

South Carolina
Epidemiologic Profile of
HIV, AIDS, and
Sexually Transmitted Infections
2024



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Acronyms: Epidemiologic Profile

ADAP – AIDS Drug Assistance Program

AIDS – Acquired Immune Deficiency Syndrome

BRFSS – Behavior Risk Factor Surveillance System

CBHSQ – Center for Behavioral Health Statistics and Quality

CDC – Centers for Disease Control and Prevention

DPH- Department of Public Health

DHHS – Department of Health and Human Services

EHARS – Enhanced HIV/AIDS Reporting Surveillance System

FDA – Food and Drug Administration

FLIS – Full Low-Income Subsidy

FPL – Federal Poverty Level

HIV – Human Immunodeficiency Virus

HPC – HIV Planning Council

HPSA - Health Professional Shortage Area

HRSA – Health Resources and Services Administration

IDU – Injection Drug User

MSM – Men Who Have Sex with Men

NIR – No Identified Risk

NSDUH – National Survey on Drug Use and Health

OSUS – Office of Substance Use Services

PEP – Post Exposure Prophylaxis

PLWHA – People Living With HIV/AIDS

PHS – Public Health Services

PrEP – Pre-Exposure Prophylaxis

PWH – People With HIV

PWID – Persons Who Inject Drugs

RSR – Ryan White HIV/AIDS Program Services Report

RW – Ryan White

SAMHSA – Substance Abuse and Mental Health Services Administration

SCAN – South Carolina Community Assessment Network

SCION – South Carolina Infectious Disease and Outbreak Reporting Network

SC – South Carolina

STI – Sexually Transmitted Infection

SUD – Substance Use Disorder

U=U – Undetectable Equals Untransmittable

YRBSS – Youth Risk Behavior Surveillance System

Definitions: Epidemiologic Profile

AIDS – Acquired Immune Deficiency Syndrome, the end stage of HIV infection characterized by life-threatening or severely disabling disease.

HIV/AIDS – Includes those people with HIV infection, as well as those who have progressed to AIDS. Unless noted, most HIV data in this profile includes people diagnosed with AIDS.

HIV Only – Includes only people with HIV infection who did not develop AIDS within 365 days of report of positive HIV test.

Health Professional Shortage Area (HPSA) – A Department of Health and Human Services (HHS) designation system to identify areas facing a critical shortage of primary medical, dental or mental health care professionals.

Incidence – The number of new HIV/AIDS cases newly diagnosed and reported each year. Incidence cases may be combined in two- or three-year periods.

Incidence Rate – Number of new cases occurring during a period of time, divided by the annual average population, multiplied by 100,000. It is a measure of the frequency with which an event occurs in a population over a period of time. It is also a measure of risk of getting the disease.

Natural Breaks (Jenks) – Is a data classification method designed to determine the best arrangement of values into different classes. This is done by seeking to minimize each class's average deviation from the class mean, while maximizing each class's deviation from the means of the other groups (used primarily in maps).

Other Risks – In relation to Risk Exposures, the term “Other” or “Other Risks” is used to describe a group of risks that include such categories as hemophilia, blood transfusion and perinatally acquired infection. **PLWHA** – People Living With HIV/AIDS – See Prevalence below.

Prevalence – The number or proportion of people estimated to be living with **Diagnosed and Reported** HIV/AIDS at the end of a particular period of time (e.g. year).

NOTE: Beginning with the 2016 Epidemiologic Profile (2015 data), Prevalence numbers are based on Last Known Residence. This is a change from previous years Prevalence numbers, which were based on Residence at Time of Diagnosis.

This change makes comparisons with Epidemiologic Profiles before 2016 inaccurate, and it should not be done.

Prevalence Rate – Total number of living HIV/AIDS cases (old and new cases) during the year of report, divided by the annual average population multiplied by 100,000. It is the proportion of people in a population who have a particular disease or attribute at a specified point in time (or specified period of time).

Rates are used to:

- measure the frequency of disease (in this case, HIV/AIDS) or other outcomes of interest,
- describe the distribution of disease occurrence in human populations,
- allow comparison of the risk of disease or burden of disease across populations,
- characterize the risk of disease for a population, and
- identify determinants of disease.

They may also be used to help:

- prioritize prevention programs among competing causes,
- identify target groups for intervention,
- acquire funding for resources, and
- compare events across geopolitical boundaries.

NOTE: All rates are per 100,000 population, unless otherwise stated.

Executive Summary

The 2024 South Carolina (SC) Epidemiologic Profile of HIV, AIDS, and Sexually Transmitted Diseases provides data and a detailed analysis on the burden and trends of HIV and STIs across different racial and ethnic populations of the state to guide public health planning, prevention, and resource allocation. The Epi Profile serves several important purposes, including assisting in monitoring and tracking trends of HIV and STI outbreaks in the state. We present this Executive Summary to provide a preview of the overall report.

About SC:

SC ranks 40th among the 50 states of the United States (US) in terms of size, with a land area of 30,064.2 square miles and a population of 5,373,555 distributed across 46 counties grouped into four Public Health Regions (PHRs): Upstate, Midlands, Pee Dee, and Lowcountry. There are slightly more females, 2,767,381 (51.5%) than males, 2,606,174 (48.5%) in the state, with a total median age of 40.5. The population is grouped into six race categories: American Indian/Alaskan native, Asian, Black/African American, Native Hawaiian/Other Pacific Islander, White, and Multiple races, with Whites comprising a majority (64%), followed by Blacks/African Americans (27%).

SC, like many Southern states, ranks high for poverty, low educational attainment, and uninsured population compared to other U.S. states, and these factors can affect a person's ability to access and adhere to HIV prevention, treatment and care services.

Key HIV/AIDS Findings:

In 2023, approximately 20,234 people in SC were living with diagnosed HIV/AIDS, the majority (62%) of whom were people who reported their race/ethnicity as Blacks/African Americans. There was an average of 793 new HIV infections reported during 2022-2023 and Blacks/African Americans comprised a majority (56%) of the cases when compared to other racial or ethnic populations, followed by Whites (25%), and Hispanic (13%). Sixteen percent of people living with HIV/AIDS are not aware of their HIV status and, therefore, are not taking advantage of available treatment and prevention services.

There is also a significant burden of newly diagnosed HIV/AIDS among different age groups within the state, with people aged 20-39 years accounting for the highest population of newly diagnosed cases (63%), highlighting a critical demographic population for education and prevention efforts.

Among different behavioral risk groups, men who have sex with men (MSM) accounted for up to 84% of new infections, with young Black MSM representing the majority of cases, thus underscoring the need for targeted prevention and outreach programs free of stigma and discrimination. Ensuring that people living with HIV are rapidly linked to care and retained in care, while re-engaging those who have fallen out of care back into HIV treatment and care services is key to ending the HIV epidemic in SC.

Patterns of service use among people living with HIV in SC consist of the Ryan White (RW) Part B services, AIDS Drug Assistance Program (ADAP), and the HIV Continuum of Care. Of all people living with HIV/AIDS (PLWHA) who used RW Part B services in 2023, medical case management services were the most widely used.

Implications:

The significant burden of HIV among minority groups such as Black/African American, Latinx populations and MSM behavioral risk groups, and the transgender population highlights persistent inequities in access to HIV care, prevention resources, and education.

The high incidence of HIV among adolescents and young adults suggests gaps in sexual health education and access to testing and prevention services.

The geographic variation in HIV cases emphasizes the importance of region-specific interventions and the need to address barriers to HIV care and treatment.

Recommendations:

Expanding HIV prevention efforts would stem down the recent new HIV and STI cases in the state. Efforts include scaling up access to pre-exposure prophylaxis (PrEP), post-exposure prophylaxis (PEP), Doxy-PEP for treating the co-occurrence of bacterial STIs, condom distribution, health education programs, and addressing the syndemics of STIs, viral hepatitis, and substance use disorders (SUDs)

especially in communities with high prevalence and a high social vulnerability index (SVI).

Implementing enhanced testing and treatment strategies would increase knowledge of HIV status, antiretroviral therapy, and improved viral suppression. Strategies include increased routine HIV testing, linkage/reengagement and retention in care through Data-to-Care (DTC) services, particularly targeting young people, MSM, IDU, transgender persons, women, and Black/African American communities.

Addressing social determinants of health to combat stigma and improve access to culturally competent health care services, particularly in underserved communities, would improve service uptake and ensure retention to HIV care.

Supporting youth-focused interventions such as comprehensive sexual health education programs tailored to adolescents and young adults would improve HIV and STI testing and referral to treatment and prevention services.

Conclusion:

HIV/AIDS remains a significant public health challenge in SC. Continued investment in HIV education, prevention, testing, and treatment programs is essential to reducing new infections, addressing disparities, and improving health outcomes for those living with HIV. People living with HIV who achieve viral suppression and stay virally undetectable cannot transmit HIV sexually to their partner(s), otherwise known as Undetectable=Untransmittable or U=U. Collaboration among public health agencies, community organizations, and health care providers is crucial to achieving the goals of ending the HIV epidemic in the state.

Introduction

Background

The SC HIV/STI Epidemiologic Profile provides data and a detailed analysis on the burden and trends of HIV and STIs across different racial and ethnic populations of the state to guide public health planning, prevention, and resource allocation. The SC Department of Public Health (DPH) develops and maintains yearly updates of the profile as part of a national data-driven public health effort to monitor and respond to the HIV/AIDS epidemic across the US. These data are subsequently de-identified and disaggregated to highlight disparities among different populations, including racial and ethnic groups, gender, age, and risk factors and reported to the Centers for Disease Control and Prevention (CDC) for disease tracking.

The purpose of the Epi Profile is, therefore, to:

- Monitor and track trends of HIV and STI outbreaks in the state.
- Identify populations disproportionately affected by HIV and STIs.
- Develop strategies to reduce infection rates through prevention efforts, resource allocation, and policy development.
- Provide surveillance data to justify funding for HIV/STI treatment and prevention programs from federal and state sources.
- Make available data to public health agencies, health care providers, and community-based organizations (CBOs) for programmatic purposes.
- Provide data to internal and external stakeholders to improve staff training, develop disease tracking and reporting best practices, and capacity building assistance.

General Description

In the US, HIV/AIDS remains a significant cause of illness, disability, and death, despite declines in new AIDS cases and deaths. Current surveillance activities provide population-based HIV/AIDS data for tracking trends in the epidemic, targeting and allocating resources for prevention and treatment services, and planning and conducting program evaluation activities.

DPH uses the Epi Profile for planning of annual federal grant deliverables, monitoring of performance and compliance, and planning/development of new initiatives. For example, the Epi Profile is instrumental in the identification of priority populations for increasing uptake for HIV PrEP.

The Epi Profile is utilized for prevention and care planning by community

providers. The profile is also used by local community organizations, local health departments, legislators, and media. The Epi Profile is used as a framework for grant writing, policy decision-making, state health plans and public information. Data are also used for program planning and evaluation efforts. The state's Epi Profile is used extensively to determine priority/target populations, identify unmet needs, describe risk behaviors, and evaluate prevention efforts.

Types and Quality of Data

Because no one epidemiologic data set will provide a complete picture of HIV/AIDS and STIs in a community, or the state, we have assembled data from several categories and sources. Data from a variety of categories provide a more accurate picture of past, present and future infection trends. Not all data have equal value. Data sources must be considered in the context of their objectives, strengths, and limitations; who the target populations are; how the data were collected; and the validity of the data.

As described above, several data sets are used to illustrate the SC populations diagnosed with HIV/AIDS and STIs to characterize the nature of risk-taking behaviors. All the data sets have limitations or similar types of bias introduced, in that most are reported by third parties, largely providers who must seek information from the affected person as to illness, transmission mode and demographic characteristics. People's reports are limited by the willingness of providers to ask about these factors and clients' willingness to report on personal behaviors. These data are also limited in their ability to broadly characterize populations. For instance, STI or HIV/AIDS case report data can only characterize people with STI or HIV who seek treatment. Also, data on estimated condom use among women cannot characterize all women but only those who agree to participate in selected behavioral surveys. People who seek treatment for STI (and who are offered HIV testing) may be very different from those who do not. However, each of the data sets referred to in this profile provide information to describe the relative risk and impact of the diseases on the people of SC.

The following summarizes data sources, and limitations, used by the data workgroup to complete the SC. Epidemiologic Profile of HIV/AIDS and STIs.

DPH's Enhanced HIV/AIDS Reporting Surveillance System (eHARS)

All health care providers, hospitals, and laboratories in SC are required to report people diagnosed with confirmed HIV infection and/or AIDS. Each year approximately one-third of new cases are reported from county health

departments, one-third from hospitals, one-fifth from physicians, and the remainder from state/federal facilities (including prisons) and laboratories. DPH's surveillance system, eHARS, serves various functions: 1) monitoring the incidence and demographic profile of HIV/AIDS; 2) describing the modes of transmission among people with HIV/AIDS; 3) guiding the development and implementation of public health intervention and prevention programs; and 4) assisting in evaluating the efficacy of public health interventions. It is the principal source of knowledge regarding trends in the number and characteristics of HIV-infected people. It includes people in all age, gender, race/ethnic and mode-of-HIV-exposure groups; and it provides a historical perspective in trends dating to the earliest recognition of the AIDS epidemic.

This profile primarily presents data on the total infection/disease spectrum: HIV infection, including AIDS (not AIDS alone). Because of the long and variable period from HIV infection to the development of AIDS, trends in AIDS cases data do not represent recent HIV infections or all HIV-infected people. AIDS surveillance data do not represent people whose HIV infection is not recognized or diagnosed. AIDS cases have declined nationwide; however, because AIDS surveillance trends are affected by the incidence of HIV infection, as well as the effect of treatment on the progression of HIV disease, future AIDS trends cannot be predicted.

Incidence numbers reported in a particular year do not reflect the total number of new cases that occurred in that year. Also, it is important to note that new cases reported may be among people who acquired HIV prior to the reporting year, but were not diagnosed until that year. In addition, because not all people with HIV in the population have been diagnosed, these data do not represent total HIV prevalence in the population. Interpretation of these data is complicated by several factors, ranging from a person having both HIV then AIDS diagnoses in the same year, varying time between reporting HIV and AIDS cases, and numerous reasons why the number of new HIV diagnoses changed (increased, decreased or stabilized).

Some data are provided on HIV infection-only (people reported with HIV infection who do not have an AIDS diagnosis within 365 days of being diagnosed with HIV). These data, while highly dependent on people seeking or receiving HIV testing early in their infection stages, provide an opportunity to compare people presumably infected more recently with those infected as long as 10 or so years ago (AIDS diagnosis).

Risk categories are assigned like the methods described in the HIV Counseling and Testing section. There are some slight differences in the type of categories between HIV/AIDS surveillance reports and HIV Counseling and Testing reports. In SC, about 34% of adult/adolescent HIV infection/AIDS cases reported in 2023 did not have risk categories reported. These cases are defined as “No Identified Risk” (NIR). The proportion of NIR cases has been increasing nationally as well. The primary reason for incomplete risk information is that reports from laboratories do not include risk and an increasing proportion of cases result from heterosexual transmission but are not able to be defined in CDC’s definition of heterosexual transmission. For example, people who report having multiple heterosexual partners or who have sex for money/drugs, but the status of their partners is not known, are not classified as “heterosexual;” they are “No Identified Risk.”

DPH’s SC Infectious Disease and Outbreak Reporting Network (SCION)

Health care providers and laboratories are required by law to report certain STIs (including syphilis, chlamydia, gonorrhea, chancroid, hepatitis) to DPH. In 2019, SC adopted a new data system, SCION, and some deviation from previous years could exist as the state adapts to the new system and adjusts program practices accordingly.

SCION is the agency’s integrated data system for all reportable diseases, except HIV/AIDS. It is a role-based data system that allows the agency to maintain all reportable condition data in one location while limiting the users to access data based on their role within the agency. The integrated system allows for the monitoring of gonorrhea, syphilis and chlamydia data trends based on geography, race, ethnicity, gender, and risk. The data are used by program areas to 1) identify high-risk groups and geographic areas where unsafe sexual behaviors occur; 2) guide the development of public health intervention and prevention programs; and 3) assist in evaluating the efficacy of public health intervention.

DPH Clinics’ HIV Counseling and Testing Program Data

Counseling and testing data, while highly informative about people who seek counseling and testing, does not tell us anything about people who do not seek testing or choose not to test. All states provide HIV counseling and testing services and maintain data to quantify HIV counseling and testing services delivered in publicly funded sites and to determine the characteristics of people receiving those services. These data are used by prevention programs to plan and target services for high-risk people. The type of data collected in SC includes the

counseling and testing site type, number of clients tested and number positive for each risk group, number tested, number positive by type of test site, and number tested and number positive by race/ethnicity, gender, and age group. Clients receive confidential counseling and testing in each of the 46 county health department clinics.

The counseling and testing data system is standardized and has been in place for many years. Data in the "SC Epidemiologic Profile of HIV, AIDS, Sexually Transmitted Infections," hereafter referred to as the Epi Profile, reflects the number of clients tested during a specific period. People who received multiple tests during the report period are only counted once. It includes people tested in family clinics, maternity clinics, TB, STI clinics and people requesting services or referred through partner counseling services. Approximately one-third of the newly diagnosed and reported people with HIV infection each year are from DPH counseling and testing sites. People tested in other settings, such as physician offices, hospitals, state facilities, etc. are not included in the DPH counseling and testing database.

To determine a client's level of risk, each person is assigned a risk status: men who have sex with men (MSM), injection drug users (IDU), or heterosexual contact with a person at risk for or who has HIV. Since most clients acknowledge multiple risks, risk status is determined by using the CDC's hierarchy of risk, which assigns the client's highest risk. The highest possible risk is sex with a person with HIV/AIDS, while the least significant is "no acknowledged risk." A person is only represented in their highest risk category no matter how many risks the client acknowledges.

The CDC's hierarchy of risk includes a category for the combined risks of MSM and IDU; in previous HIV/AIDS Epidemiologic Profiles, the combined risks of MSM and IDU have been grouped and reported within the single category of "persons who inject drugs." This report leaves the combined risks of MSM and IDU as a stand-alone category. This CDC risk hierarchy can limit interpretability of data; it also does not reflect associated risks such as other non-injecting substance use, i.e. crack-cocaine.

Counseling and testing data in SC and nationally are distinct from blinded, HIV data surveys that generate an estimate of HIV data that is unbiased by client self-selection. The DPH counseling and testing system only includes clients who seek out counseling and testing services or agree to be tested after consultation with a counselor at a clinic site. However, for those clinic sites in which clients can obtain services other than counseling and testing for HIV, and in which all or nearly all

clients receive HIV testing, (for example, maternity and STI clinics), data for those sites approximates the reliability of the blinded surveys.

RW HIV/AIDS Program Services Report (RSR)

The annual RSR captures information regarding the services provided by all RW funded entities. The RSR is divided into sections, including service provider information; client information; service information; and medical information. Providers report on all clients who received services eligible for RW Parts A, B, C or D funding, regardless of the actual funding source used to pay for those services. The SC RW Part B contractors complete the RSR and submit the data directly to Health Resources and Services Administration (HRSA).

