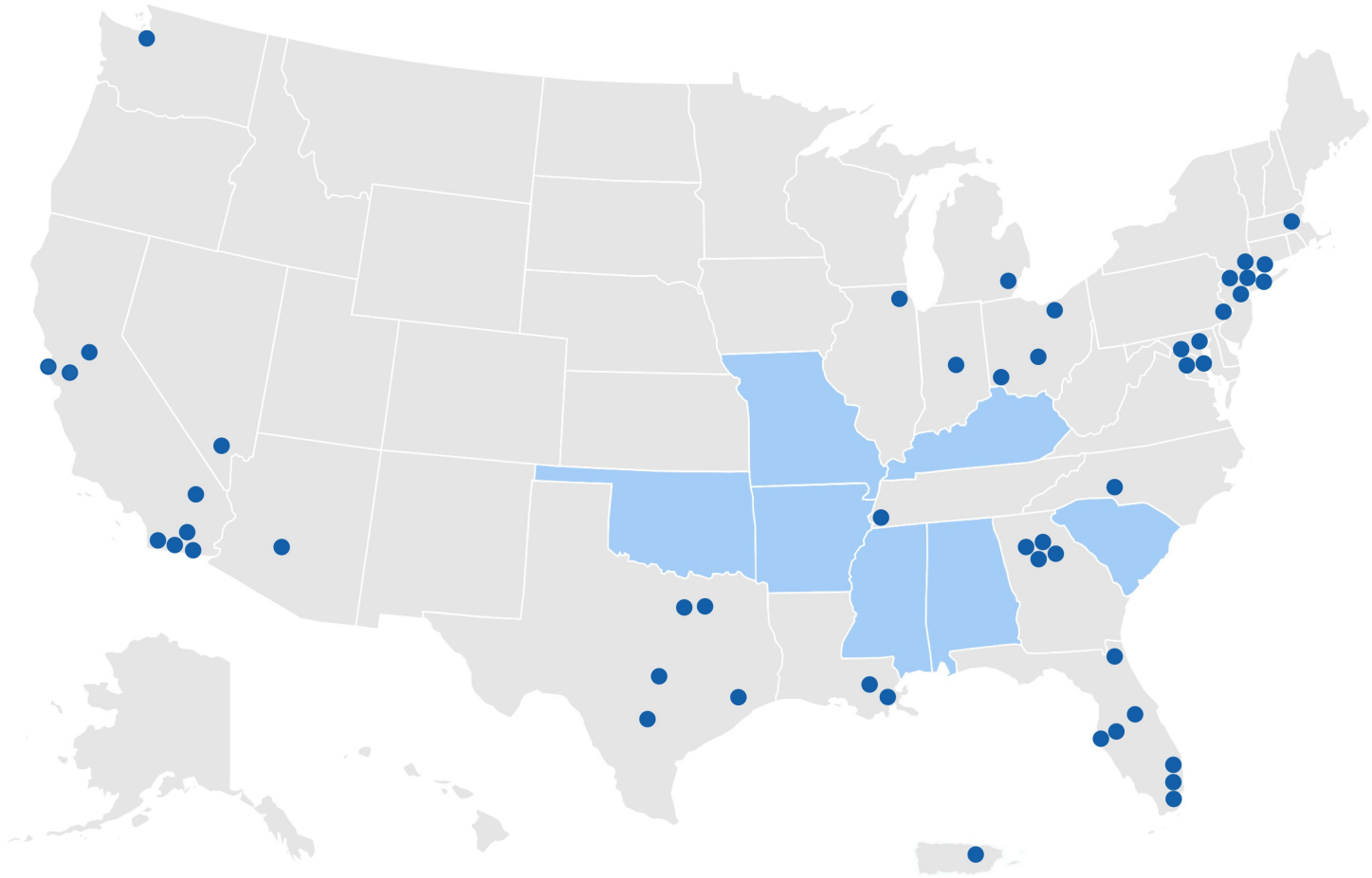


African Americans account for 44% of HIV diagnoses, but comprise only 13% of U.S. population

