



New HIV Diagnoses

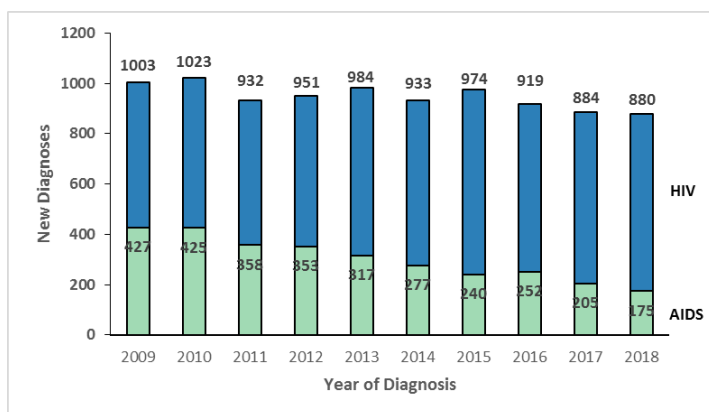
In 2018, there were 37,968 new HIV diagnoses in the United States (US).¹ From 2014 to 2018, the number of new HIV diagnoses in the US decreased by 7%.¹ This decline in new diagnoses suggests a true decrease in new infections, and can be attributed to increased HIV testing and targeted HIV prevention efforts in recent years. However, HIV diagnoses have increased among some subgroups.

Nationally, men who have sex with men (MSM) are the population most affected with HIV, accounting for 69% of all new diagnoses in 2018.¹ Among MSM, new HIV diagnoses were stable among the Black/African American, Hispanic/Latino, and Asian populations, and decreased by 15% among Whites from 2014 to 2018.¹ New HIV diagnoses among people who inject drugs increased by 9% from 2014 to 2018.¹ The majority of all new HIV diagnoses in the US were among persons ages 25-34 (36%).¹ Geographical differences in the burden of HIV also exist in the US; rates were the highest in the South at 16 per 100,000 and lowest in the Midwest with 7 per 100,000.¹

NEW HIV DIAGNOSES IN VIRGINIA

In 2018, Virginia ranked 13th in the number of annual reported new HIV diagnoses in the US and 18th highest in rate of HIV diagnosis.¹

Figure 1: Newly Diagnosed HIV and AIDS Cases in Virginia, 2009-2018

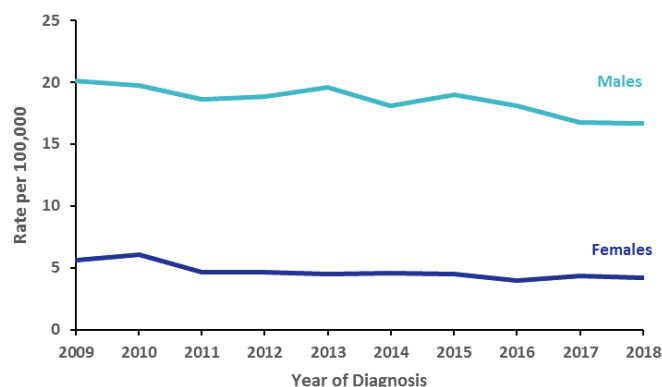


From 2009 to 2018, new HIV diagnoses in Virginia decreased by 12%.

In the past 10 years from 2009 to 2018, new HIV diagnoses in Virginia decreased by about 12%. On average, about 950 new HIV cases were diagnosed each year in Virginia. In 2018, 880 new HIV cases were diagnosed in Virginia. From 2009 to 2018, the average number of AIDS diagnoses reported annually was 303 cases. However, 2018 had the lowest number of AIDS diagnoses in Virginia, at 175 cases (Figure 1).