SC Community Assessment Network (SCAN)

The SCAN provides basic reference data for a variety of users. The primary use of SCAN is to enumerate and characterize mortality attributed to HIV infection. The data were also used to compare trends in HIV infection mortality with other leading causes of death and to characterize the impact of HIV infection on mortality. Data on causes of death are based on information recorded by hospitals, physicians, coroners, midwives, and funeral directors. Some recorded information may be inaccurate or incomplete due to underreporting of certain causes of deaths; the number of HIV-related deaths and the conditions may be underestimated. SCAN is also used to enumerate and characterize birth attributes. Vital statistics data are not as timely as AIDS case reports due in part to processing time.

U.S. Department of Health and Human Services (DHHS): National Survey on Drug Use and Health (NSDUH)

The National Survey on Drug Use and Health is an annual nationwide survey involving interviews with approximately 70,000 randomly selected people aged 12 and older. The Substance Abuse and Mental Health Services Administration (SAMHSA), which funds NSDUH, is an agency of the US Public Health Service DHHS. Supervision of the project comes from SAMHSA's Center for Behavioral Health Statistics and Quality (CBHSQ).

Data from the NSDUH provide national- and state-level estimates on the use of tobacco products, alcohol, illicit drugs (including non-medical use of prescription drugs) and mental health in the U.S. To assess and monitor the nature of drug and alcohol use and the consequences of abuse, NSDUH strives to:

- Provide accurate data on the level and patterns of alcohol, tobacco

and illegal substance use and abuse.

- Track trends in the use of alcohol, tobacco, and various types of drugs.
- Assess the consequences of substance use and abuse.
- Identify those groups at high risk for substance use and abuse.

A scientific random sample of households is selected across the U.S., and a professional RTI interviewer makes a personal visit to each selected household. After answering a few general questions during the in-person visit by the interviewer, one or two residents of the household may be asked to be interviewed for the survey. Since the survey is based on a random sample, each selected person represents more than 4,500 U.S. residents.

Participants complete the interview in the privacy of their own home. A professional RTI interviewer personally visits each selected person to administer the interview using a laptop computer. People answer most of the interview questions in private and enter their responses directly into the computer so even the interviewer does not know the answer entered. For some items, the interviewer reads the question aloud and enters the participant's response into the computer.

Each interview data file – identified only by a code number – is electronically transmitted to RTI on the same day the interview is conducted. Combined with all other participants' answers, the data are then coded, totaled, and turned into statistics for analysis. As a quality control measure, participants may receive a telephone call or letter from RTI to verify the interviewer conducted the interview in a professional manner.

Behavioral Risk Factor Surveillance System (BRFSS)

The Behavior Risk Factor Surveillance System is the world's largest random telephone survey of those in the non-institutionalized population age 18 or older. It is used to track health risks in the U.S. In 1981, the CDC, in collaboration with selected states, initiated a telephone based behavioral risk factor surveillance system to monitor health risk behaviors. South Carolina began administering BRFSS in 1984. Several core questions address knowledge, attitudes, beliefs, and behaviors regarding STIs, particularly AIDS.

Youth Risk Behavior Surveillance System (YRBSS)

The Youth Risk Behavior Surveillance System (YRBSS) was developed cooperatively by the CDC, several federal agencies and state departments of education to

measure the extent to which adolescents engage in health risk and health-enhancing behaviors. The system consists of national, state, and local school-based surveys. In SC, the YRBS consists of questionnaires administered to middle school (sixth to eighth grade) and high school (ninth to 12th grade) students in the public-school system. A two-stage sampling process is used to provide a statewide sample at each level. In the first stage, regular public schools with any of the target grades are sampled with probability proportional to the school enrollment. In the second stage, intact classes are sampled randomly and all students in these classes are eligible to participate. The overall response rate is calculated as the percentage of sampled schools that participate multiplied by the percentage of sampled students who complete usable surveys. If this overall response rate is 60% or greater, the resulting data are weighted to be representative of the entire state.

None of the 367 private K-12 schools in SC are included in the survey. Also, while schools are randomly selected for participation, some may choose not to participate. The survey includes questions about injury and violence, tobacco use, alcohol and other drug use, sexual risk behaviors, physical activity, and nutrition behaviors (the specific questions can vary from year to year). The survey is part of a national effort to monitor priority health risk behaviors that contribute to the leading causes of death, disability and social problems among youth and adults in the U.S.

This survey is conducted by South Carolina Healthy Schools at the Department of Education and relies heavily on surveillance methods and self-reports; so, it depends on how well respondents understand the questions and how well they can accurately and honestly answer the question. However, the questionnaire has demonstrated good test-retest validity, and the data are edited, checked, and weighted. These data are representative of only public middle school students (sixth to eighth grade) or public high school students (ninth to 12th grade) in SC

Overall Description

Data and data sets used for the completion of this profile are collected from different sources and by various methods to provide valuable insights into the trends and disparities of HIV/AIDS and STIs across various populations and risk factors within the state. This profile has its strengths as well as limitations as represented below:

Strengths:

- Data are collected from multiple sources and disaggregated to show the

different demographic populations, ethnic and racial groups, as well as risk factors.

- The profile captures trends in the reported cases of STIs and HIV/AIDS based on factors such as age, race, gender, and geographic location.
- Information obtained from this report can be used by policymakers, health care providers, and public health officials for targeted prevention and treatment services and for the allocation of resources.
- The report contains county and regional level data and compares state and federal rates of STI and HIV/AIDS as part of CDC's national HIV/AIDS control program.

Limitations:

- Delays in data reporting, processing, and cleaning may lead to incomplete or outdated data.
- Undiagnosed and unreported cases of HIV/AIDS and STI HIV/AIDS may lead to an underestimation of the true burden of these disease conditions in the state.
- The report shows disease trends but lacks detailed insights into the underlying behavioral, socioeconomic, and structural factors driving infection rates.
- The profile report does not account for unreportable disease conditions.
- Gaps in reported data may be due to stigma, lack of testing, mistrust for the health care system, and privacy concerns.

Analyses and Findings

This Epidemiologic Profile presents data and findings to answer the following core questions about the HIV/AIDS epidemic in SC which are divided into four main domains: (See the appendix section for the Integrated Guidance for Developing Epidemiologic Profiles).

- **Core question 1.1:** What are the demographic characteristics and social determinants of health among the general population in SC?
- **Core question 2.1:** What is the epidemiology of HIV and the distribution of HIV-related disparities or health inequities in SC?
- **Core question 2.2:** What is the distribution of social determinants of health that exacerbate HIV-related disparities among people with HIV in SC?
- **Core question 3.1:** What HIV care and treatment services are available SC?
- **Core question 3.2:** What is the HIV care continuum in SC for the overall population and for priority populations in SC?
- **Core question 4.1:** What is the landscape of HIV prevention and testing services in SC, including gaps in prevention?
- **Core question 4.2:** What are the indicators of risk for acquiring and transmitting HIV infection in SC?

Sociodemographic Characteristics of the Population

The HIV epidemic in the U.S., and in SC, is a composite of multiple, unevenly distributed epidemics in different regions and among different populations. These populations may comprise people who practice similar high-risk behavior, such as injecting drugs or having unprotected sex with a person with HIV.

The social, economic, and cultural context of HIV and STIs must be considered when funding, designing, implementing, and evaluating prevention programs for diverse populations. This section provides background information on SC's populations, which is essential for assessing potential HIV and STI impact. Gender refers to a person's assigned sex at birth.

The State

South Carolina lies on the southeastern seaboard of the U.S. The state is bounded on the north by North Carolina, on the southeast by the Atlantic Ocean, and on the southwest by Georgia. It ranks 40th among the 50 states in size and has a

geographic area of 30,061 square miles. South Carolina has a diverse geography that stretches from the Blue Ridge Mountains in the northwest corner to the beaches along the Atlantic coast. Manufacturing is the state's leading industry, followed by tourism and forestry. The total number of people living in SC is 5,373,555, according to the 2023 SC population estimate.

Demographics

Gender

Of the 5,373,555 people living in SC, 2,767,381 (51.5%) are female and 2,606,174 (48.5%) are male, (Figure 1.1.1). There are only slight differences within each gender by age group. Males aged 19 and under comprised 24% of the male population and those aged 60 and over comprised 25%. Females aged 19 and under comprised 23% of the female population and those aged 60 and over comprised 27%. As a percentage of the total population, females aged 60 and over were 14% and males aged 60 and over were 11%.

**Figure 1.1.1: Selected Demographics
South Carolina**

	South Carolina
Population	5,373,555
Median Age	40.5
Sex	
Male	48.5%
Female	51.5%
Distribution of Population by age	
<19	24%
20-29	12%
30-39	13%
40-49	12%
50-59	12%
60+	26%

Sources: U.S. Census Bureau and SC Vital Statistics 2023

Age

Persons aged 19 and under made up 24% of SC's total population while people aged 60 and over made up 26%. The age groups 20-29, 30-39, 40-49, and 50-59 comprised 12%, 13%, 12%, and 12% of the population, respectively, (Figure 1.1.1).

Race

Although race and ethnicity are not risk factors for HIV transmission, they are markers for complex underlying social, economic, and cultural factors that affect personal behavior and health. Race is often reported classified into six categories: *American Indian/Alaskan native, Asian, Black/African American, Native Hawaiian/Other Pacific Islander, White, and Multiple races*. Ethnicity is often included in these six categories. However, in SC the combined categories of American Indian/Alaskan native, Asian, Native Hawaiian/Other Pacific Islander, and multiple races comprise less than two percent of the total population so are grouped into a category of "Other." Caucasians comprise the largest proportion of SC's population, 64%; Black/African Americans comprise 27%; Hispanic origin comprise six percent; and Other comprise three percent.

Nativity

Of the 5,373,555 people living in SC by the end of 2023, 316,432 (5.9%) were born outside the United States. When categorized by sex, males born outside the U.S. were 159,156 (6.1%) out of the total male population of SC of 2,605,014 while females were 157,282 (5.7%) of the 2,768,541 female population of the state. Forty-three percent of the foreign-born population were naturalized citizens of the U.S. while 57% were not U.S. citizens, (For further reading, see the Appendix for U.S. Census Bureau's Understanding and Using American Community Survey data).

Socioeconomic Status

Socioeconomic status is a term used to describe the economic and sociological combined measure of a person's income, educational attainment, financial security, and perceptions of social status and social class. Socioeconomic status can include quality of life attributes as well as the opportunities available to people. Low socioeconomic status is often associated with increased disease morbidity and premature mortality.

Education & Poverty Level

South Carolina continues to rank low in the percentage of people over 25 years of age who have bachelor's degrees or higher. In SC, it is estimated that 12% of the

population has less than a high school education. Educational attainment is strongly correlated with poverty, and despite the economic strides made in recent years, SC remains among states with the highest percentage of people who live below the poverty level.

Employment

Education also impacts a person's employment opportunities. South Carolina's unemployment rate is, typically, slightly higher than the U.S. unemployment rate. Unemployment status is correlated to limited access to health care services, resulting in increased risk for disease.

Access to Care

In SC, it is estimated that 14.3% of the population under the age of 65 do not have health insurance. In addition, all or part of 45 (out of 46) counties are designated as Health Professional Shortage Areas (HPSA). Data from the Nation Health Statistics Reports can be found here: [National Health Statistics Reports 2023 Number 194](#)

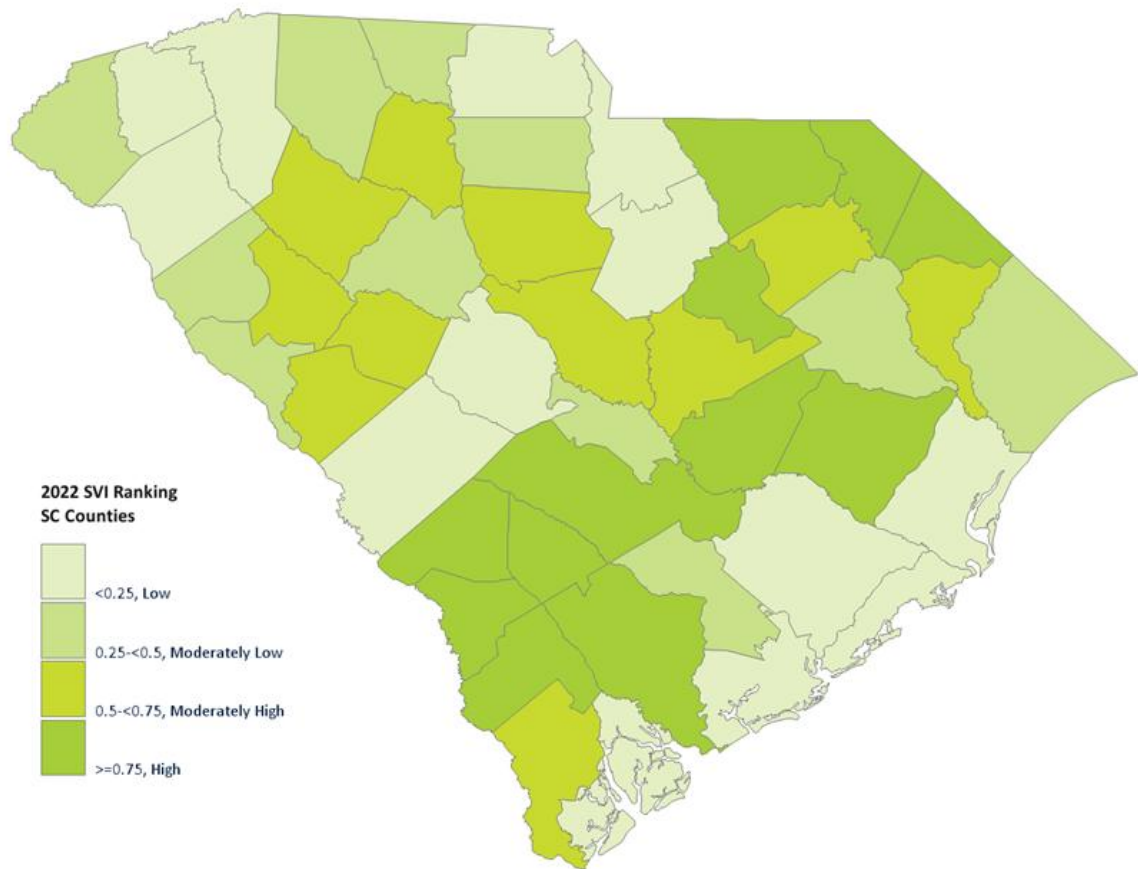
Housing

The South Carolina Council on Homelessness estimates there are, on average, 5,000 homeless adults and children in SC. The issue of homelessness is particularly important for people living with chronic infections (such as HIV) because homelessness has been associated with reduced access to care, engagement in harmful behaviors, lower survival rates and poor adherence to treatment.

Social Vulnerability Index (SVI)

The social vulnerability index (SVI) is a tool or method created by CDC and the Agency for Toxic Substances and Disease Registry (ATSDR) to identify socially vulnerable communities. The CDC/ATSDR SVI uses U.S. Census data to determine the relative social vulnerability of every census tract and county. The SVI ranks each tract on 16 social factors, such as unemployment, poverty, racial and ethnic minority status, crowded housing, etc. and groups them into four related themes: socioeconomic status, household characteristics, racial and ethnic minority status, and housing type & transportation. Each census tract and county receive a separate ranking for each of the four themes, as well as an overall ranking. These rankings are based on percentiles and range from 0 to 1, (Refer to the appendix for additional reading on Social Vulnerability Index calculations and data).

Figure 1.1.2: South Carolina Social Vulnerability Index Ranking Among SC Counties



Source: https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html

State level SVI rankings for SC counties are used. The percentile values range from 0 to 1, which are categorized into quartiles: <0.25 as Low; 0.25 to <0.5 as Moderately Low; 0.5 to <0.75 as Moderately High; and >=0.75 as High, (Figure 1.1.2).

Summary

South Carolina, like many Southern states, ranks high for poverty, low educational attainment and uninsured population compared to other U.S. states. These factors can affect one's ability to access prevention and health care services and adhere to regimens for the treatment and care of diseases that may lead to more severe consequence.

Epidemiology of HIV and Distribution of HIV-related Disparities

The epidemic in SC is predominantly driven by sexual exposure, primarily among men who have sex with men and heterosexuals at risk. However, the CDC reports Heroin use is on the increase across the U.S. among men and women, most age groups, and all income levels. Therefore, the number of cases reporting Injecting Drug Use as a risk for HIV should be closely monitored.

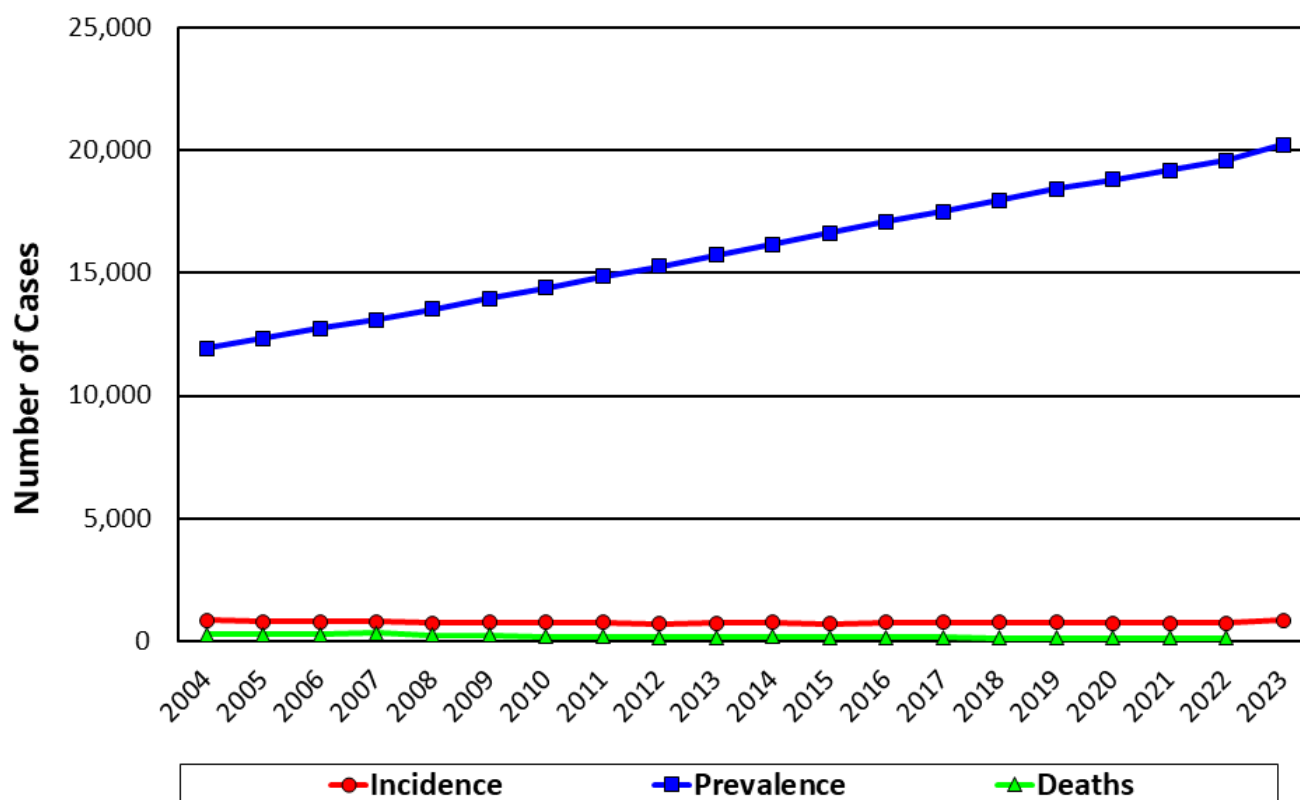
African Americans are disproportionately affected by HIV/AIDS and are over-represented among all risk populations.

