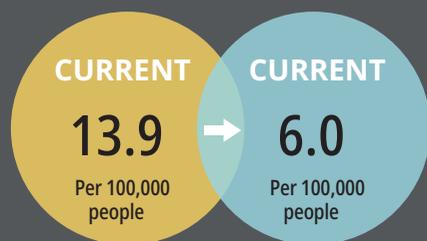


HEALTH INDICATOR 14: HIV DIAGNOSIS RATE

DESIRED RESULT: IMPROVE SEXUAL HEALTH



DEFINITION

Number of new HIV diagnoses per 100,000 population

DETAILS

Not Applicable

NC HIV DIAGNOSIS RATE (2018)

13.9 per 100,000 people

2030 TARGET

6.0 per 100,000 people

RANGE AMONG NC COUNTIES

0 - 29.6 per 100,000 people

RANK AMONG STATES

40th*

DATA SOURCE

NC Division of Public Health, Epidemiology Section

STATE PLANS WITH SIMILAR INDICATORS

Not Applicable

*Rank of 1st for state with lowest HIV diagnosis rate

Rationale for Selection:

Human Immunodeficiency Virus (HIV) remains a deadly disease if left untreated. Newly diagnosed HIV infection rates manifest extremely high disparities among men who have sex with men and African Americans. These disparities identify opportunities to improve access to prevention, care and treatment, which can end HIV transmission and associated deaths.^{RR}

Context

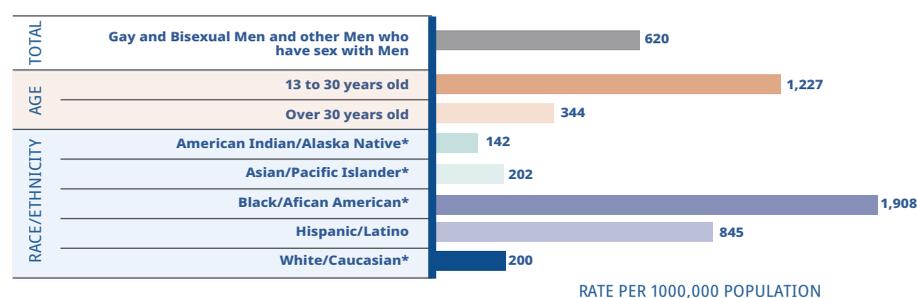
HIV is a virus that affects the immune system's ability to defend itself, with deadly consequences if left untreated. North Carolina's HIV diagnosis rate has been decreasing, and in 2018 the rate was 13.9 per 100,000 people, which is slightly lower than the national rate of 14.6 per 100,000 people.¹²⁰ The primary mechanisms through which the virus is spread are sexual contact and injection drug use.¹²¹ Once contracted, the virus can have lifelong physical and psychological impacts, and increases the risk of negative health outcomes such as AIDS, cancer, tuberculosis, and other infectious diseases.¹²² Pregnant women living with HIV who are not suppressed on antiretroviral therapy are at risk of passing it to their babies during delivery or breastfeeding.^{122,123}

While no cure exists at this time, advances in HIV antiretroviral medications make it possible for persons living with HIV to live largely normal lives and prevent transmission of the virus to others.¹²² However, treatment remains expensive, costing an estimated \$478,000 for lifelong care.¹²⁰ Recent advances have led to the development of pre-exposure prophylaxis (PrEP), a daily medication that reduces the risk of HIV transmission by 99% through sexual contact or 74% through injecting drug use if taken as directed.¹²⁴ Expanded access to and use of treatment and prevention medications can control the spread of HIV and drastically reduce diagnosis rates.

Individuals may be fearful of being tested or of disclosing their status to friends, family members, and current or future sexual partners due to social stigma surrounding the disease or the exposure risk and the level of social stigma varies by cultural and religious background.¹²⁵ People may also be unaware that they have been exposed to or are living with HIV, since individuals can remain asymptomatic for months to years after initial infection.¹²⁶

FIGURE 25

Estimated HIV Infection Rates among Newly Diagnosed Adult and Adolescent (13 years and older) Gay and Bisexual Men and Other Men who have Sex with Men in North Carolina, 2018



*Non-Hispanic

Source: 2018 North Carolina HIV/STD/Hepatitis Surveillance Report. North Carolina Department of Health and Human Services, Division of Public Health, HIV/STD/Hepatitis Surveillance Unit. https://epi.dph.ncdhhs.gov/cd/stds/figures/factsheet_HIV_2018.pdf