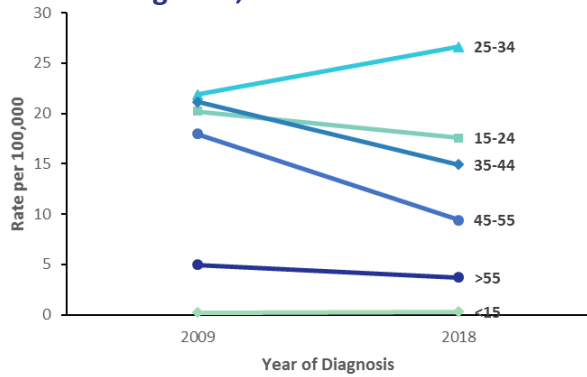
By Gender

Figure 2: Newly Diagnosed HIV Cases by Gender, 2009-2018



In 2018, approximately 80% of the newly diagnosed HIV cases in Virginia were among males. Rates of new diagnoses among males have declined from 2009 to 2018, from 20 per 100,000 population in 2009 to 17 per 100,000 in 2018. Rates of newly diagnosed cases among females declined from 6 per 100,000 in 2009 to 4 per 100,000 in 2018 (Figure 2). Males were four times more likely to be diagnosed with HIV than females in 2018.

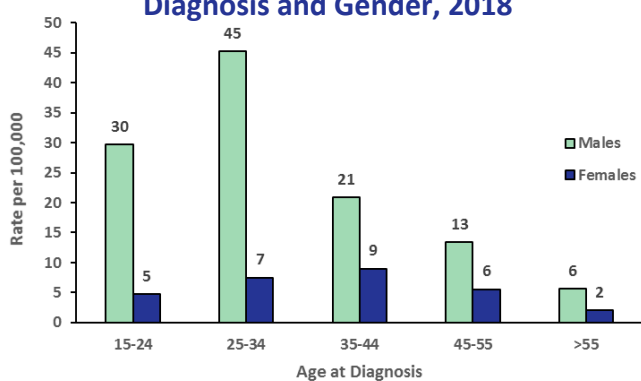
Figure 3: Newly Diagnosed HIV Cases by Age at Diagnosis, 2009 versus 2018



By Age at Diagnosis

The rate of new HIV diagnoses was highest among the 25-34 age group in 2018 at a rate of 27 per 100,000, an increase from 22 per 100,000 among those 25-34 in 2009. Rates among the 35-44 and 45-54 age groups have steadily declined over the past 10 years, from 21 per 100,000 and 18 per 100,000, respectively, in 2009 to 15 per 100,000 and 9 per 100,000, respectively, in 2018 (Figure 3). Rates of new HIV diagnoses among persons ages 55 and older and persons under 15 years showed little change across the 10-year time period.

Figure 4: Newly Diagnosed HIV Cases by Age at Diagnosis and Gender, 2018

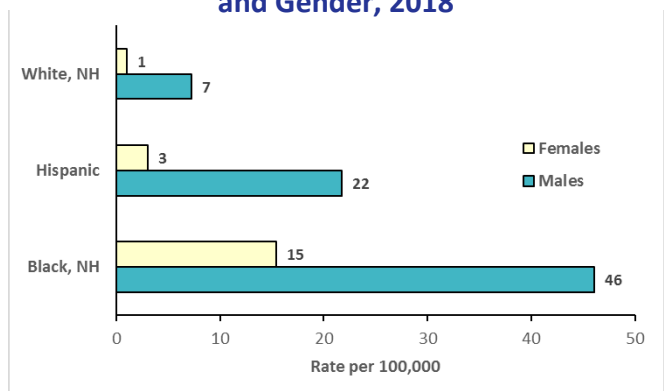


The highest rate of diagnosis in 2018 among males was the 25-34 age group (45 per 100,000), followed by the 15-24 age group (30 per 100,000) (Figure 4). Age at diagnosis for females was slightly older, with the highest rate of diagnosis for females among in the 35-44 age group (9 per 100,000). Males ages 25-34 were over six times more likely to be diagnosed with HIV than females of the same age.

By Race/Ethnicity

In 2018, 58% of the newly HIV diagnosed cases were Black, non-Hispanic (NH), followed by White, non-Hispanic (25%), and Hispanic/Latino (12%) persons. On average from 2009 to 2018, 59% of all new HIV diagnoses were among Black persons. In 2018, Black persons were over 7 times more likely to be diagnosed with HIV than their White counterparts, and nearly 2.5 times more likely than Hispanics/Latinos. The lowest rate of diagnosis in 2018 was among the White population at 4 per 100,000.