Figure 2.1.1 depicts trends in the SC HIV/AIDS incidence, prevalence, and deaths from 2004- 2023. HIV prevalence has been on a steady increase since 2004 as more people living with HIV are living longer and healthier lives by staying in HIV care and receiving antiretroviral medication to treat their infection.

HIV incidence, on the other hand, has remained steady over the 10-year period between 2004 and 2023, with minor fluctuations from year to year. People who get tested to know their HIV status, start antiretroviral treatment and stay virally suppressed and undetectable cannot transmit HIV to their sex partners, also known as Treatment as Prevention (TasP). The number of people in this category is increasing. Staying on PrEP and PEP and the consistent use of condoms have helped reduce new HIV transmissions in the state.

HIV deaths have declined steadily since 2004 as more people living with HIV stay on their medication to achieve viral suppression.

Figure 2.1.1: South Carolina HIV/AIDS Incidence, Prevalence, and Deaths



Note: number of cases diagnosed in S.C. only; excludes out of state cases returning to S.C.

Impact of HIV/AIDS on the Population

In SC, AIDS cases have been reported since 1981 and confirmed cases of HIV infection have been reportable since February 1986. During the calendar year of 2022, according to the CDC HIV/AIDS Surveillance Report, SC ranked 10th among states, the District of Columbia, and U.S. dependent areas with a HIV case rate of 13.6 per 100,000 population. The epidemic is continuing to grow with an average of 70 cases of HIV infection reported each month during 2023. The incidence rate in SC for 2023 is 15.7 per 100,000 population. As of Dec. 31, 2023, there were an estimated 20,234 SC Carolina residents living with diagnosed HIV infection (including AIDS).

This section summarizes the overall toll of the epidemic in SC based on total reported HIV/AIDS cases and deaths.

Gender

Figure 2.1.2 shows the impact of HIV on the men and women in SC Men are disproportionately affected by HIV/AIDS. Men make up 49% of SC's total population but comprise 72% of PLWHA (prevalence). People diagnosed with HIV/AIDS during the two-year period 2022-2023 give an estimate of more recent infections or potentially emerging populations.

Figure 2.1.2: S.C. Disproportionate HIV Impact by Sex

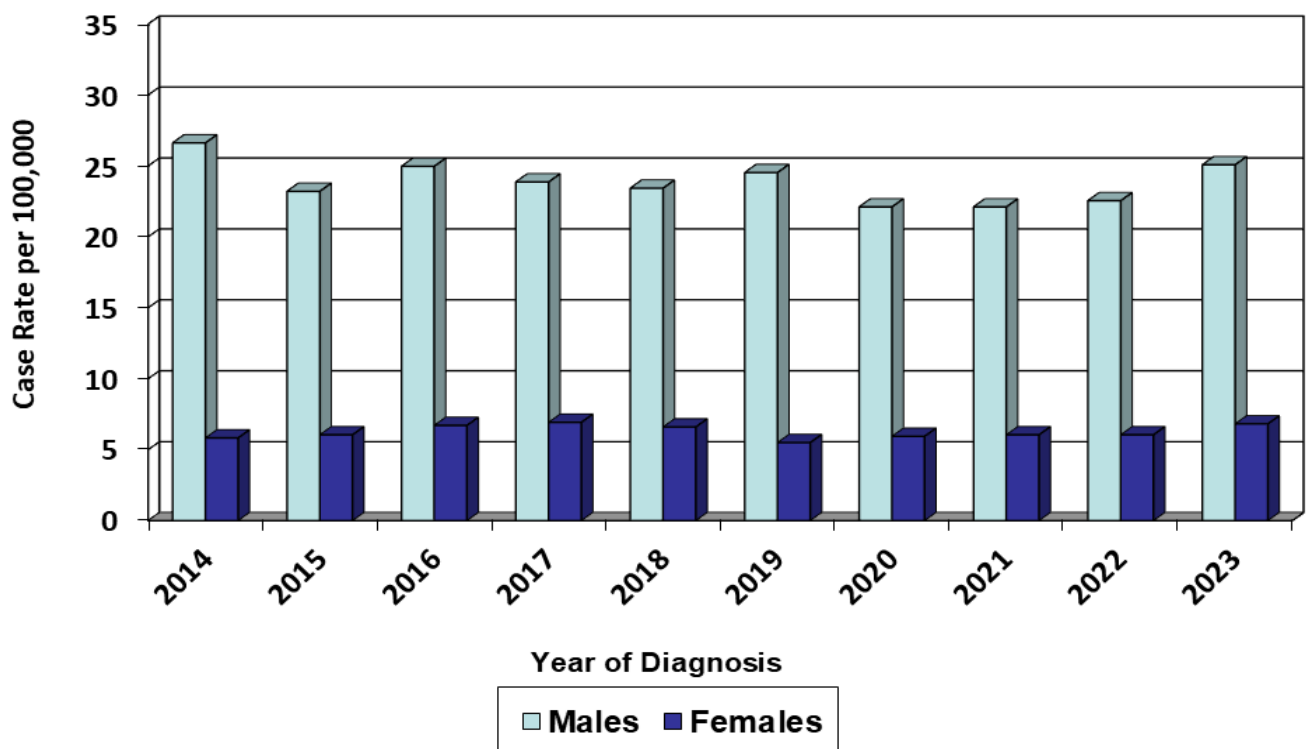
SEX	S.C. Total Population, 2023 est.		Total Estimated Living With HIV/AIDS, 2023		Total HIV/AIDS Diagnosis, 2022-2023	
	No.	%	No.	%	No.	%
Male	2,611,037	49%	14,536	72%	1,234	78%
Female	2,762,518	51%	5,698	28%	351	22%
Total	5,373,555		20,234		1,585	

Figure 2.1.3 shows the rate per 100,000 population for males and females diagnosed with HIV/AIDS from 2014 to 2023, as well as how the case rate fluctuates from year to year for men and women.

Women have seen the sharpest decline in the rate of newly diagnosed HIV/AIDS during the last 10 years, with the rate decreasing by 9% from 2014 (7.26) to 2023 (6.76), and while the rate may fluctuate from year to year, on average, women have had a 1% per year decrease in the rate for new cases.

Men, however, have not seen the same decline in the rate of new cases as women have, with the rate increasing 5% from 2013 (23.21) to 2022 (24.42). For males, the rate has more pronounced fluctuations; however, despite these fluctuations, the average change over the last 10 years has been less than 1% per year.

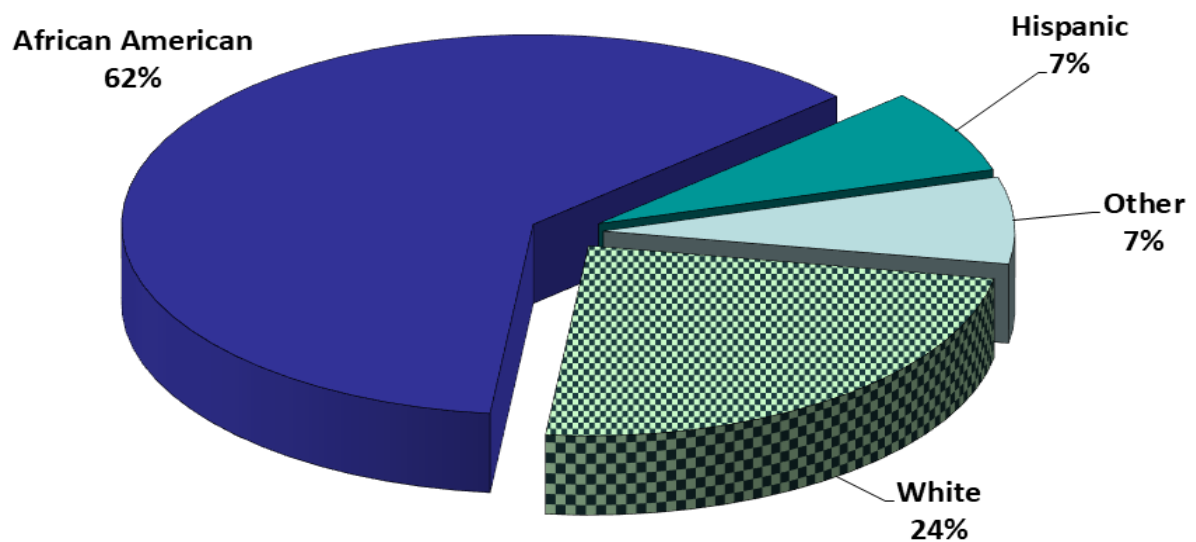
Figure 2.1.3: S.C. HIV/AIDS Case Rate per 100,000 Males and Females, 2014-2023



Race/Ethnicity

African Americans are disproportionately impacted by HIV/AIDS in SC African Americans comprise 27% of the state's total population, yet 62% of the total people living with HIV are African American. Six percent of the total cases are Hispanics, who comprise 7% of the state's population, (Figure 2.1.4).

Figure 2.1.4: Proportion of Persons Living with HIV/AIDS by Race/Ethnicity, 2023



African American men, who comprise only 12% of the state's population, make up the largest proportion of both PLWHA in 2023 and new diagnoses in 2021-2022 (42% and 43% respectively). African American women, who similarly comprise only 13% of the population, make up 20% of PLWHA in 2022 and 13% of new diagnoses in 2022-2023. Whites, who comprise the largest proportion of the population in SC (31% males; 32% females), make up 24% of PLWHA in 2021-2022 (19% males; 5% females) and 25% of new diagnoses in 2022-2023 (19% males; 6% females), (Figure 2.1.5)

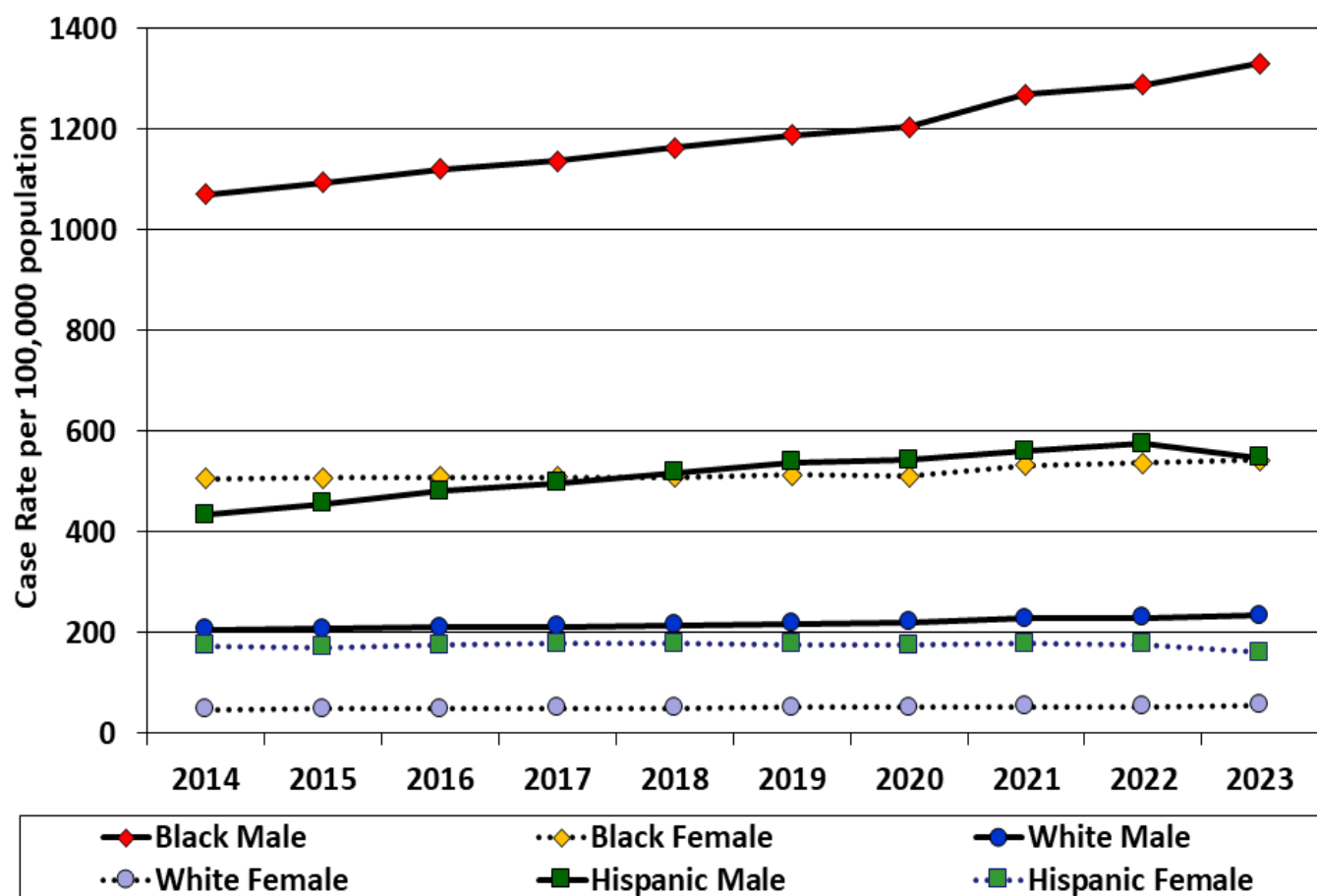
Figure 2.1.5: Disproportionate HIV Impact by Race/Ethnicity/Gender, S.C.

Race/Ethnicity & Gender	SC Total Population		Total Persons Living With HIV/AIDS, 2023		Total HIV/AIDS Diagnosis, 2022-2023	
	No.	%	No.	%	No.	%
Black Males	634,194	12%	8,440	42%	649	43%
Black Females	723,662	13%	3,927	20%	203	13%
White Males	1,653,691	31%	3,860	19%	295	19%
White Females	1,725,103	32%	941	5%	92	6%
Hispanic Males	208,842	4%	1,141	6%	171	11%
Hispanic Females	191,706	4%	305	2%	28	2%

Each year the number of people living with HIV/AIDS continues to grow. Case rates per 100,000 by race and gender show the disparate burden of HIV among African Americans.

As Figure 2.1.6 shows, the rate per 100,000 population in 2023 is six times higher for Black males than for White males, and 10 times higher for Black females compared to White females.

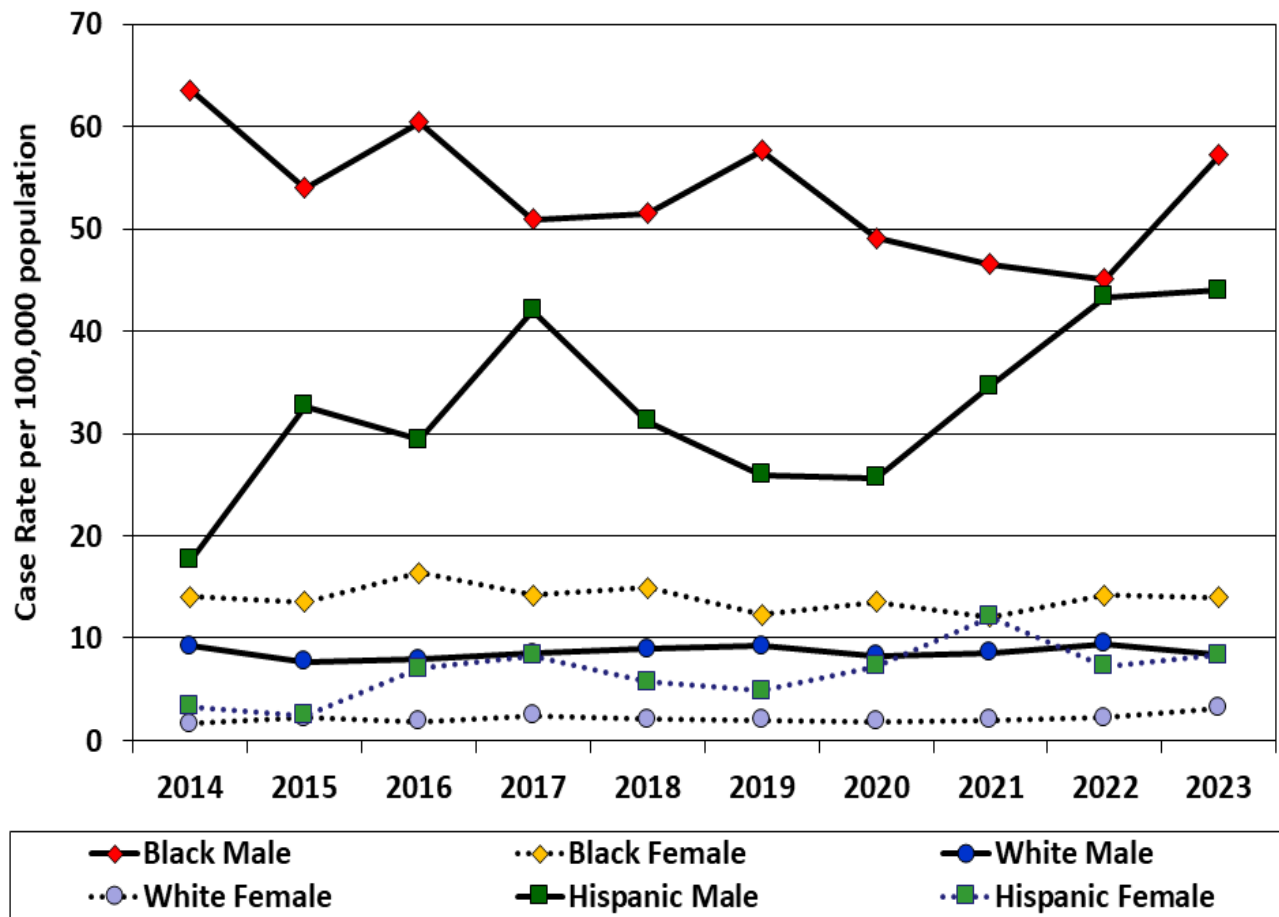
Figure 2.1.6: S.C. HIV/AIDS Prevalence Rates by Race/Gender, 2014-2023



In SC the trend in the number and rate of people newly diagnosed with HIV/AIDS each year has changed, with a 1% increase in the rate per 100,000 population between 2014 (15.1) and 2023 (15.3).

However, during this 10-year period, there have been high and low fluctuations from one year to the next. There are also important differences in the rates among race/gender populations, (Figure 2.1.7).