From 2012-2016, HIV diagnoses among **American Indians/ Alaska Natives** increased 34%

https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2017-vol-29.pdf
**Data for the year 2017 are preliminary and based on 6 months reporting delay

48 COUNTIES, 7 STATES WITH SUBSTANTIAL RURAL BURDEN, DC AND SAN JUAN ACCOUNT FOR 50% OF NEW DIAGNOSES



Data on burden of HIV in the US shows areas where HIV transmission occurs more frequently. More than 50% of new HIV diagnoses* occurred in only 48 counties, Washington DC and 1 municipality in San Juan, Puerto Rico. In addition, 7 states have a substantial rural burden – with over 75 cases and 10% or more of their diagnoses in rural areas.

*2016-2017 data

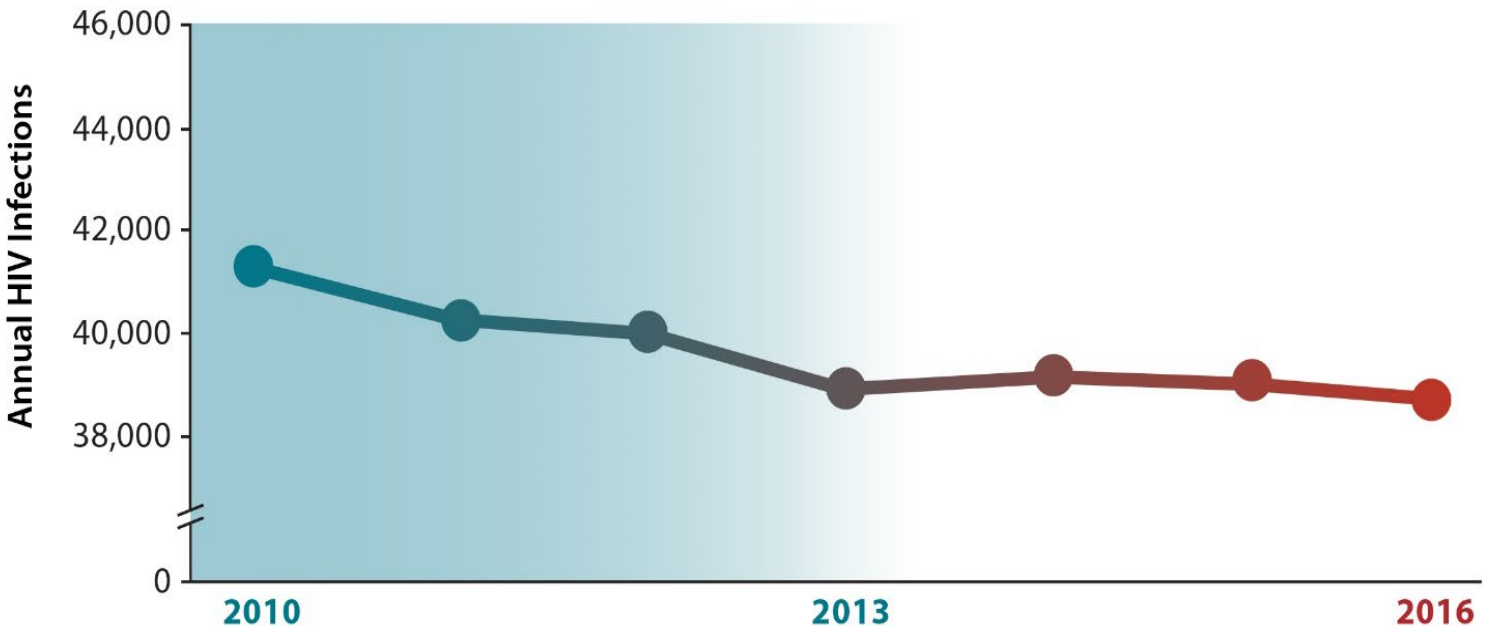
Incidence

HIV INFECTIONS STARTED TO STABILIZE IN 2013

MAJOR PROGRESS

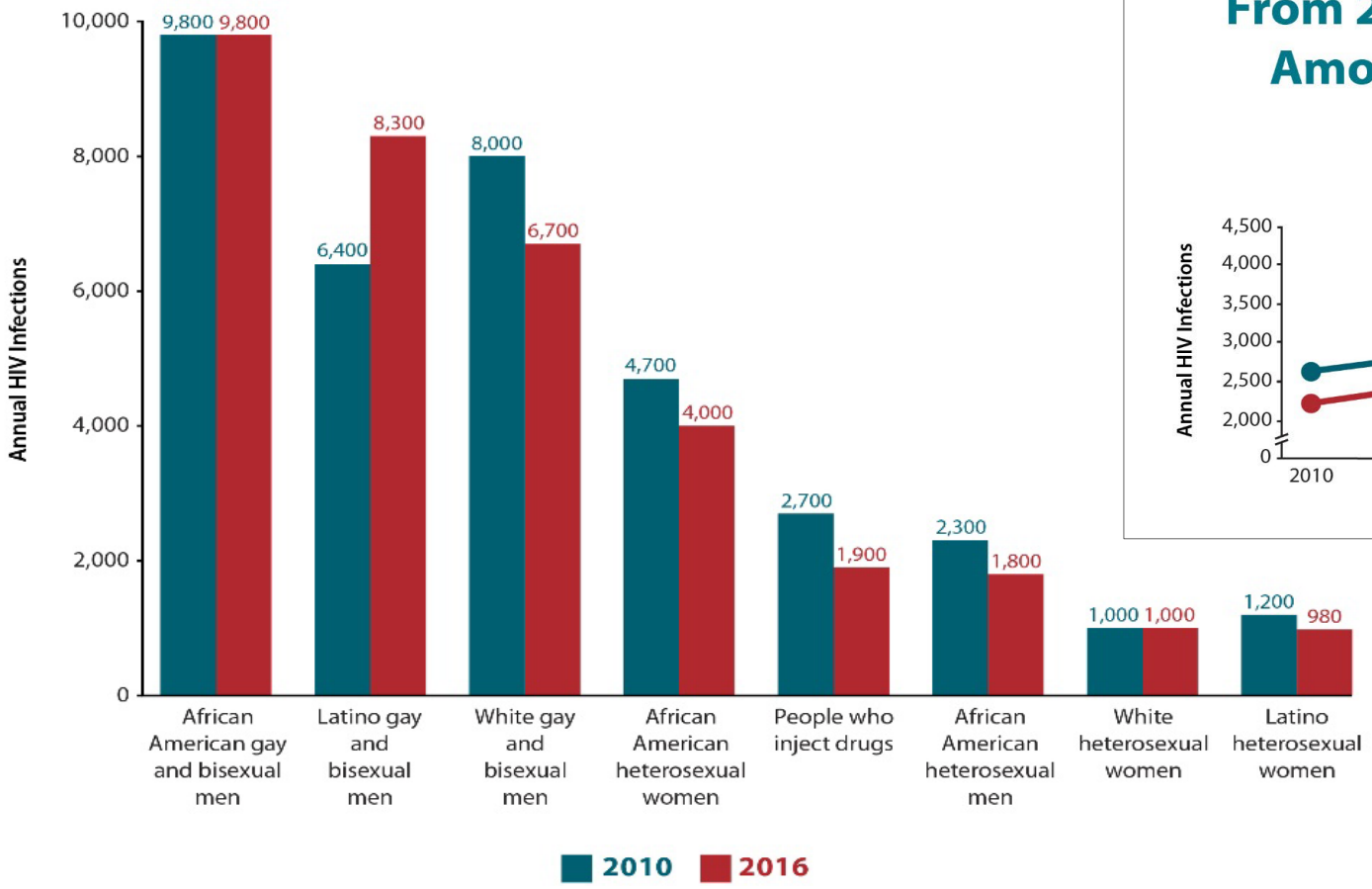
1980s
peak incidence near 130,000 annually