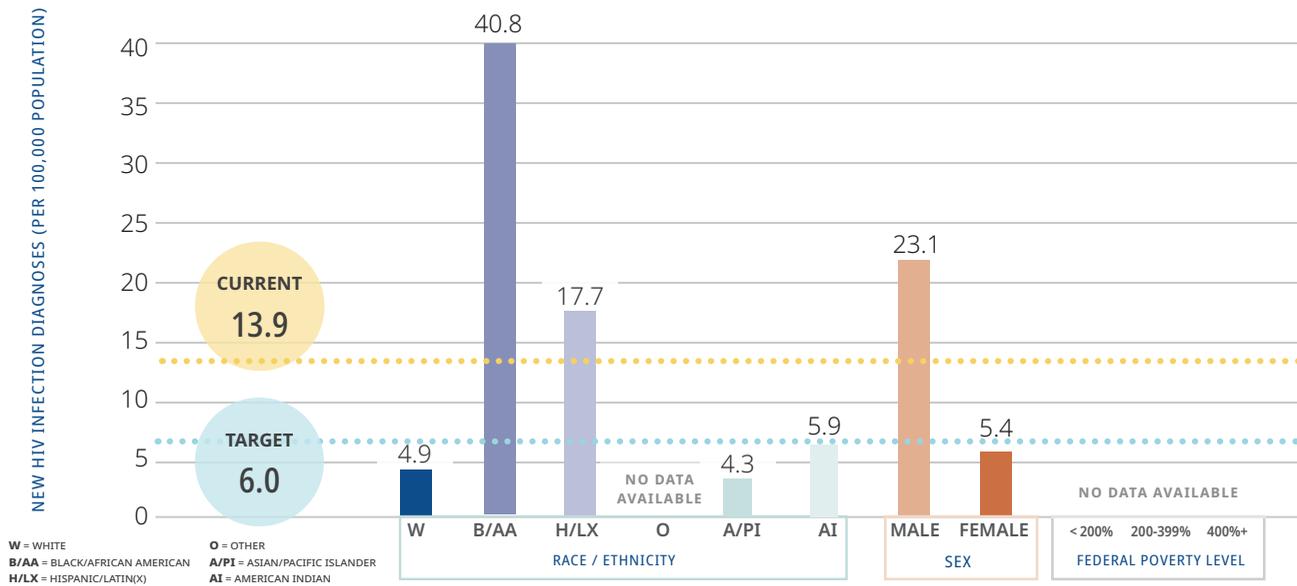
^{RR}It is important to note that the HIV diagnosis rate would decrease with decreased testing, yet that is not an acceptable means to decrease diagnoses. Healthy sexual behaviors, increased testing, and proper treatment are important methods for decreasing transmission of the virus.

HEALTH INDICATOR 14: HIV DIAGNOSIS RATE

DESIRED RESULT: IMPROVE SEXUAL HEALTH

FIGURE 26

HIV rate across populations in North Carolina and distance to 2030 target



Disparities

Despite the overall decrease in HIV diagnosis rate, significant racial/ethnic disparities in HIV diagnosis rates remain, with persons of color making up a disproportionate share of the population diagnosed with HIV annually. In 2018, the HIV diagnosis rates for African American men (68.7 cases per 100,000) and women (15.9 cases per 100,000) far exceeded that of their white counterparts (8.0 and 2.0 cases per 100,000, respectively).¹²⁷ Persons of Hispanic ethnicity also have disparate HIV diagnosis rates (17.7 cases per 100,000) compared to whites (4.9 cases per 100,000).¹²⁷ The HIV diagnosis rate among men who have sex with men (MSM) is 155 times that of heterosexual men (MSM: 621.0 per 100,000 in 2018; heterosexual men: 4.0 per 100,000).¹²⁷ These two levels of disparity compound for African American MSM, who have estimated diagnosis rates of 1,908.2 per 100,000 compared to 199.7 per 100,000 for white MSM.¹²⁷

HIV disproportionately affects lower-income communities and people without insurance, as well as people with vulnerable or chaotic life situations such as sex workers and incarcerated populations.¹²⁸ People living in impoverished areas often have fewer health care and prevention resources, including access to HIV treatment and PrEP, which can increase the potential for HIV transmission.¹²³

2030 Target and Potential for Change

The HNC 2030 group reviewed data across several years and populations and a forecasted value for North Carolina based on historical data to develop a target for HIV diagnosis rate. The group chose 6.0 diagnoses per 100,000 people as the target for 2030. Effective HIV treatment and PrEP have the potential to drastically reduce transmission rates into the future. With this fact and the national efforts to end HIV transmission, the group set an aggressive goal. To meet this goal, it is critical that NC reduces disparities in infection rates for African Americans.

Levers for Change

(CDC, HIV Prevention in the United States, 2015)

- Increase access to PrEP for individuals at high risk for HIV transmission
- Implement interventions that improve access to HIV treatment
- Make testing easy, accessible, and routine
- Ensure people who are diagnosed are linked with appropriate care and receive behavioral interventions and other supports to decrease risk of transmission
- Ensure availability of condoms at health departments and community-based organizations
- Increase Medicaid eligibility