Figure 2.1.7: S.C. HIV/AIDS Incidence Rates by Race/Gender, 2014-2023



While women in general have seen a decline in the rate of newly diagnosed HIV/AIDS, African American women specifically have seen a 1% decrease between 2014 and 2023, and on average, had a 1% per year decrease in the rate for new cases. White women have seen an increase over the same time period: 88% increase from 2014 (1.7) to 2023 (3.2); White women averaged a 10.3% per year increase in the rate for new cases. African American men had a 10% decrease in the rate between 2014 (63.6) and 2023 (57.2) and have averaged 1% per year decrease in the rate for new cases. The rate for White men decreased 10% over the same period (9.2 to 8.4) and have also averaged a 1% per year decrease in the rate for new cases.

Age

When analyzing HIV/AIDS data by age, the differences between the two measures (incidence and prevalence) become pronounced.

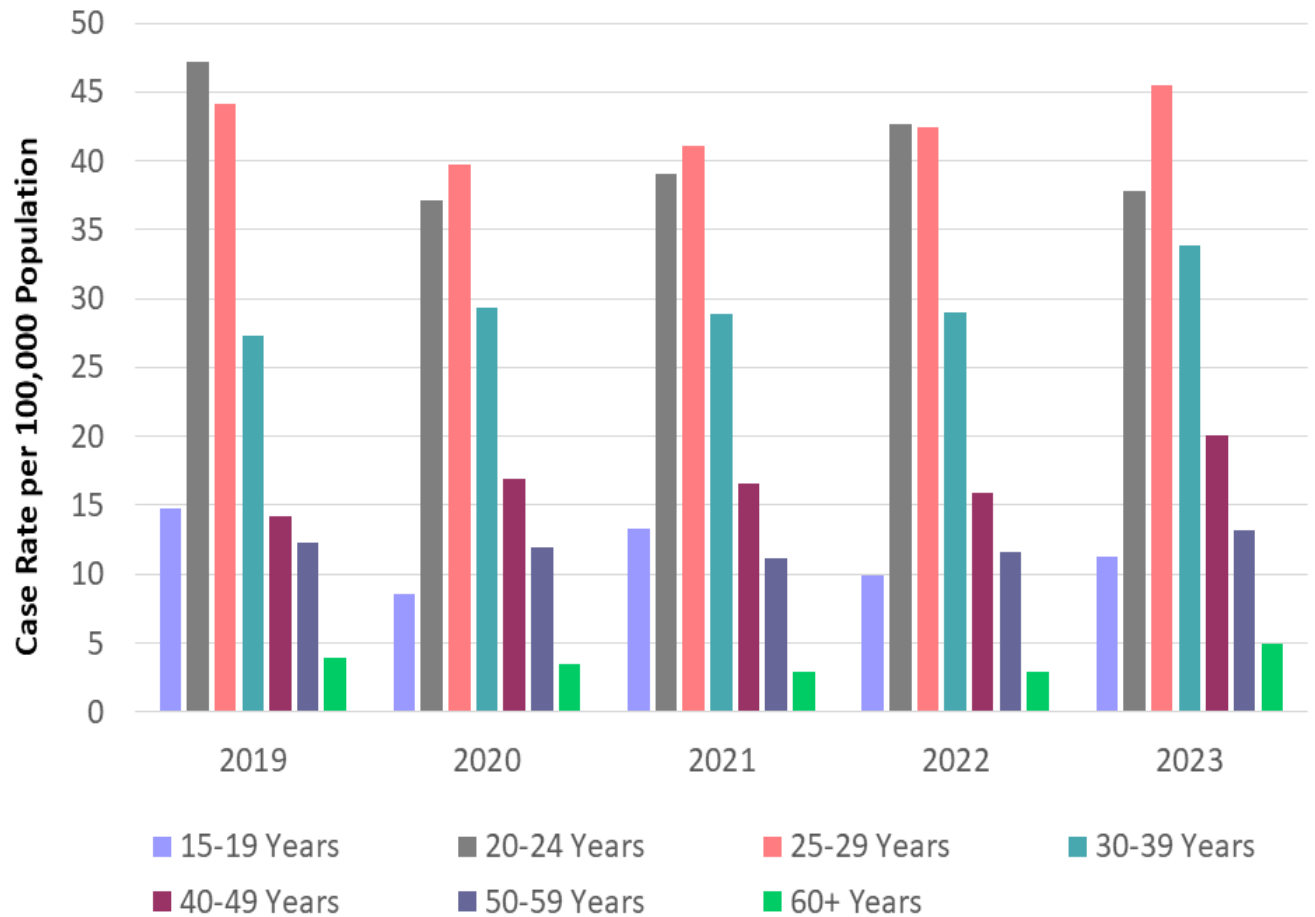
Figure 2.1.8: Disproportionate S.C. HIV Impact by Age

Age Range	SC Population		Total Persons Living with HIV/AIDS, 2023		Total HIV/ AIDS Diagnosis, 2022-2023	
	No.	%	No.	%	No.	%
<15 Years	932,659	17%	134	0.7%	3	0.2%
15-19 Years	355,001	7%	96	0.5%	74	5%
20-24 Years	343,356	6%	539	3%	281	18%
25-29 Years	330,246	6%	1,245	6%	289	18%
30-39 Years	697,615	13%	4,170	21%	434	27%
40-49 Years	640,513	12%	3,635	18%	228	14%
50-59 Years	675,925	13%	4,990	25%	168	11%
60+ Years	1,398,240	26%	5,425	27%	108	7%

With incidence, 68.2% of new cases diagnosed in 2022-2023 were under the age of 40, and with 2023 prevalence, 70% were over the age of 40. For incidence, people aged 20-29 comprised the largest proportion, 36% of newly diagnosed cases (20-24, 18%) and (25-29, 18%) and people 30-39 comprised 27%. People under the age of 20 comprised just over 5% of new diagnoses. For prevalence, 18% were aged 40-49, 25% were aged 50-59, and 26% were aged 60+ (Figure 2.1.8).

Figure 2.1.9 shows the HIV/AIDS incidence rates by age groups. From 2019 to 2023, the average change in rate for the 15-19 age group increased by 6% and for the 20-24 age group rate increased by 1%. The 25-29 age group decreased by 1.6%, the 30-39 age group increased by 6.3%, while the 40-49 age group increased by 0.8% and the 50-59 age group increased by 2.0%. The 60+ age group saw a 17.4% increase.

Figure 2.1.9: S.C. HIV/AIDS Incidence Case Rate by Age, 2019-2023

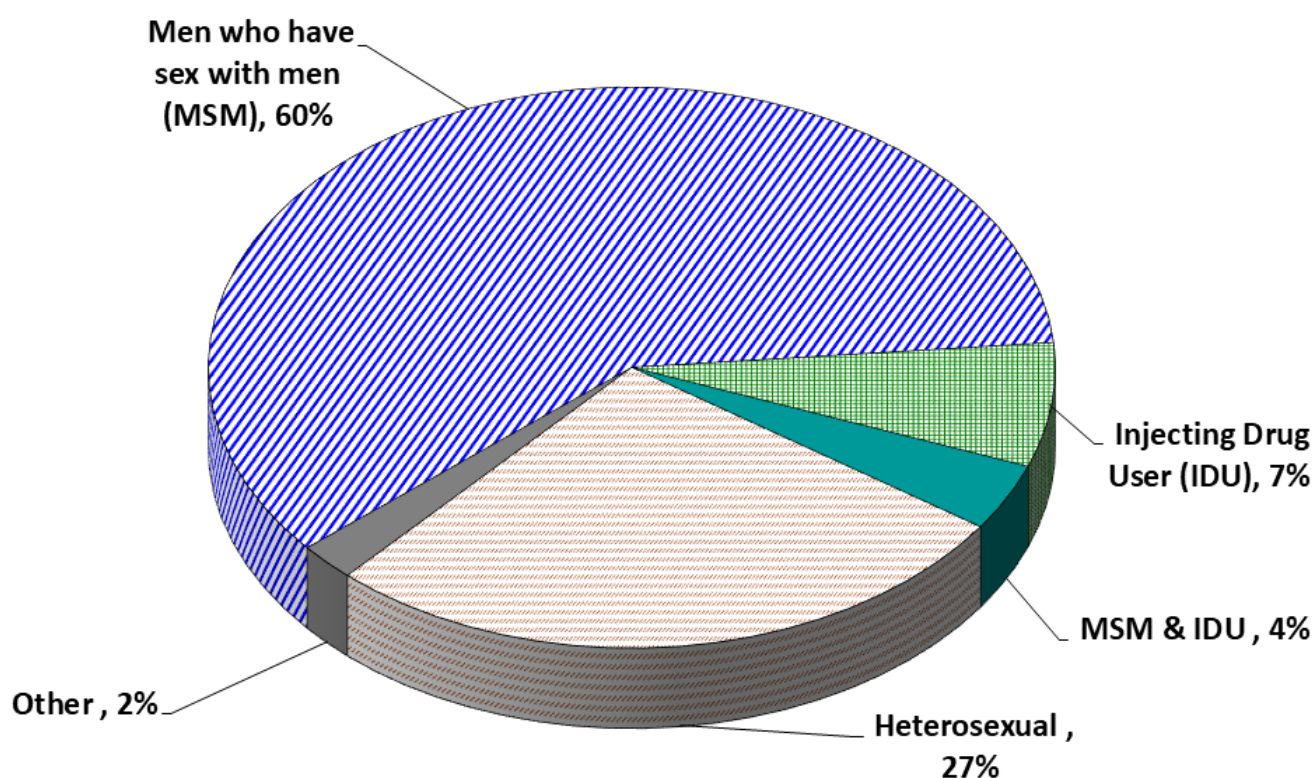


Risk Exposure

Of the cases with an identified risk factor, men who have sex with men was the highest reported risk factor in 2023 for PLWHA (60%). Heterosexual contact accounted for 27% of reported risk factors. Seven percent reported a risk of IDU. Four percent reported the combined risks of MSM and IDU (Figure 2.1.10).

Figure 2.1.10: Proportion of Persons Living with HIV/AIDS by Risk Exposure, 2023

N=15,333

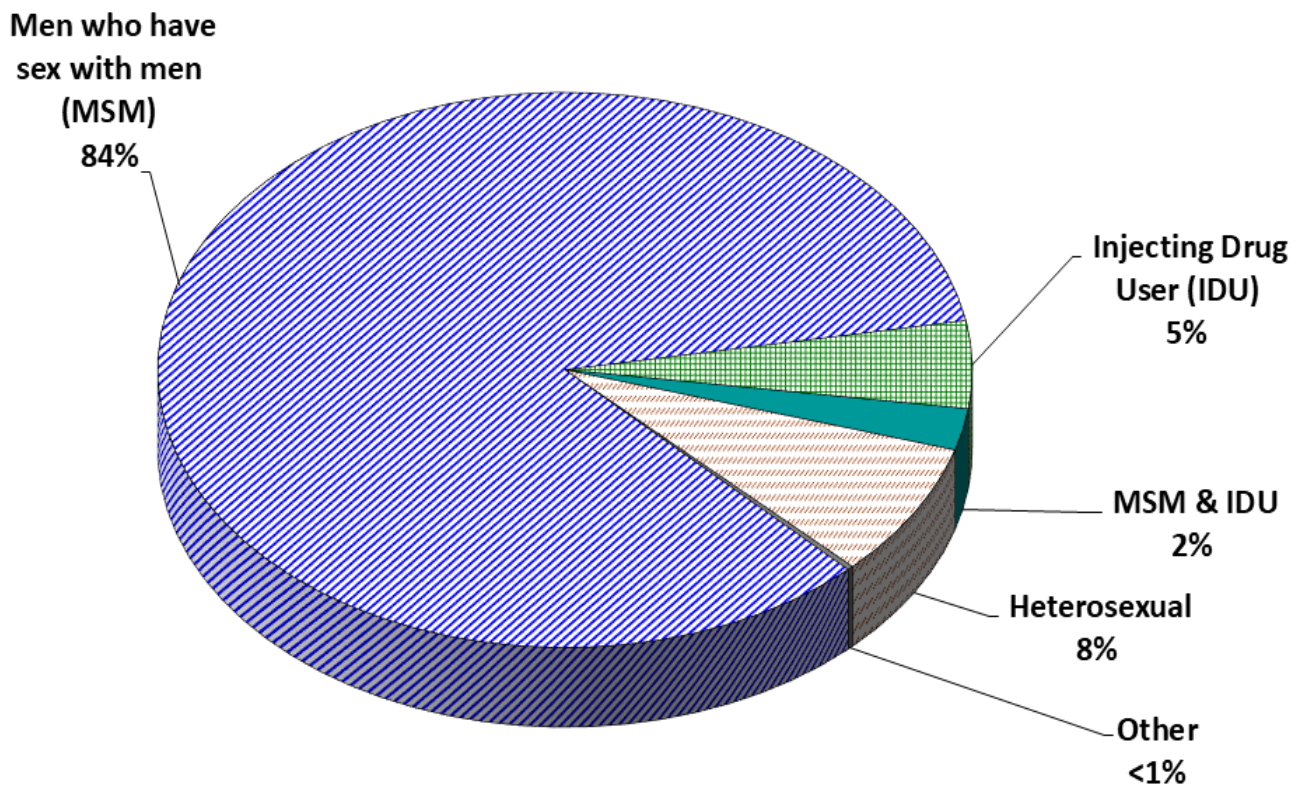


Note: Total excludes cases with no risk identified.

The risk category 'Other' includes blood transfusion, hemophilia, and perinatal transmission, all of which account for a very small proportion of PLWHA (2%). Of the total estimated number of PLWHA in 2023 (23% had no risk identified).

Figure 2.1.11: Proportion of HIV/AIDS Cases Diagnosed 2022-2023 by Risk Exposure

N=826



Note: Total excludes cases with no risk identified.

Figure 2.1.11 shows reported risk for people newly diagnosed with HIV/AIDS during 2022-2023.

The proportion of new cases with a reported risk of MSM was 84% and with a reported risk of heterosexual contact was 8%; IDUs made up 5% and the combined risk of MSM and IDU 2%. Forty-three percent of new cases had no risk identified. Over time, the proportion of cases with no risk identified each year decreases as risks are determined through follow-up surveillance activities.

The race/gender profile of newly diagnosed cases in 2022-2023 with no risk reported is reflective of the total proportion of HIV/AIDS cases by race/gender, (Figure 2.1.12).

**Figure 2.1.12: New S.C. HIV/AIDS Cases (2022-2023)
Race/Ethnicity and Gender: Proportion of No Risk Identified
Compared to Proportion of Reported Cases**

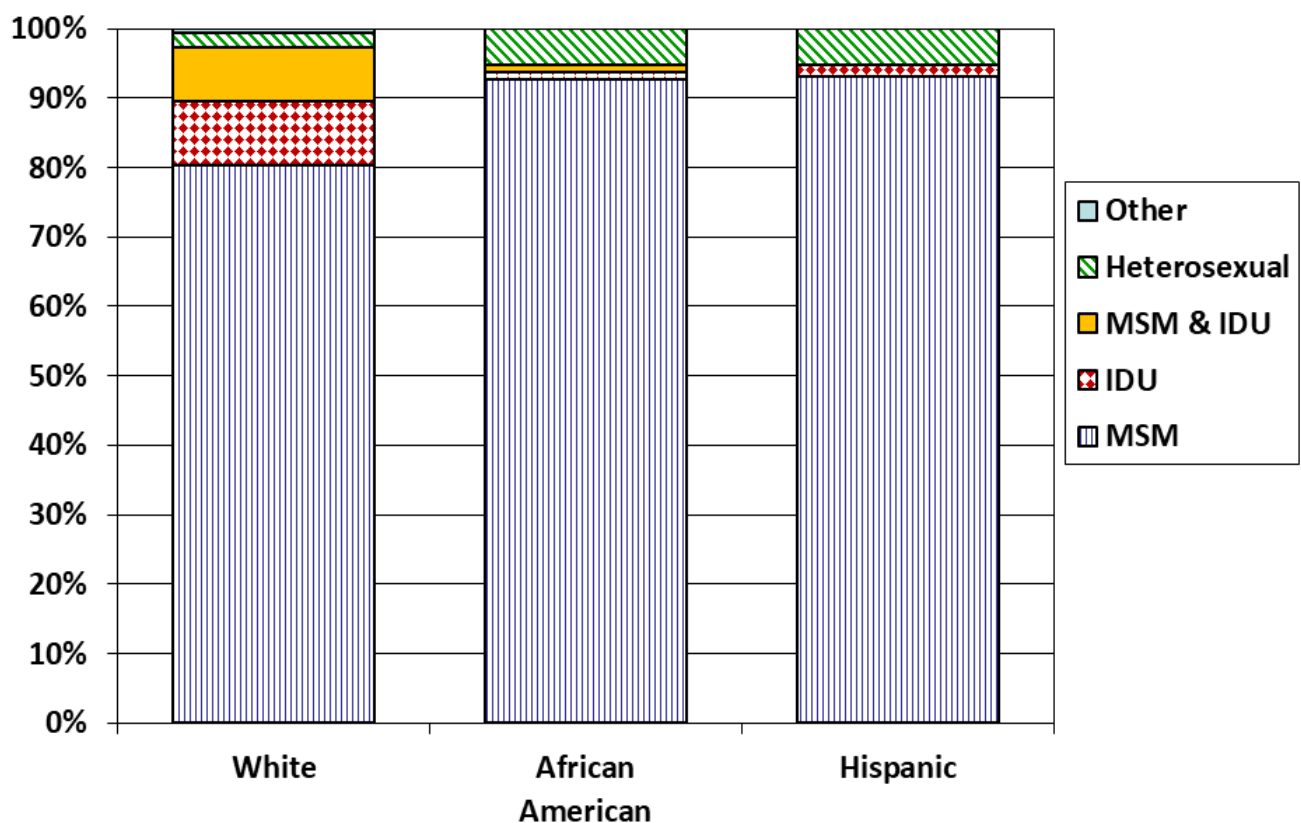
Race/Gender (Adult/Adolescent Cases)	New HIV/AIDS Cases 2022-2023	
	% with No Risk Identified (N=680)	% Cases Reported (N=1,438)
Black Male	39%	45%
Black Female	26%	14%
White Male	15%	21%
White Female	9%	6%
Hispanic Male	8%	12%
Hispanic Female	3%	2%

Note: Primary reasons for risk exposure information not reported were explained in the South Carolina HIV/AIDS Surveillance System section of the introduction.

Of the reported risks for newly diagnosed cases in 2022-2023: among African American men, most cases were attributed to MSM contact (93%), Heterosexual risk (5%), and IDU (1%). For White men, most cases were attributed to MSM contact (80%), IDU (9%), the combined risk of MSM and IDU (8%), and Heterosexual risk (2%).

Of Hispanic men with reported risk factors, most cases were attributed to MSM contact (93%), Heterosexual risk (5%), both IDU and the combined risk of MSM and IDU (0%), (Figure 2.1.13) Thirty-two percent of men diagnosed in 2022-2023 had no indicated risk.