1985 - 2012
interventions have driven infections down to <50,000 annually

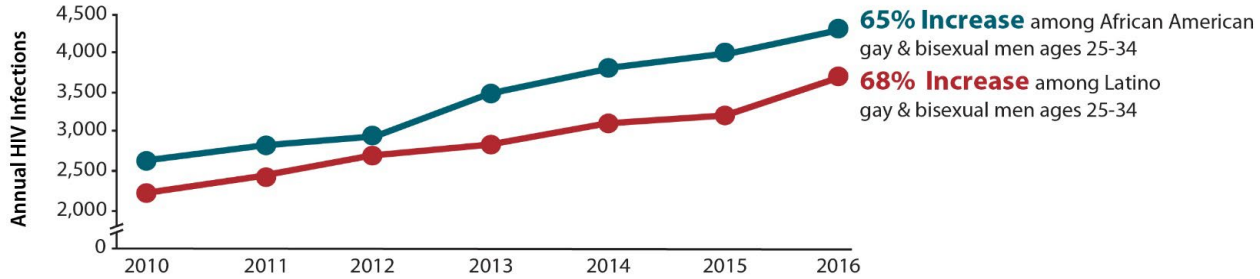


PREVENTION AND TREATMENT NOT REACHING THOSE WHO COULD BENEFIT MOST

New HIV Infections by Race and Transmission Group, U.S. 2010 vs. 2016



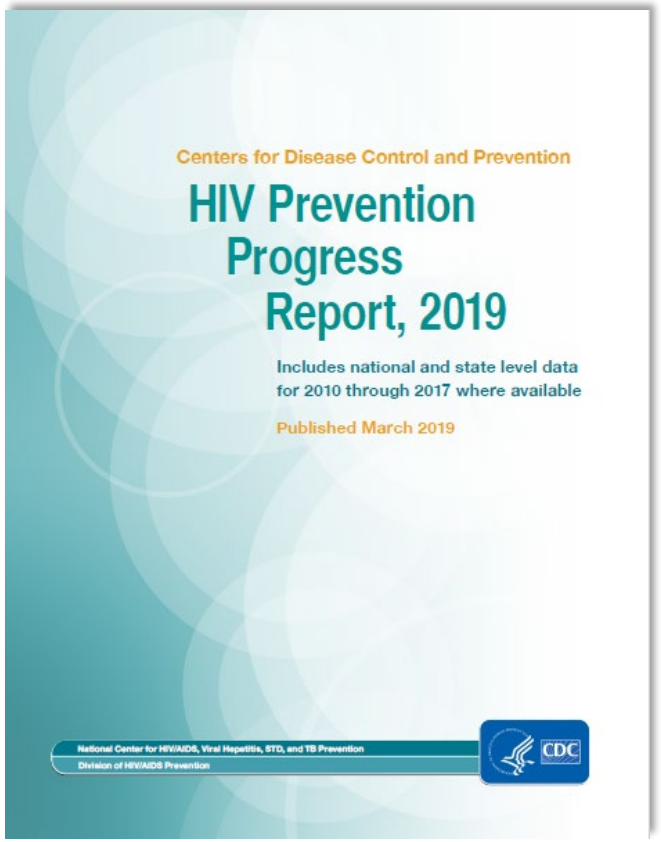
From 2010-2016 Annual HIV Infections Increased Among Latino and African American Gay and Bisexual Men Ages 25-34



National and State Progress

HIV Prevention Progress Report (HPR) 2019

- First time that CDC has produced a report that includes both national and state level indicators
- Reports on progress of 21 key HIV prevention and care indicators
- Reflects DHAP Strategic Plan and national indicator reporting activities
  - NHAS 2020, HP 2020, GPRA, UNAIDS
- Includes 7 state level indicators (where available) for 50 states and District of Columbia



National Progress: Summary Indicator Status

- Met Target - 8 indicators (38%)
- Progress - 9 indicators (43%)
- No progress - 4 indicators (19%)