Figure 5: Newly Diagnosed HIV Cases by Race and Gender, 2018

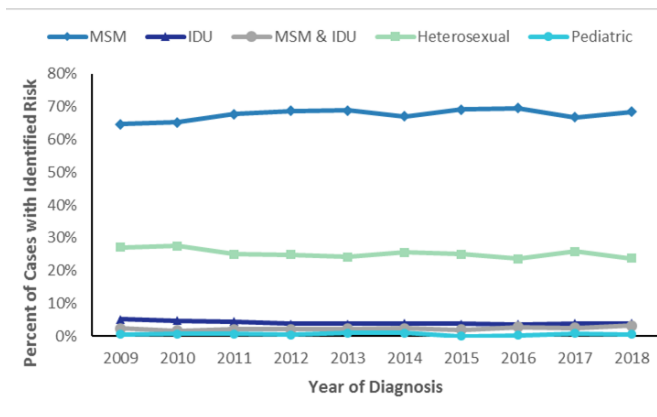


In 2018, Black females were 15 times more likely to be diagnosed with HIV than their White counterparts, and Hispanic/Latino females were 3 times more likely to be diagnosed than White females (Figure 5). Among the male population in Virginia, Black males were over 6 times more likely to be diagnosed than White males and 2 times more likely to be diagnosed than Hispanic/Latino males. The greatest disparities in gender were among Hispanic/Latino and White persons, as Hispanic/Latino and White males were over 7 times more likely to be diagnosed with HIV than their females counterparts; whereas, Black males were 3 times more likely to be diagnosed than Black females.

By Transmission Risk

HIV risk transmission was estimated using a multiple imputation (MI) procedure provided by CDC which probabilistically assigned those who did not report or identify a specific risk and estimated a potential risk factor for transmission. Between 2009-2018, an average of 24% of reported HIV cases had no reported transmission risk. These cases were estimated using the MI procedure.

Figure 6: Newly Diagnosed HIV Cases by Transmission Risk, 2009-2018



From 2009 to 2018, the percent of newly diagnosed cases attributed to male-to-male sexual contact (MSM) increased from 65% to 68% (Figure 6). Heterosexual contact decreased slightly over the past 10 years, from 27% in 2009 to 24% in 2018. Injection drug use (IDU) has remained relatively stable over the past 10 years, with 4-5% reporting IDU only and 2-3% reporting MSM and IDU.

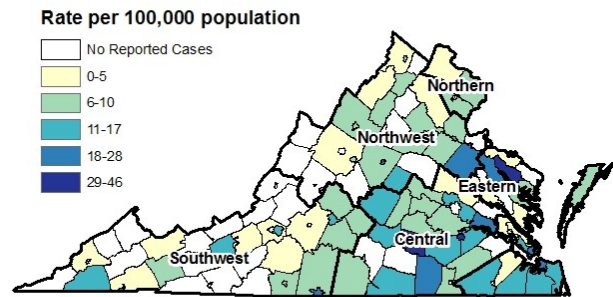
By Health Region

Virginia is divided into 5 health regions: Central, Eastern, Northern, Northwest, and Southwest. In 2018, the rate of diagnosis was the highest in the Central and Eastern regions at 16 and 14 per 100,000 population, respectively. The lowest diagnosis rates occurred in the Southwest and Northwest health regions (about 6 per 100,000 in each region).

As evidenced from Figure 7, counties with highest rates of persons newly diagnosed with HIV in 2018 are located primarily in the Eastern region and

Central Region, where highest rates approached 46 cases per 100,000 population. Lower rates occurred primarily in the Northwest and Southwest regions, where rates by county ranged from 1 to 22 per 100,000.

Figure 7: Newly Diagnosed HIV Cases by City/County, 2019



REFERENCES

- Centers for Disease Control and Prevention. HIV in the United States: At A Glance. <https://www.cdc.gov/hiv/statistics/overview/ata glance.html>. Accessed September 2020.
- Centers for Disease Control and Prevention. *HIV Surveillance Report, 2018*; vol. 31. <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published May 2020. Accessed September 2020.