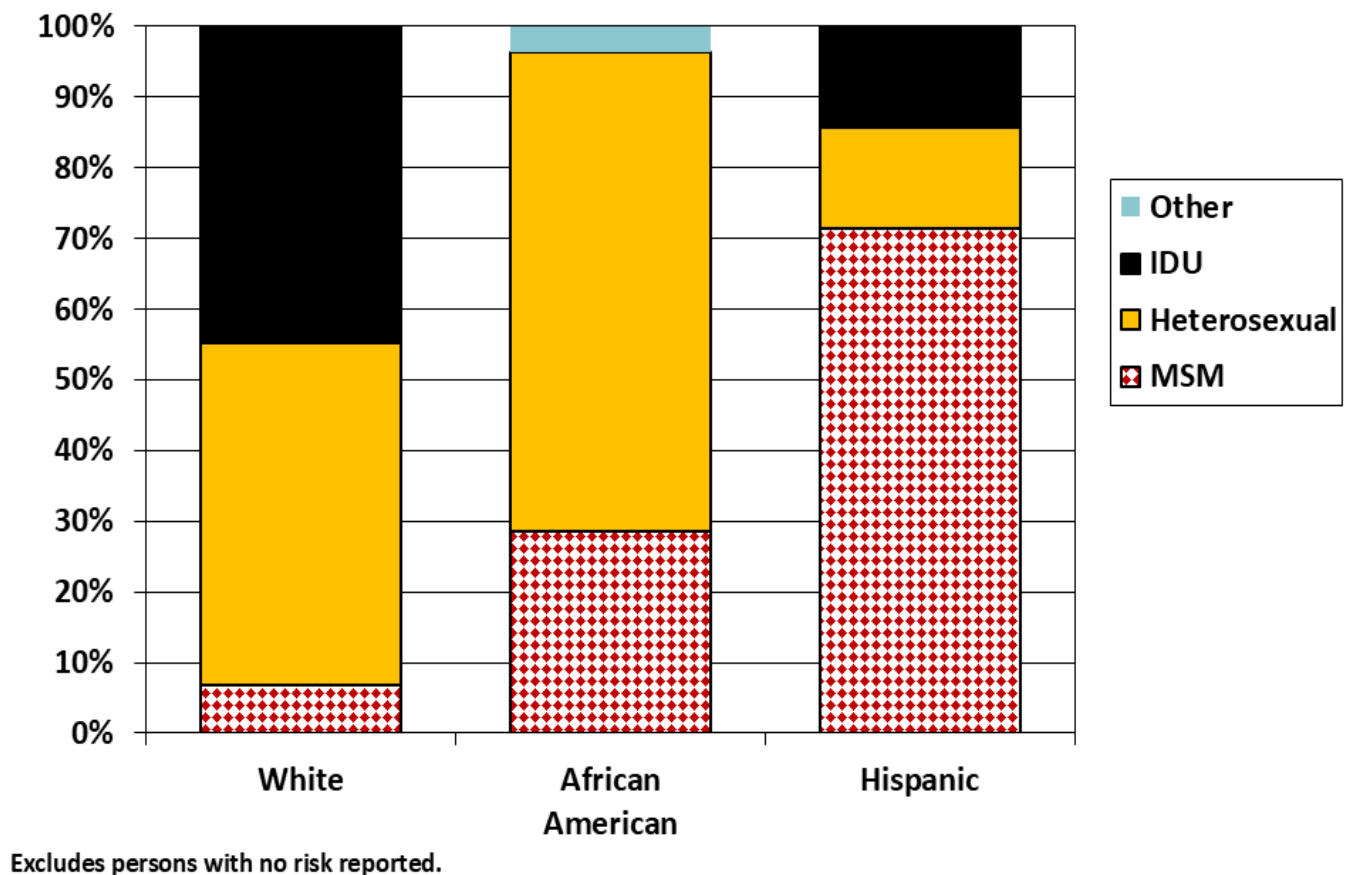
Figure 2.1.13: Proportion of Male HIV/AIDS Cases by Exposure Category, Diagnosed 2022-2023



Excludes persons with no risk reported.

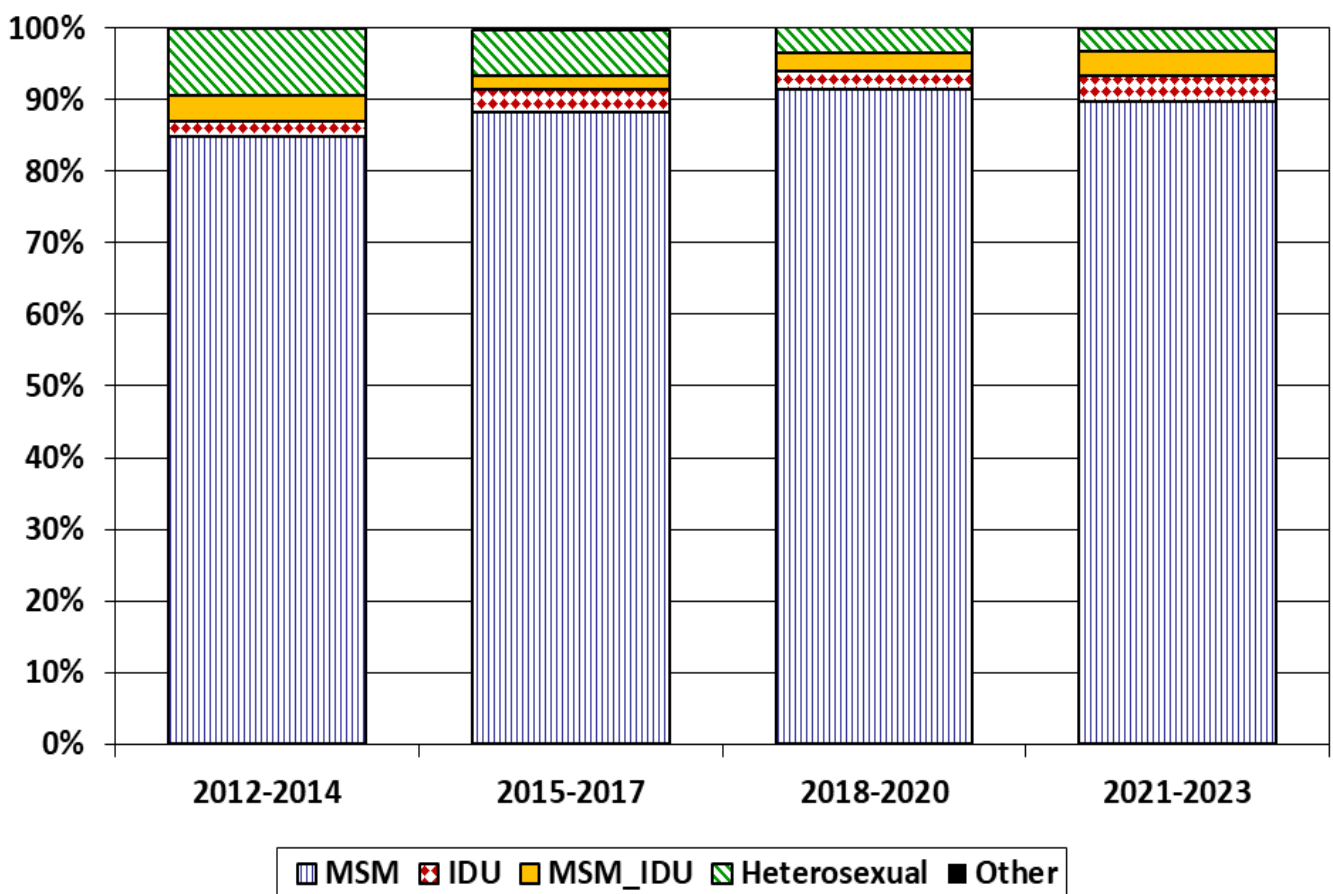
Among women diagnosed during 2022-2023, heterosexual contact was the most often reported risk (50%). Sixty-eight percent of African American women reported heterosexual contact as their risk, while 75% of Hispanic women and 42% of White women reported a risk of heterosexual contact. White women reported Injecting Drug Use more often (45%) than Hispanic women (14), and African American women (0%), (Figure 2.1.14). Seventy-nine percent of women diagnosed in 2022-2023 had no indicated risk.

Figure 2.1.14: Proportion of Female HIV/AIDS Cases by Exposure Category, Diagnosed 2022-2023



Figures 2.1.15 and 2.1.16 show the proportion of total HIV/AIDS cases diagnosed during four periods from 2012 to 2023 by gender and risk exposure category for males and females in SC. Heterosexual contact has decreased 65% from 2012-2014 to 2021-2023 as a reported risk for men, while the reported risk of MSM has increased 6% over the same time period.

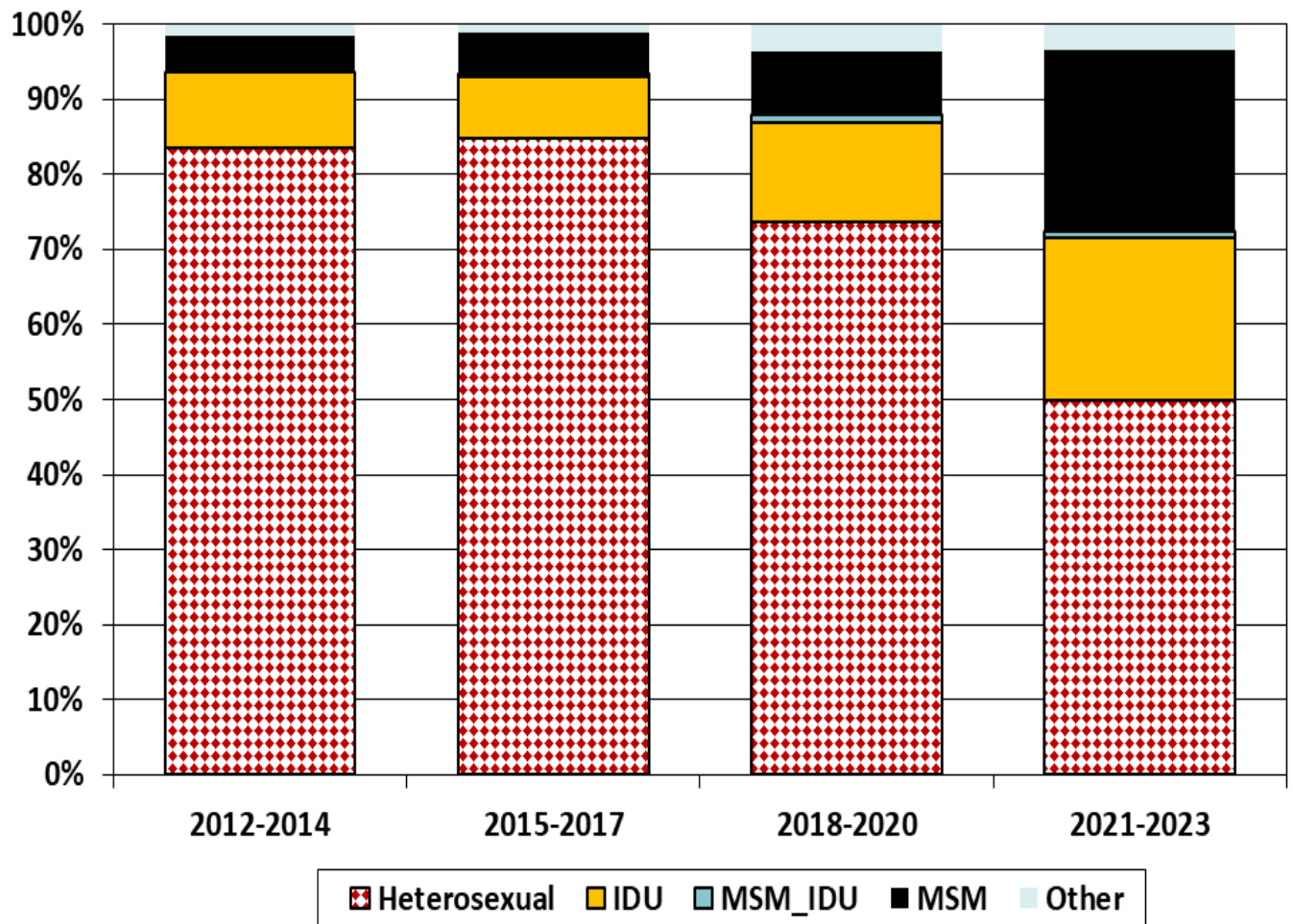
Figure 2.1.15: Proportional Distribution of Male HIV/AIDS Cases by Exposure Category, Diagnosed 2012-2023



Excludes persons with no risk reported.

The proportion of reported risks for women is consistent across all the time periods until 2012-2020. However, the proportion of cases due to IDU has increased 64% between 2012 and 2023. On the other hand, heterosexual contact decreased by 32% from 2012 to 2023, (Figure 2.1.16).

Figure 2.1.16: Proportional Distribution of Female HIV/AIDS Cases by Exposure Category, Diagnosed 2012-2023



Excludes persons with no risk reported.

HIV Risk Factors

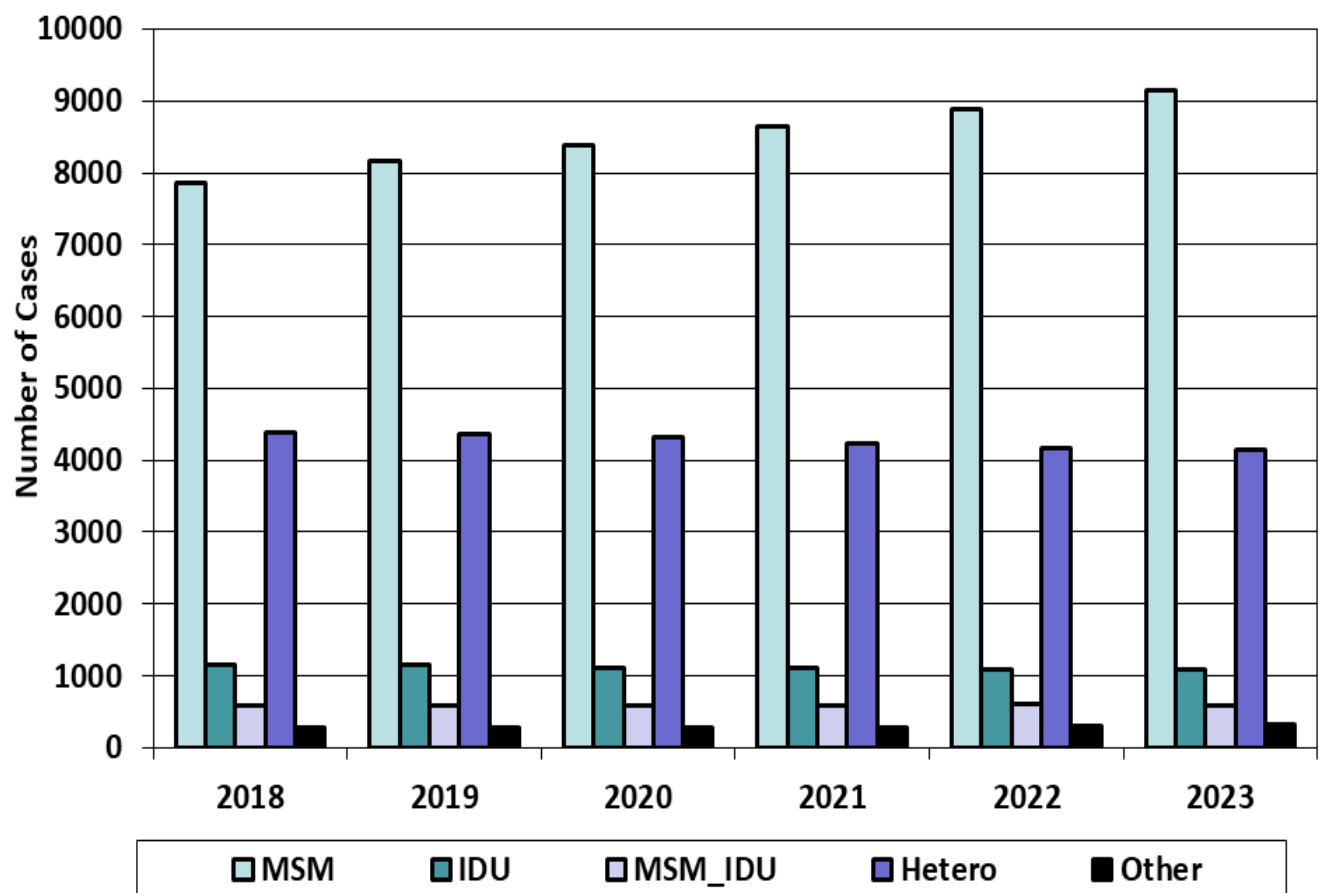
HIV can be transmitted when someone comes in contact with an infected person's blood, breast milk, or sexual fluids. The people most likely to become infected with HIV are those who engage in high-risk behaviors that place them at greater risk. Transmission happens most often during sexual or drug-using activity, and the frequency of the high-risk behavior combined with HIV prevalence in sexual or drug-using networks determines a person's risk of becoming infected. In order to accurately target STI/HIV prevention and treatment activities, it is important for community planning groups (and program providers) to have information on the number and characteristics of people who become newly infected with HIV and people whose behaviors or other exposures put them at various levels of risk for STI and HIV infection. This section summarizes HIV infection among population groups at high risk for HIV infection and provides STI and behavioral risk data.

Characteristics of HIV/AIDS in People at Highest Risk

Analysis of characteristics of people with HIV/AIDS helps identify people at greatest risk for acquiring HIV. Risk for infection can be determined by assessing the frequency of high-risk behavior (e.g., unprotected sex, needle-sharing) in combination with the estimated prevalence of HIV/AIDS and incidence of HIV/AIDS.

Figure 2.1.17 shows the number of people in SC living with HIV/AIDS at the end of each year by reported risk. MSM comprise the greatest number of people living with HIV, followed by heterosexuals. IDU, MSM and IDU, and other risks comprise fewer numbers.