✓	Reduce disparities: New HIV diagnoses—Black females
	Increase viral suppression
	Reduce disparities: Viral suppression—Youth
	Reduce disparities: Viral suppression—Transgender women in care
	Reduce risk behaviors among Young MSM
	Reduce high-risk sex among persons with HIV
	Increase PrEP prescription
	Reduce death rate
→	Reduce new HIV infections
	Increase knowledge of HIV+ status
	Reduce new HIV diagnoses
	Reduce disparities: New HIV diagnoses—MSM
	Reduce disparities: New HIV diagnoses—Young black MSM
	Increase linkage to HIV medical care
	Increase retention in care
	Reduce disparities: Viral suppression—Persons who inject drugs
	Reduce high-risk sex among MSM
✗	Reduce disparities: HIV diagnoses—Southern United States
	Reduce non-sterile injection
	Reduce homelessness
	Reduce HIV stigma

HPR PrEP Indicator

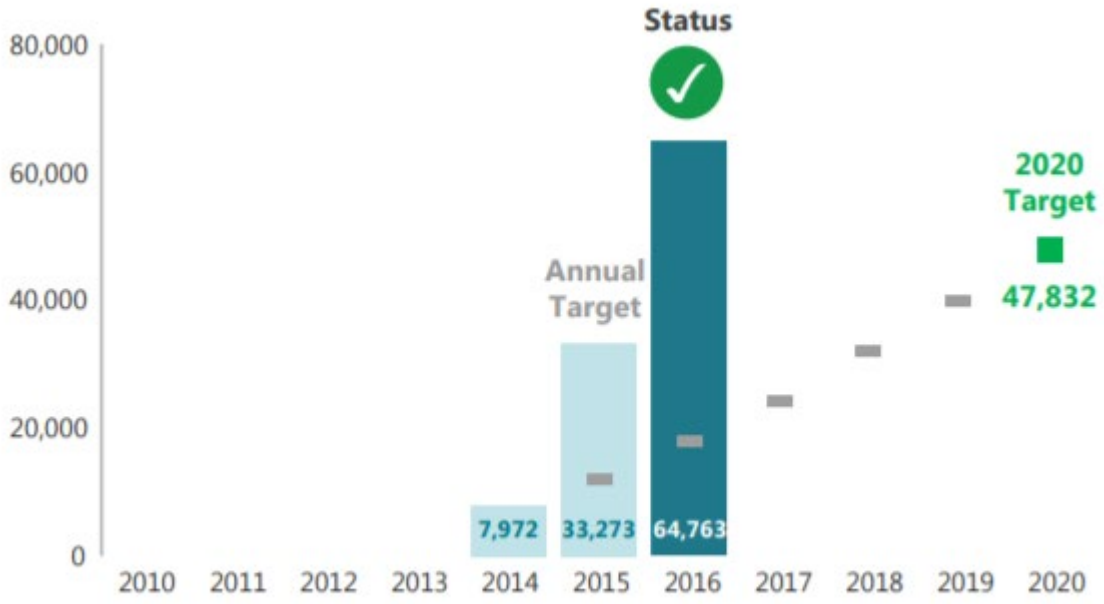
By 2020, increase the number of persons prescribed pre-exposure prophylaxis (PrEP) by at least 500 percent

National Progress

In 2016, there were 64,763 persons who were prescribed PrEP.

The 2016 target (17,937) for persons prescribed PrEP was **exceeded.**

The 2020 target (47,832) **has been met.**



Source: MarketScan® Commercial Claims and Encounter Database (IBM Watson Health); **Baseline:** 2014

PrEP use has increased among gay and bisexual men at risk for HIV between 2014-2017

Increase in PrEP **USE** among MSM

6% to 35%

Increase in PrEP **AWARENESS** among MSM

60% to 90%

HIV HAS COST AMERICA TOO MUCH FOR TOO LONG

700,000

American lives lost to HIV since 1981

$20 billion

Annual direct health expenditures by U.S. government for HIV prevention and care

Without intervention and despite substantial progress another

400,000

Americans will be newly diagnosed over 10 years despite the available tools to prevent infection

Ending the HIV Epidemic

Now is the time to end the HIV epidemic

We have access to the most powerful HIV treatment and prevention tools in history and new technology that allows us to pinpoint where infections are spreading most rapidly.

By equipping all communities at risk with these tools, we can end HIV in America.