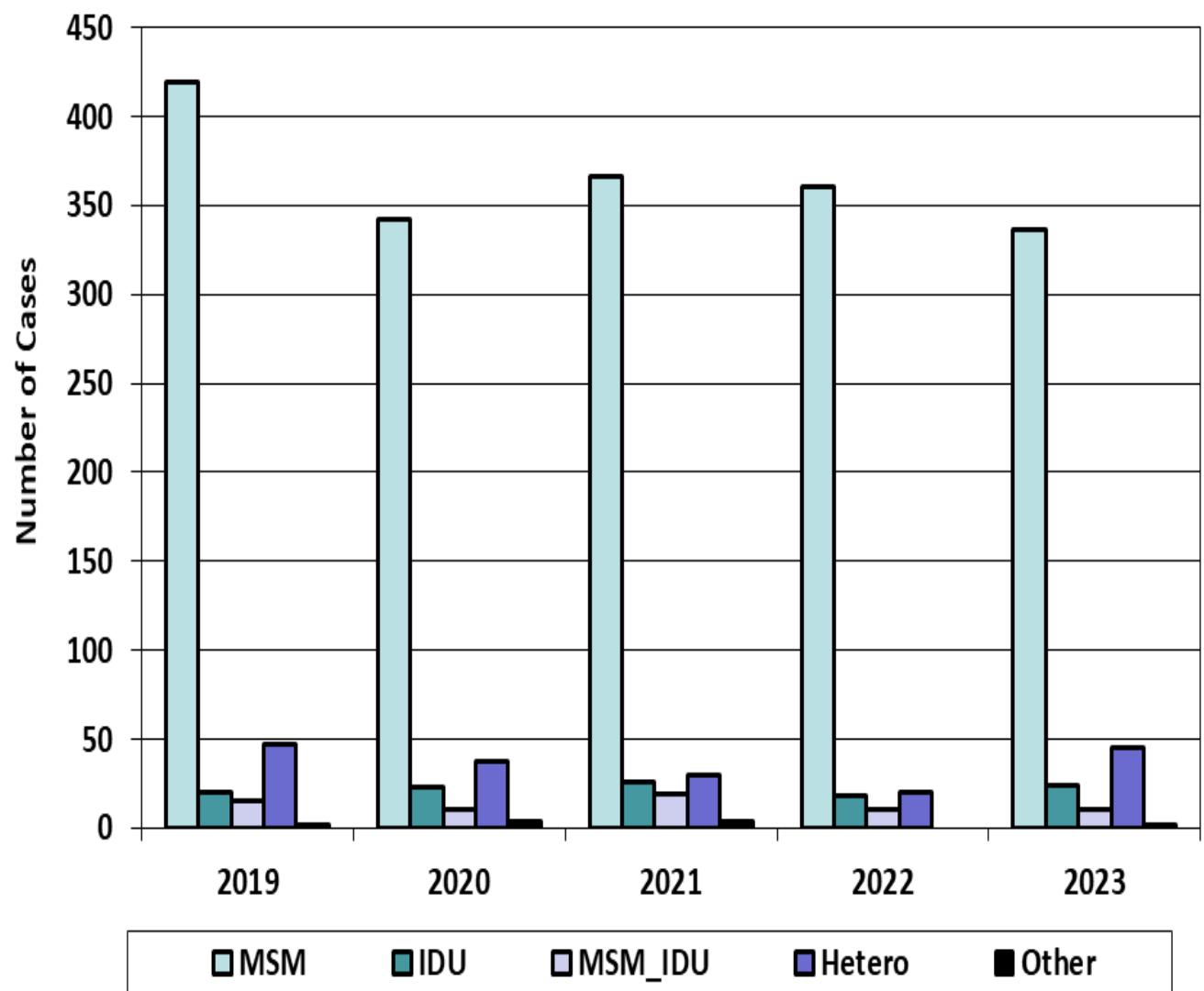
Figure 2.1.17: Number of People Living with HIV/AIDS by Year and Reported Risk, 2018-2023



Excludes persons with no risk reported.

Figure 2.1.18 is a graph of the number of each reported risk for newly diagnosed cases, by year. Similar to the prevalence graph above, MSM is the most often reported risk among newly diagnosed cases; followed by heterosexual contact, IDU, combined MSM and IDU, and other risks.

Figure 2.1.18: Number of new HIV/AIDS Cases by Year of Diagnosis and Reported Risk, 2019-2023



Excludes persons with no risk reported.

Based on data in this profile, the following primary populations have been identified as being at the highest risk of HIV/AIDS: men who have sex with men (MSM), high-risk heterosexuals, injecting drug users (IDUs), and men who have sex with men and injecting drug use (MSM_IDU). Women will be described in the heterosexual and injecting drug user section, and teenagers/young adults will be described within each population category.

Characteristics of Men who have Sex with Men

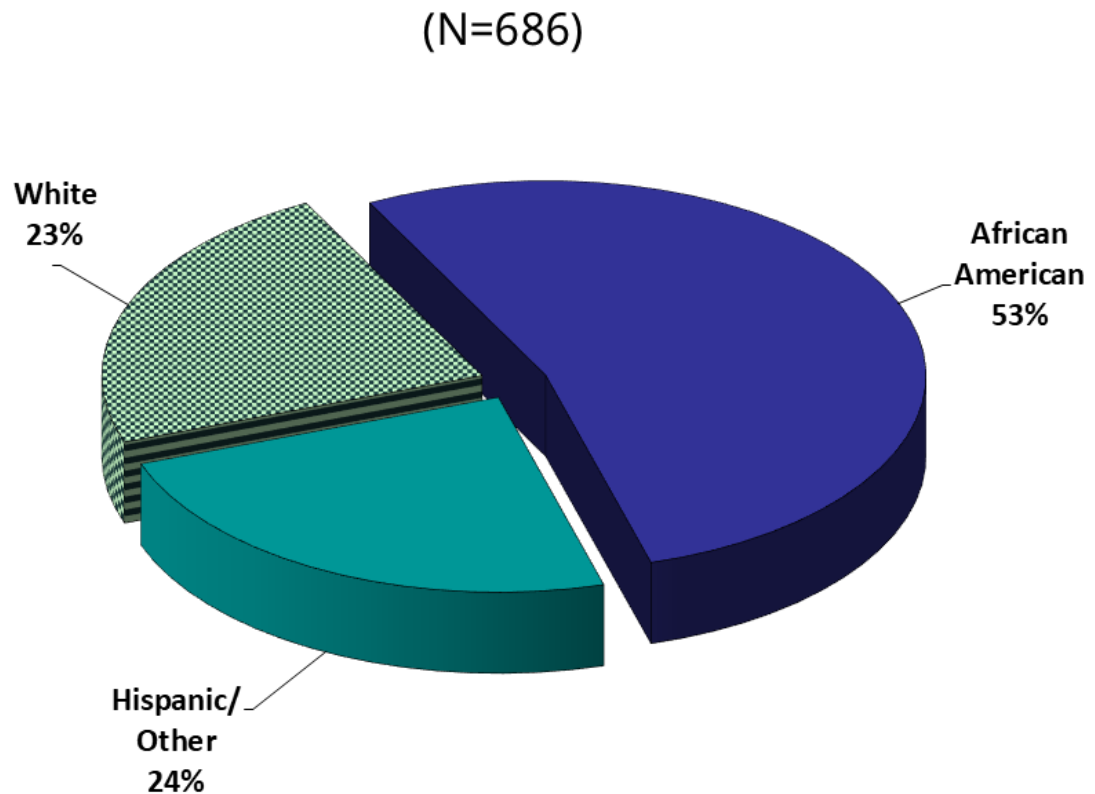
Prevalence of Men Who Have Sex with Men (MSM) Behavior

According to the U.S. Census Bureau, there are an estimated 1,499,755 males in SC between the ages of 15-65, which is the age range when people are most sexually active. A review of literature and other state profiles indicates that the estimated percentage of MSM ranges from 1.7% to 12.9%. This would mean the number of MSM in SC could be estimated to be between 25,496 and 193,468.

Of PLWHA in SC with a reported risk, the largest proportion is men who have sex with men (60%). MSM also accounted for the highest proportion (84%) of recently diagnosed cases.

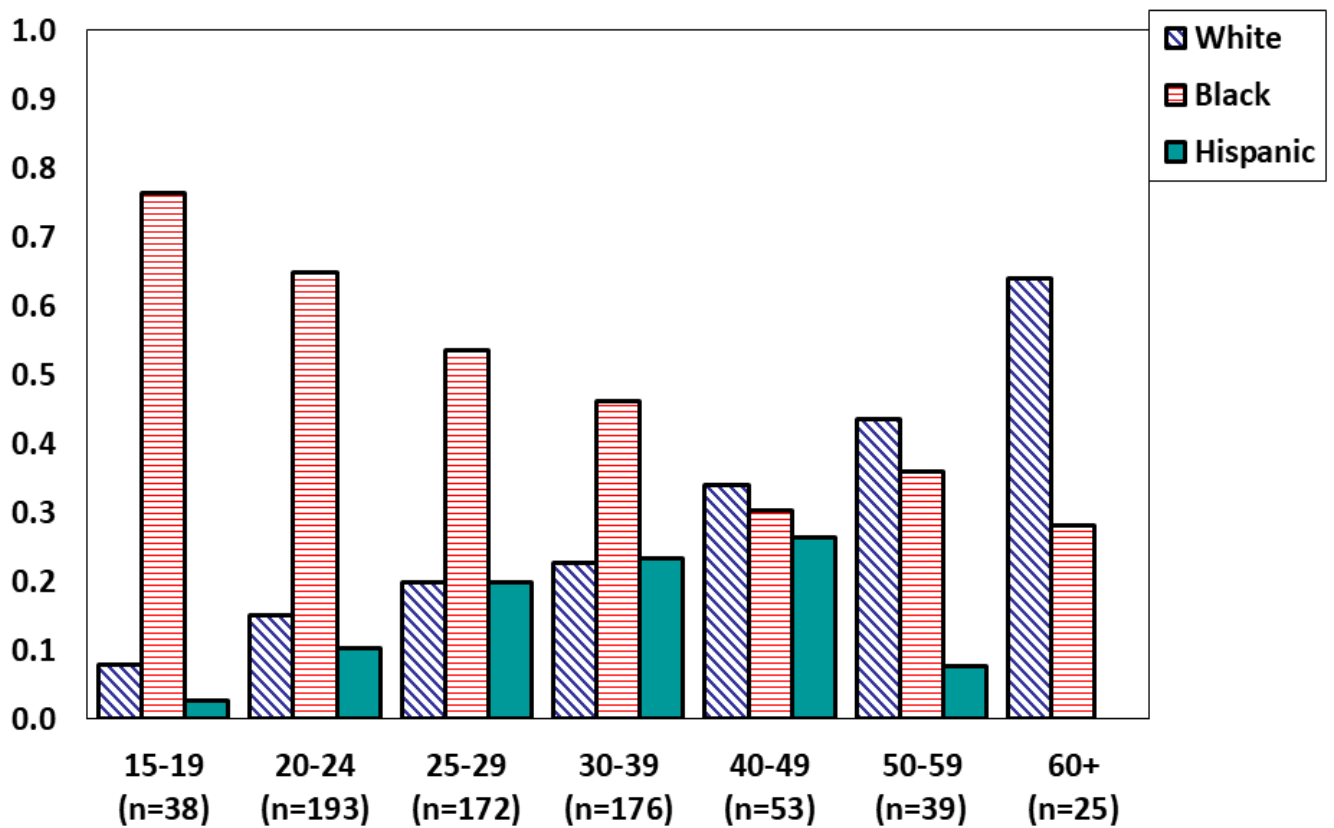
The majority of MSM cases diagnosed during 2022-2023 were African American (53%). White men accounted for 23% of the new cases and 24% were Hispanic or other races, (Figure 2.1.19).

Figure 2.1.19: Proportion of Men Diagnosed with HIV/AIDS in 2022-2023 who Reported a Risk of MSM by Race/Ethnicity



The majority of MSM diagnosed during 2022-2023 were 20-29 years of age (53%); 25% were 30-39 years of age, 8% were 40-49 years of age, and 10% were 50+ years of age. For men recently diagnosed, African Americans accounted for the highest proportion for each age group below the age of 40, and Whites accounted for the highest proportion over the age of 40, (Figure 2.1.20).

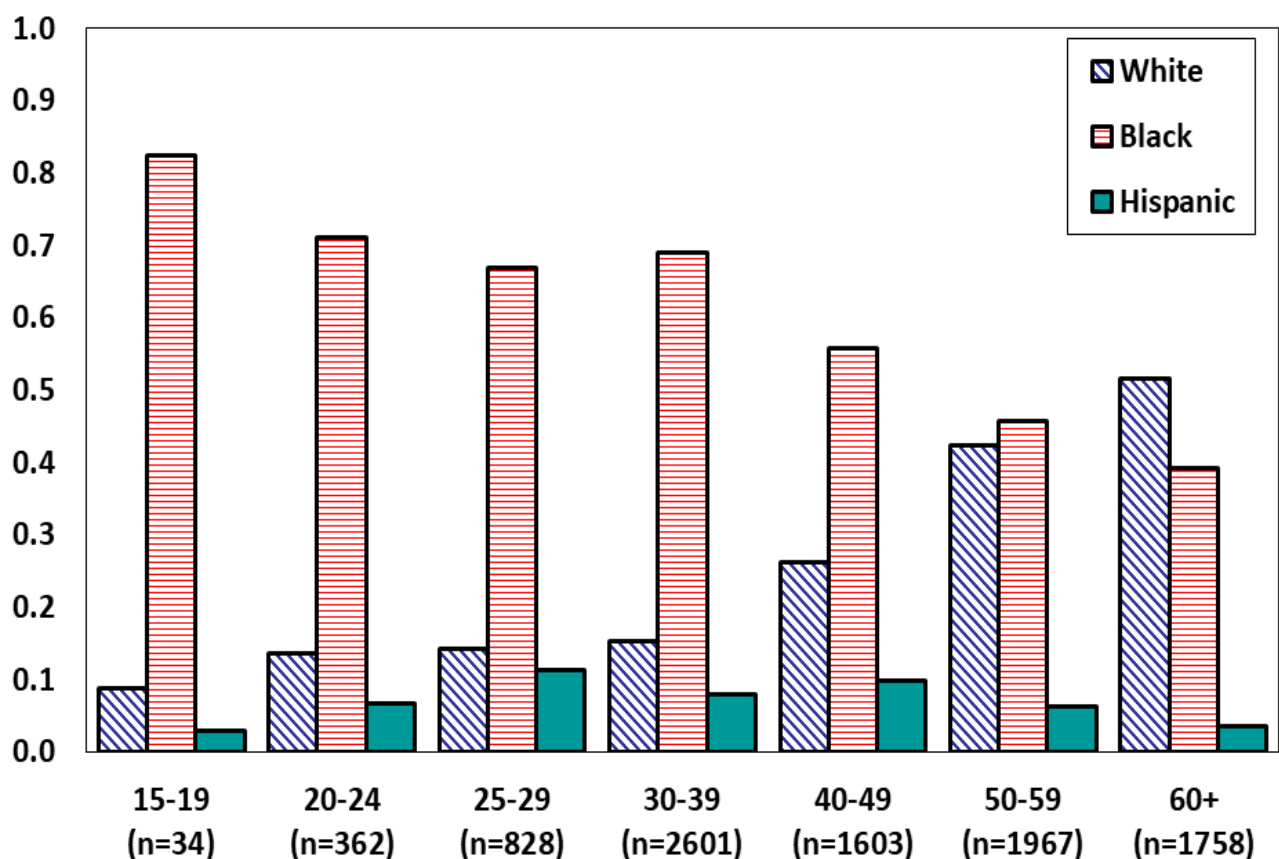
Figure 2.1.20: Percent of MSM HIV/AIDS Cases Diagnosed 2022-2023 by Age Group & Race/Ethnicity
N=697



Total N includes 'Other' race/ethnicity not included in graph.

Of men who have sex with men living with HIV/AIDS in 2023, 56% were African Americans, 30% were White, and 7% were Hispanic. The majority of MSM living with HIV/AIDS were over the age of 30 (86%), with the highest percentage in the 30-39 age group (28%). Twenty-one percent were 50-59 years of age, and 13% were below the age of 30. African Americans accounted for the highest proportion for each age group below the age of 60 and Whites accounted for the highest proportion over the age of 60, (Figure 2.1.21).

Figure 2.1.21: Percent of MSM Living with HIV/AIDS by Age/Race, 2023 (N=9,153)



Total N includes "Other" race/ethnicity not included in graph.

Summary

Among men who have sex with men, African Americans account for over half the proportion of both living with HIV/AIDS (56%) and newly diagnosed HIV/AIDS cases (53%). And of MSM, age 20-40, African Americans comprised 70% of cases living with HIV/AIDS and 59% of newly diagnosed HIV/AIDS.

Characteristics of High-Risk Heterosexuals

Prevalence of High-Risk Heterosexual Behavior

It is difficult to assess the number of people in SC who engage in heterosexual contact that puts them at high risk of becoming infected with HIV and other STIs. While there are some differences in the population of people with HIV/AIDS and the population of those with a non-HIV STI, most experts acknowledge that a diagnosis of an STI would suggest the person is engaging in unsafe sexual practices. During 2023, 33,470 cases of chlamydia, 12,172 cases of gonorrhea and 938 cases of infectious syphilis were reported in SC. More data on STIs, as well as other behavioral indicators such as teenage pregnancy and condom use, is described later.

In order for a case of HIV or AIDS to be considered as heterosexual transmission, it must be reported that the person had heterosexual contact with a person who has documented HIV infection or AIDS or had heterosexual contact with a person who is in a high-risk group for HIV (MSM or IDU).

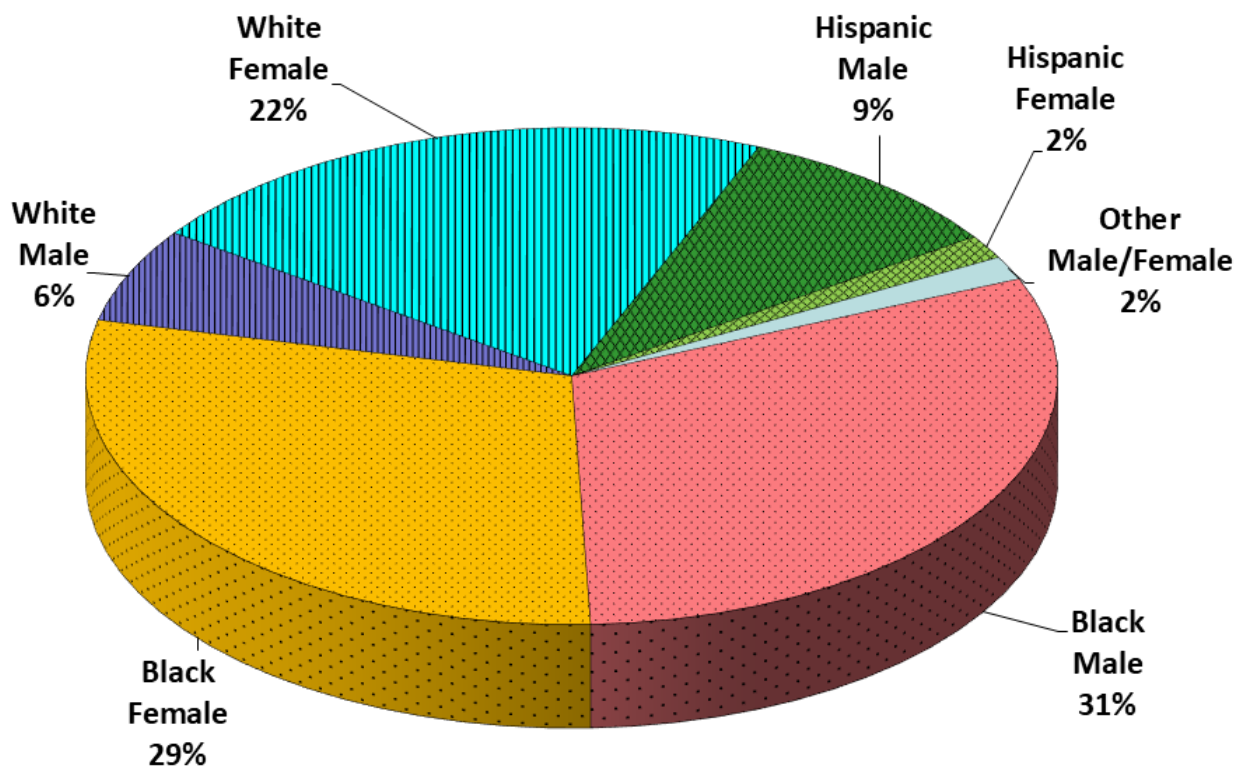
People with reported high-risk heterosexual contact comprise 27% of the total PLWHA at the end of 2023. Of PLWHA who reported a risk of heterosexual contact, majority were African American women (50%), 23% were African American men, 10% were White women, and 3% were White men, (see below).

Characteristics of high-risk heterosexuals:

Prevalence: Race/Sex	White Male	White Female	Black Male	Black Female	Hispanic M/F	Other M/F	Unknown M/F
Count	125	428	952	2,062	249	335	2
	3%	10%	23%	50%	6%	8%	0%
	13%		73%				

Eight percent of people diagnosed during 2022-2023 reported high-risk heterosexual contact. Figure 2.1.22 shows that African American men and women comprise a disproportionate 60% of recently diagnosed heterosexual HIV/AIDS cases. African American women account for 29% of recent cases and 31% are African American men. White women account for 22%, while men account for 6%. Hispanic men and women together account for 11% of recent cases with a reported risk of heterosexual contact (9% men and 2% women). Other Male/Female account for 2%.

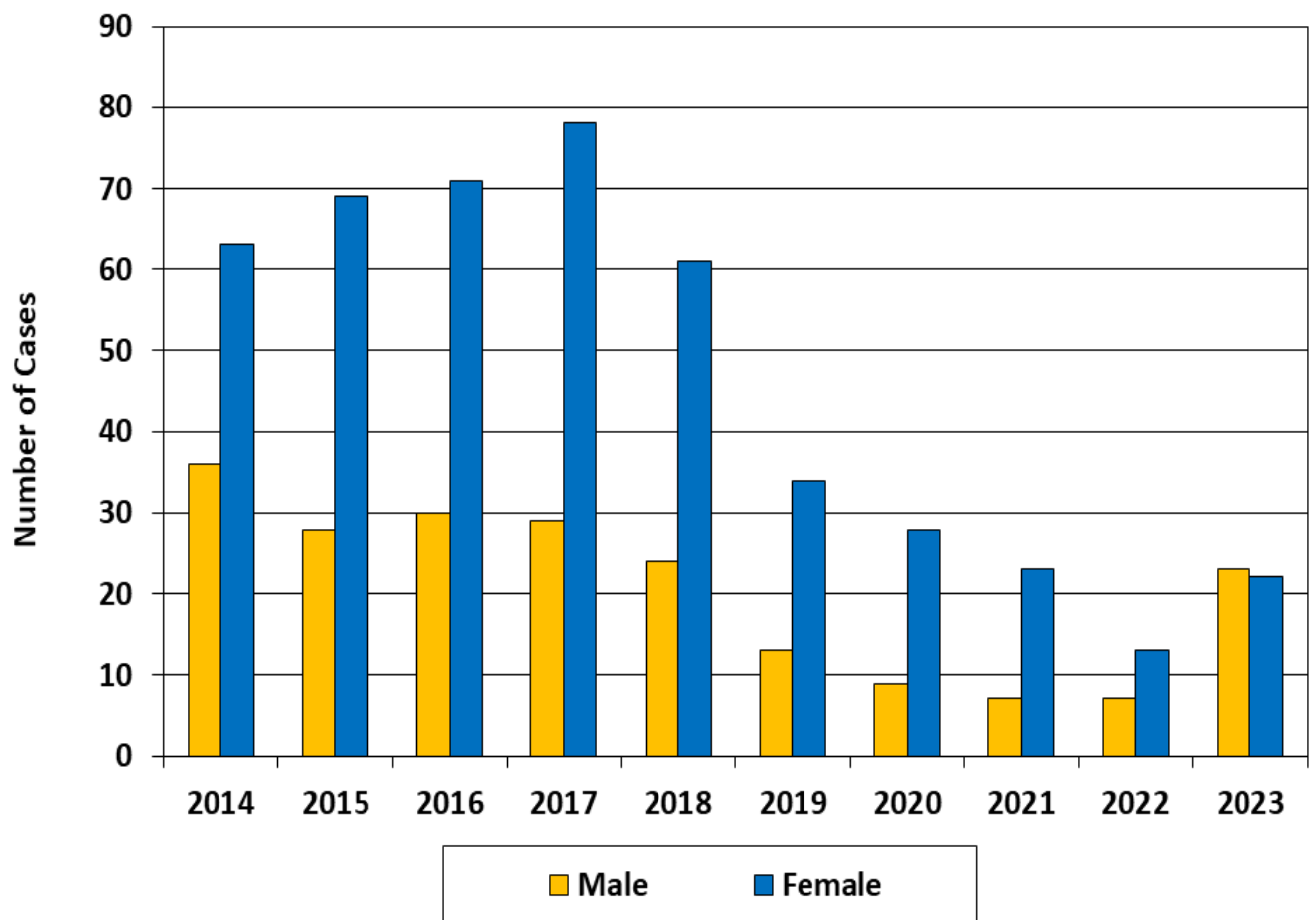
Figure 2.1.22: Proportion of Heterosexual HIV/AIDS Cases by Race/Ethnicity, Diagnosed 2022-2023 (N=65)



Excludes Unknown Race/Gender

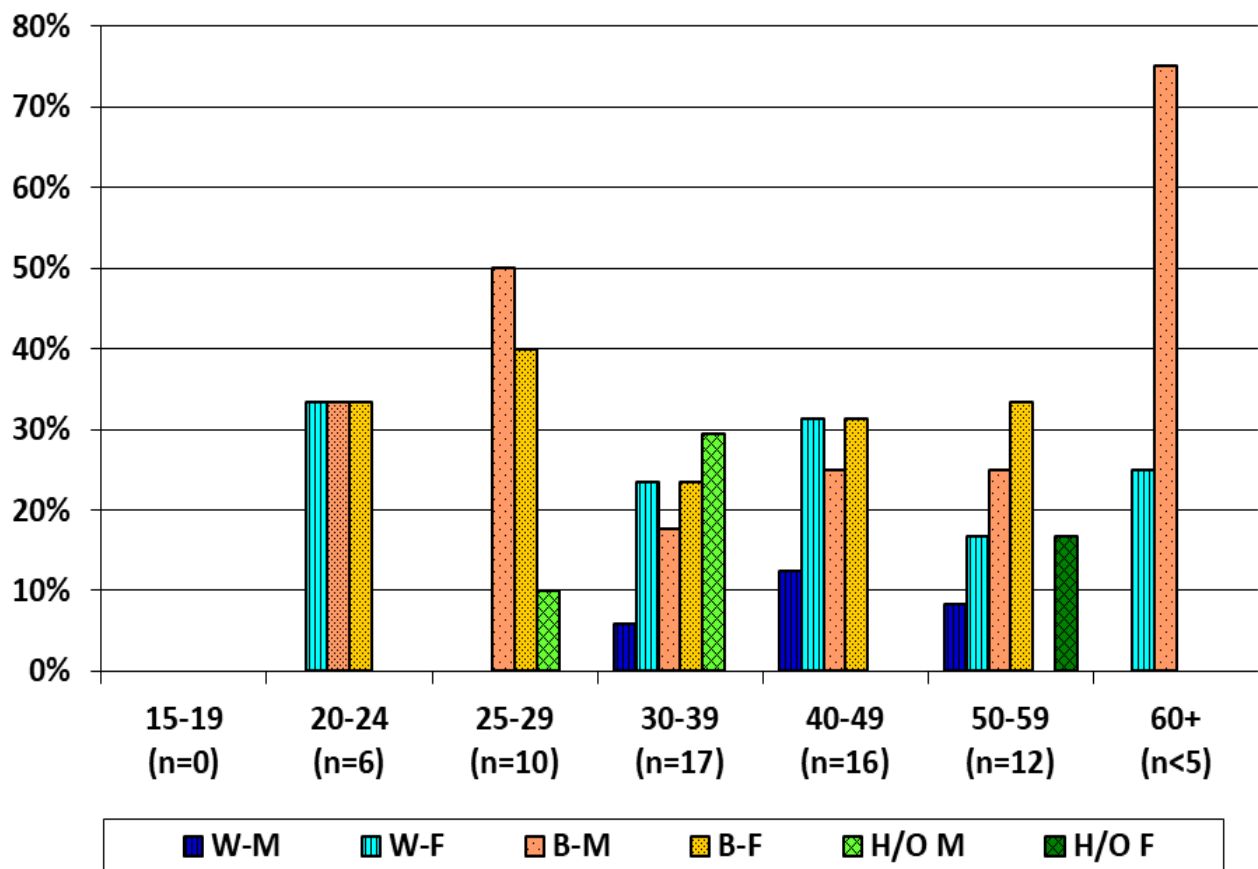
On average, the number of heterosexual cases diagnosed each year decreased by 88% from 2018 to 2023. Figure 2.1.23 shows the number of heterosexually acquired HIV cases in men and women in SC from 2014 to 2023. During most of this period, the proportion of female cases averaged 47% higher than males.

Figure 2.1.23: S.C. HIV/AIDS Cases Attributed to Heterosexual Transmission, by Sex and Year of Diagnosis



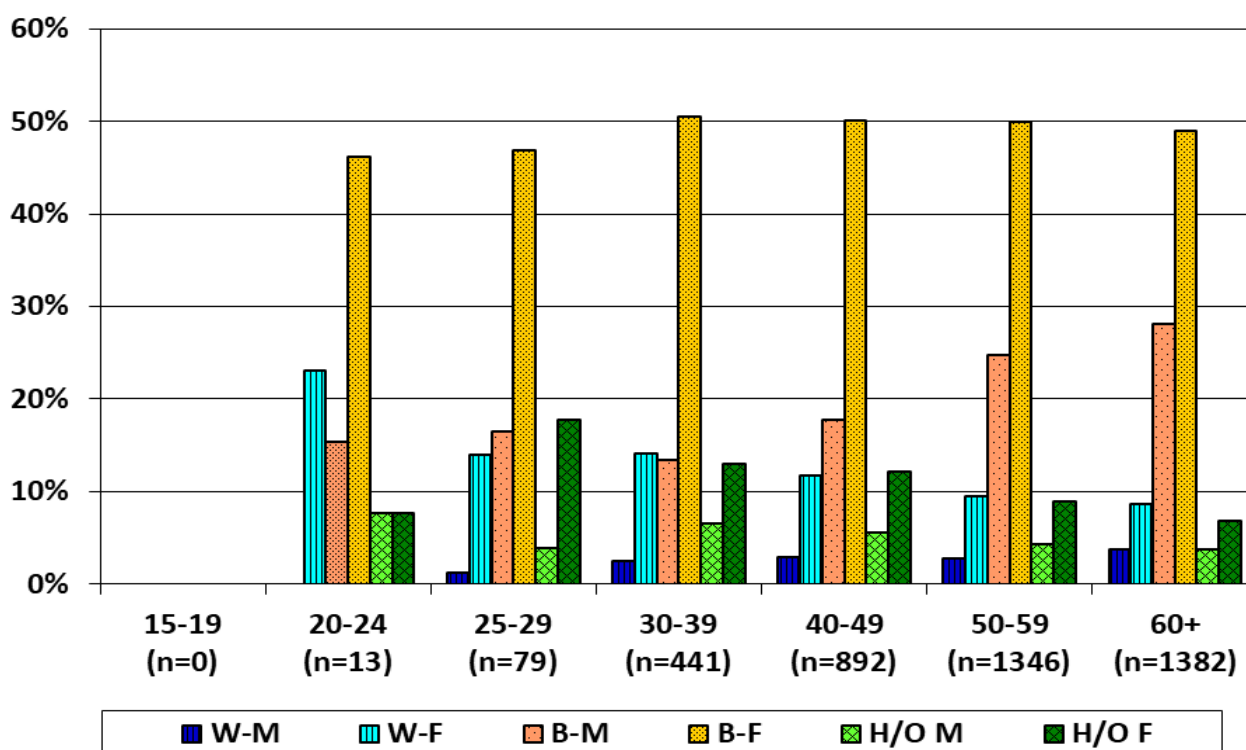
The proportion of high-risk heterosexuals diagnosed in 2022-2023 was highest among the 20-29 age group. In addition, the other age groups are evenly distributed: 20-29 (24%), 30-39 (26%), 40-49 (25%), and 50-59 (18%). African American women and men comprised the greatest proportion of cases in each age group, (Figure 2.1.24).

Figure 2.1.24: Percent Heterosexual S.C. HIV/AIDS Cases Diagnosed 2022-2023 by Age/Race/Sex



Of PLWHA in 2023 who reported a risk of heterosexual contact, 86% were age 40 and over; 40-49 (21%), 50-59 (32%), and 60+ (33%). African American women comprised the greatest proportion (50%), followed by African American men (23%). White men and women account for 13% and Hispanic/Other men and women account for 14% of PLWHA who reported a risk of heterosexual contact, (Figure 2.1.25).

Figure 2.1.25: Percent of Heterosexuals Living with HIV/AIDS by Age Group and Race/Ethnicity/Gender, 2023



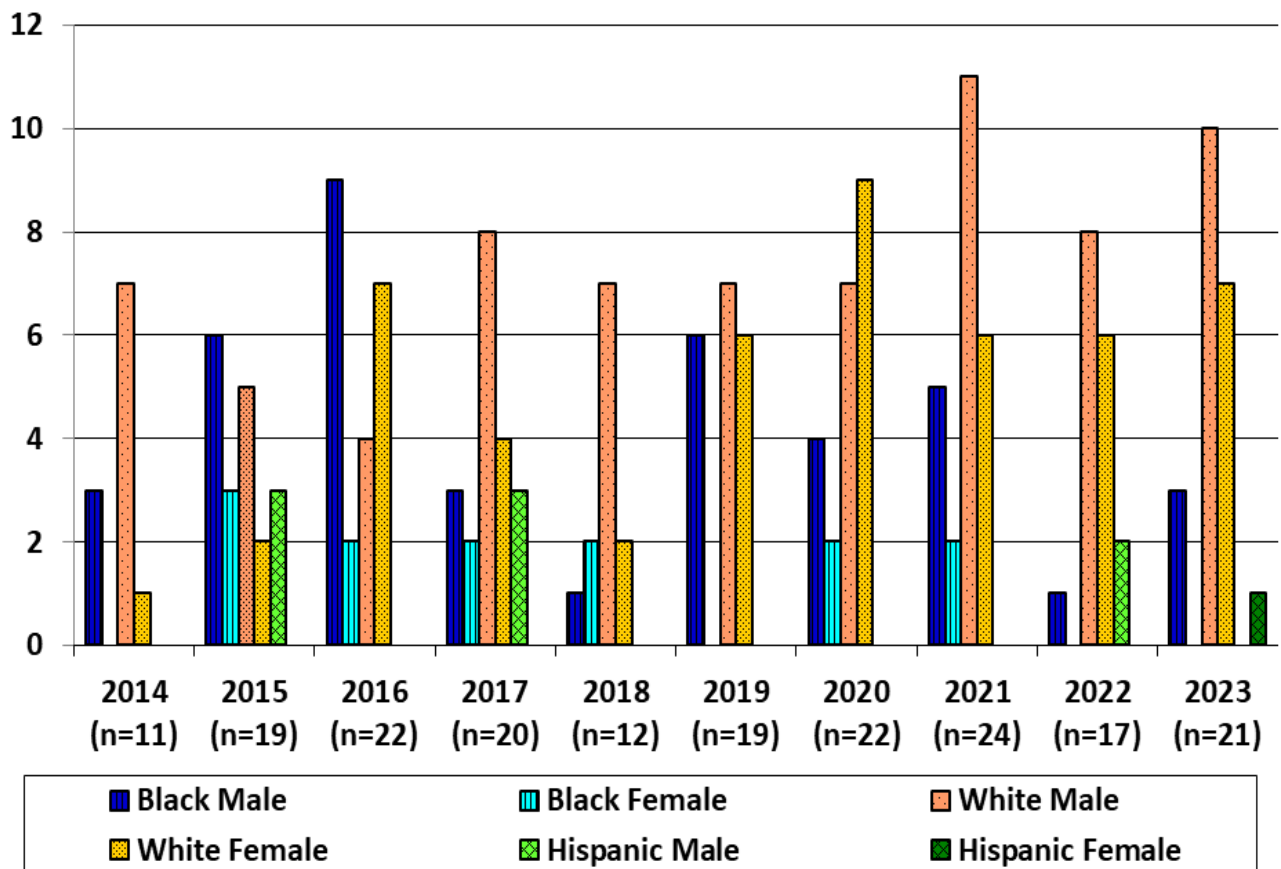
Summary

Among heterosexually exposed cases, African American women account for 29% of newly diagnosed HIV/AIDS cases and African American men account for 31%. Of people living with HIV/AIDS with a reported risk of heterosexual contact, African American women account for 50% and African American men account for 23%. Of people with a reported risk of heterosexual contact, African American men and women aged 20-59 account for five out of every 10 PLWHA and six out of every 10 people diagnosed in 2022-2023.

Characteristics of Persons who Inject Drugs

Injection drug users (IDU) account for 7% of reported risks for people living with HIV/AIDS in 2023 and 5% of people recently diagnosed with HIV/AIDS during 2022-2023, (Figure 2.1.26).

Figure 2.1.26: Number of New HIV/AIDS Cases due to Injecting Drug Use by Gender, Race and Year of Diagnosis



Over the past 10 years, the number of new HIV/AIDS diagnoses with a reported risk of injecting drug use declined since 2016. However, the number of IDU reported risk experienced an incline between 2018 and 2021, then dropped momentarily between 2021 and 2022, and currently experiencing another increase between 2022 and 2023, (Figure 2.1.27). Considering the national opioid crisis, it is important to monitor this risk category closely. Men account for the largest proportion of those reporting injecting-drug-use as their risk, (Figure 2.1.27).

Figure 2.1.27: Number of HIV/AIDS Cases Due to Injecting Drug use by Gender and Year of Diagnosis

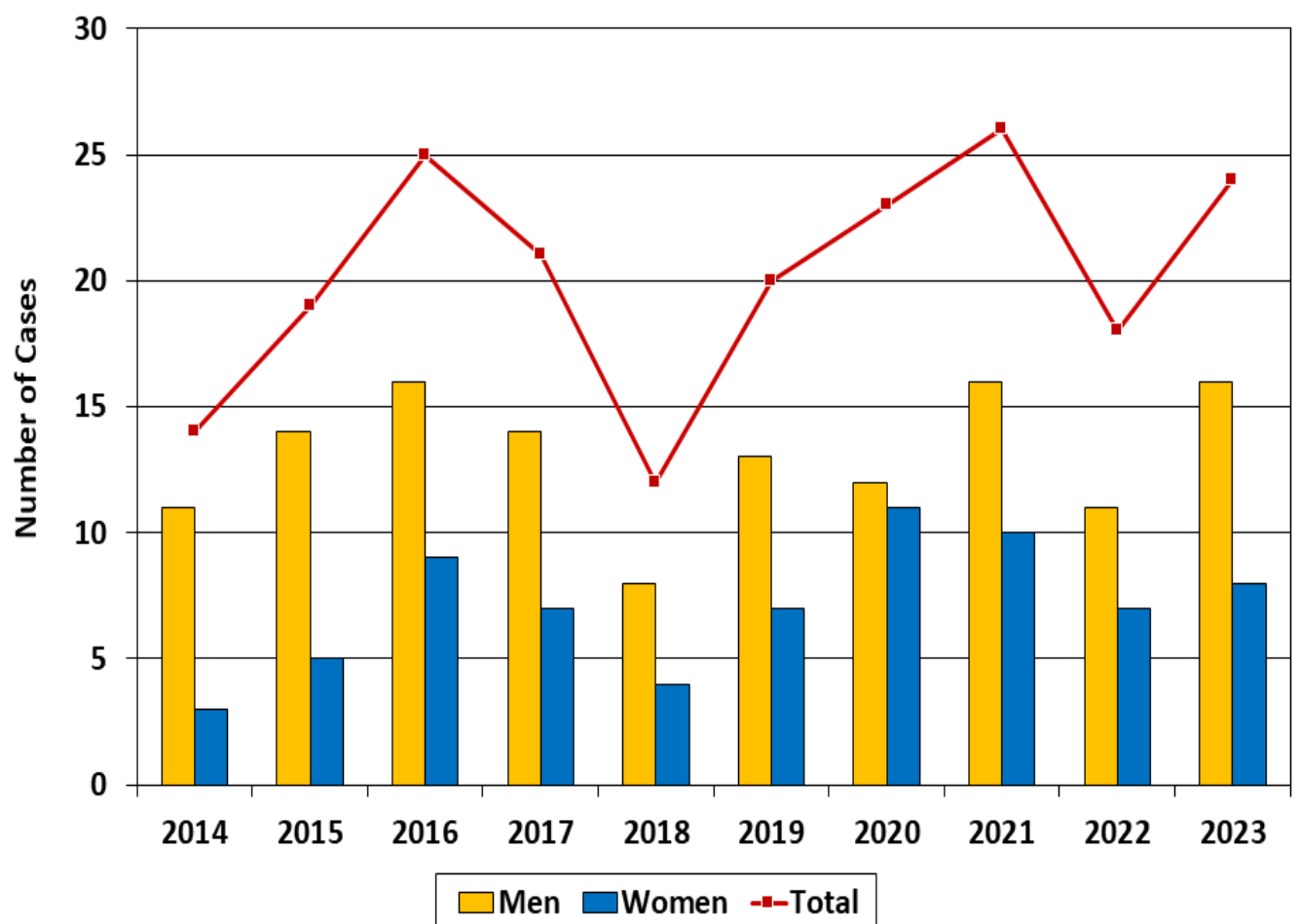


Figure 2.1.28: Proportion of Injecting Drug Users Diagnosed with HIV/AIDS 2022-2023 by Race/Sex

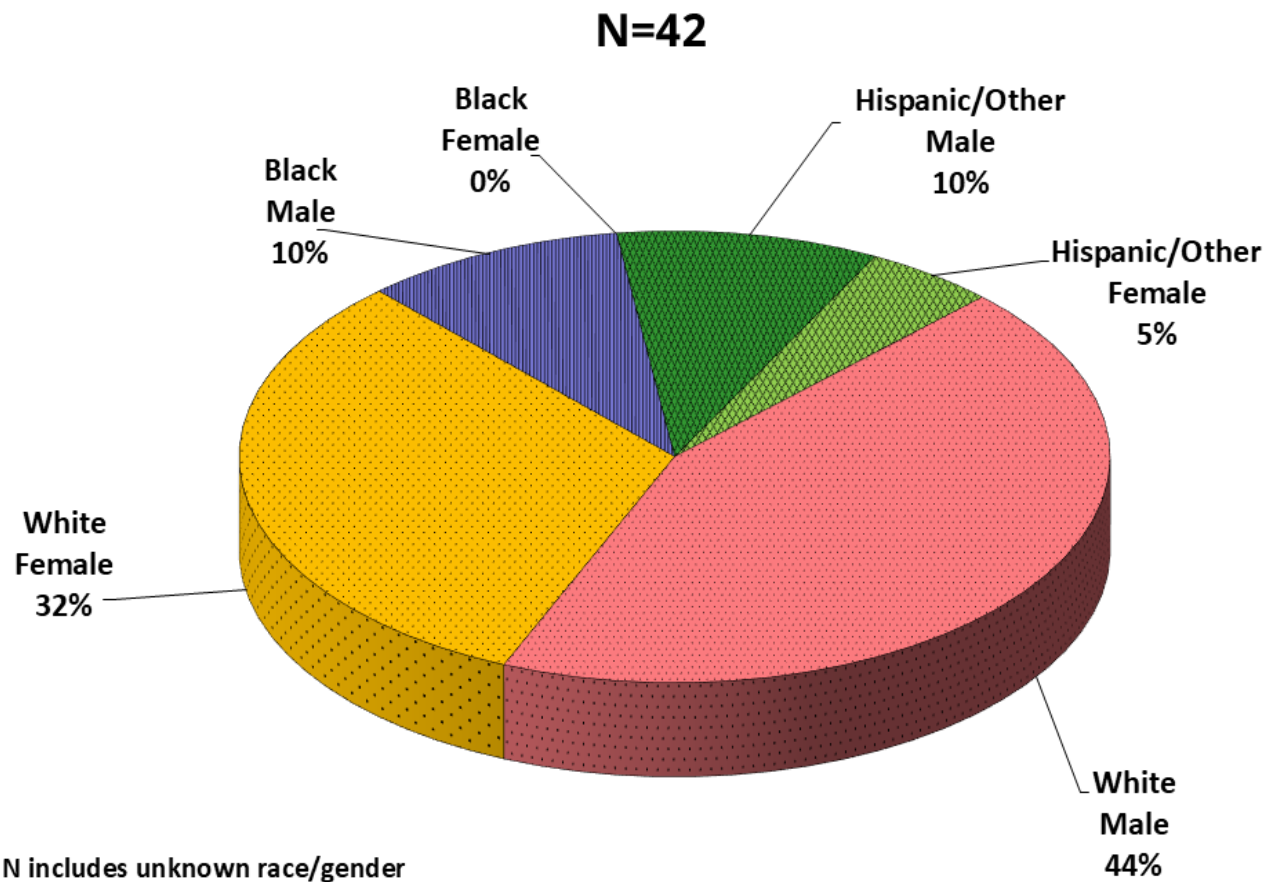


Figure 2.1.28 shows race and gender proportions of recently diagnosed (2022-2023) IDU cases. Men accounted for 64%: African American men 10%, White men 44%, and Hispanic/other 10%. African American women accounted for 0% and White women 32%.

Figure 2.1.29: Percent of Injecting Drug Users Diagnosed with HIV/AIDS 2022-2023 by Age Group, Race, and Gender

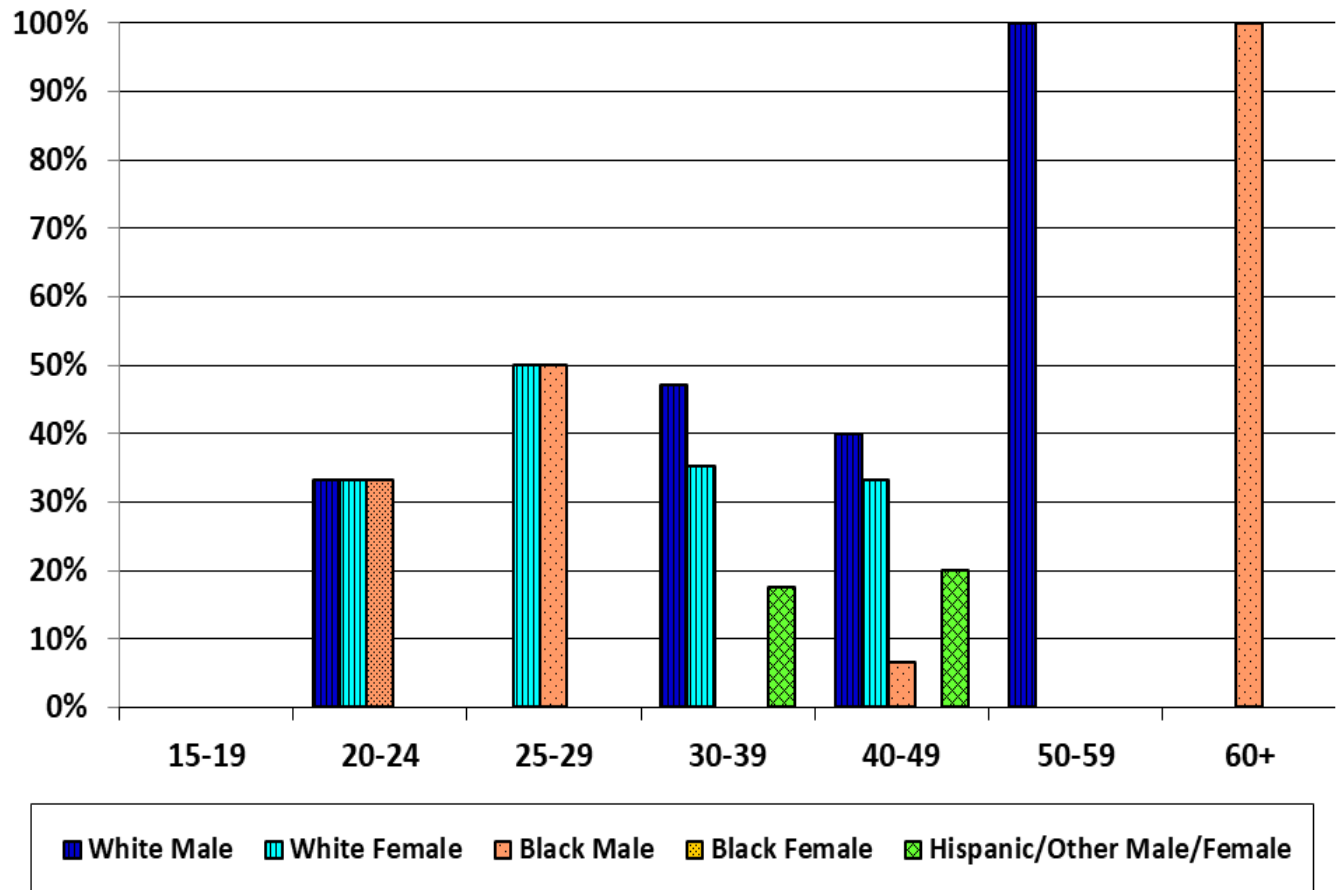
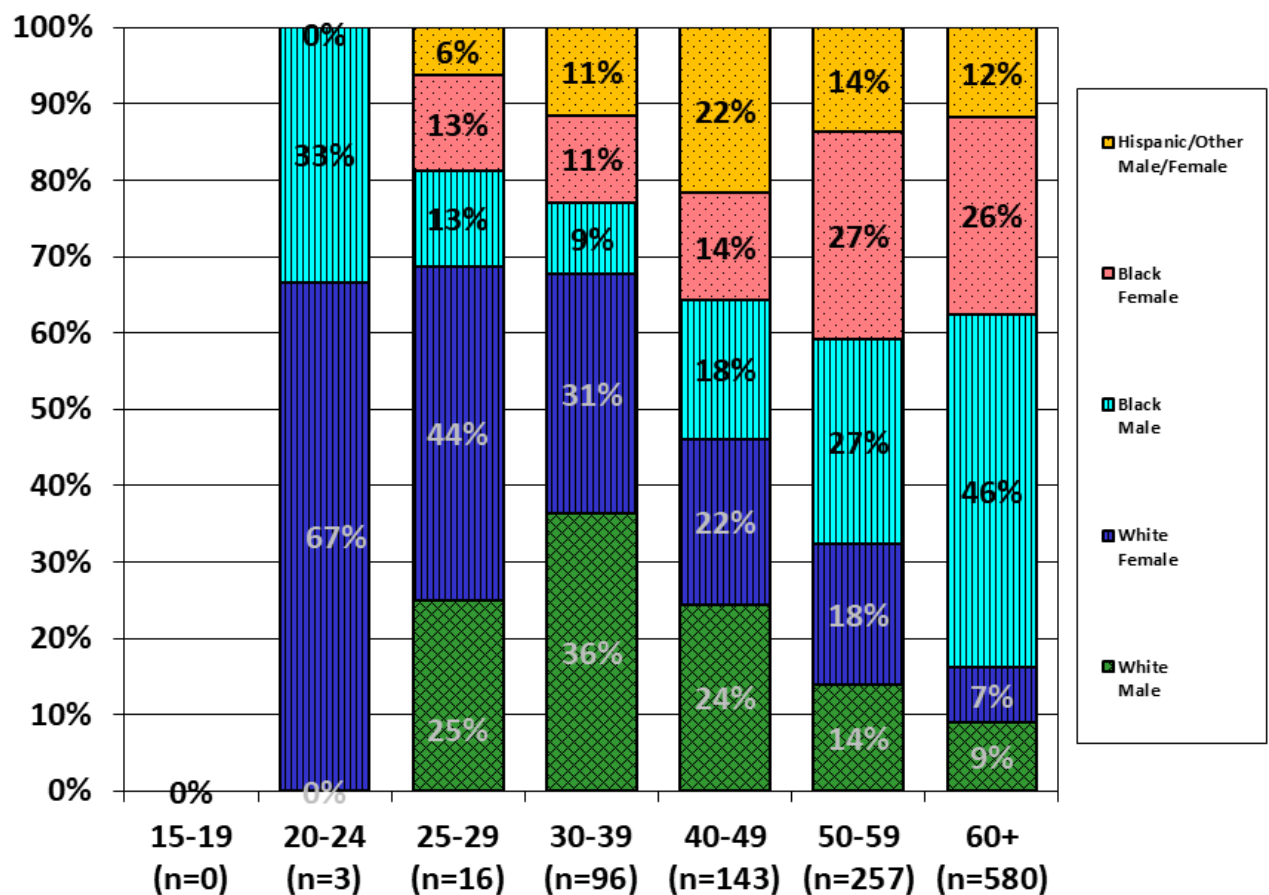


Figure 2.1.29 shows that 46% of IDU cases diagnosed in 2022-2023 are over the age of 30: 30-39 (41%), 40-49 (37%), 50-59 (7%), and 60+ (2%). Of those at risk, 14% were aged 20-29.

Of PLWHA with IDU as an identified risk factor, most (89%) are 40 years of age and older. African Americans account for the greatest proportion of cases over the age of 40, with African American men accounting for 37% and African American women accounting for 24%. Within the 20-39 age groups, both White men and women account for the greatest proportion (34%) and White men (34%), followed by African American men 10% and African American women 11%, (Figure 2.1.30).

Figure 2.1.30: Percent of IDU Persons Living with HIV/AIDS by Race/Sex and Age Group, 2023 (N=1,095)



Mortality

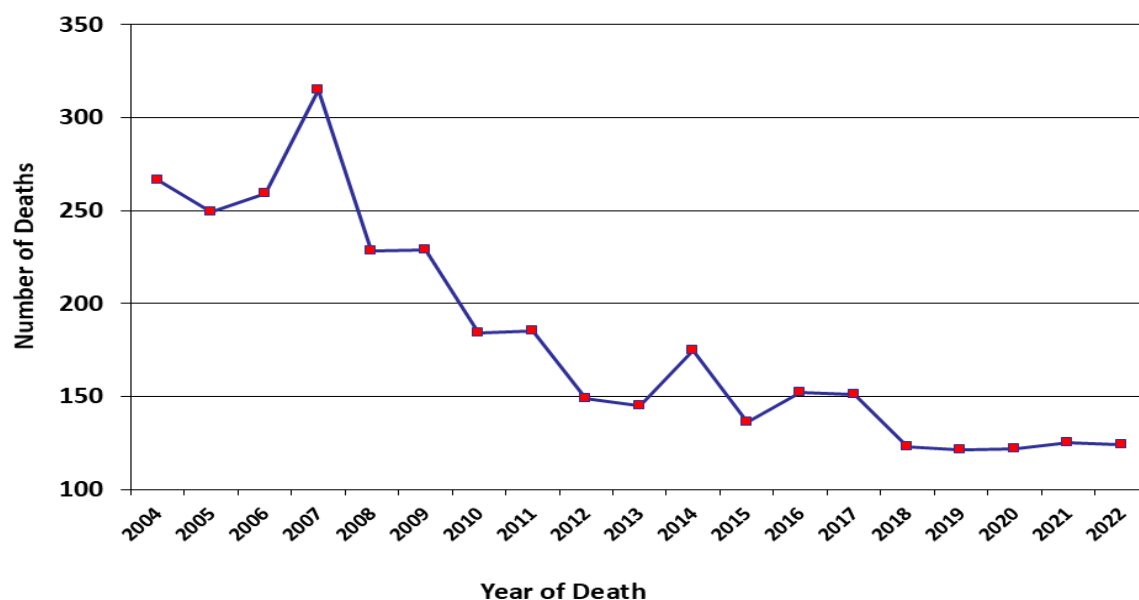
Note: 2022 was the last year of data available when this report was published.

With the advent of combination therapies and the use of prophylaxis, people with HIV are living longer and delaying the progression of AIDS, which is the advanced stage of the disease. These medications have also led to the decrease in AIDS-related deaths.

Large declines in AIDS mortality nationally essentially occurred during 1996-1997. Officials at the CDC cautiously attributed the sudden drops in deaths to new antiretrovirals, protease inhibitors, combination therapies, and increased prophylaxis for opportunistic illnesses. However, the initially reported decreases were tempered by reports of demographic differentials that suggested only certain groups were benefiting from these new therapies.

The largest decline in deaths in SC was in 1997, with AIDS-related deaths dropping to 317 from 532 the previous year (not on graph). Since 1997, the number of AIDS deaths per year has continued to decline; however, there are fluctuations in the number of AIDS deaths from year to year. Reasons for this may include delay in diagnosis of HIV infection until severe symptoms arise, difficulty in adherence to prescribed medical treatments, and development of viral resistance to therapy, (Figure 2.1.31).

Figure 2.1.31: Deaths Due to AIDS (HIV) in South Carolina, 2004-2022



Source – Vital Records, S.C. Residence Data.

In addition to representing 42% of PLWHA (2023), African American males accounted for the majority of people who died from AIDS (54%) in 2022. African American females accounted for 23% of AIDS related deaths followed by White males (19%). By age group, the majority of deaths occurred among people aged 45 and older (78%), (Figure 2.1.32).

Figure 2.1.32: Characteristics of Persons who Died of AIDS, 2022

	Number	Percent
Race/Sex		
Black Male	67	54%
Black Female	28	23%
White Male	23	19%
White Female	5	4%
Hispanic/Other Male	#	#
Hispanic/Other Female	#	#
Age Group		
<19	0	0%
20-24	#	#
25-34	24	10%
35-44	30	12%
45-54	55	23%
55-64	73	30%
65+	62	25%

Source – Vital Records, S.C. Residence Data.
indicates that the value was suppressed due to <5 observations.

SC Residence Vital Records Data for 2023 show that a total of 124 people died of AIDS across the four Public Health Regions of the state. Majority of the deaths 29 (23%) occurred in the Upstate region, followed by the Midlands 19 (15%), and Pee Dee with a total of 14 (11%), and finally Lowcountry 13 (10%), (Figure 2.1.33).

Figure 2.1.33: Number of Persons who Died of AIDS by Health Region, 2022

Health Region	No.	%
Upstate	29	23%
Midlands	19	15%
Lowcountry	13	10%
Pee Dee	14	11%
TOTAL	124	100%

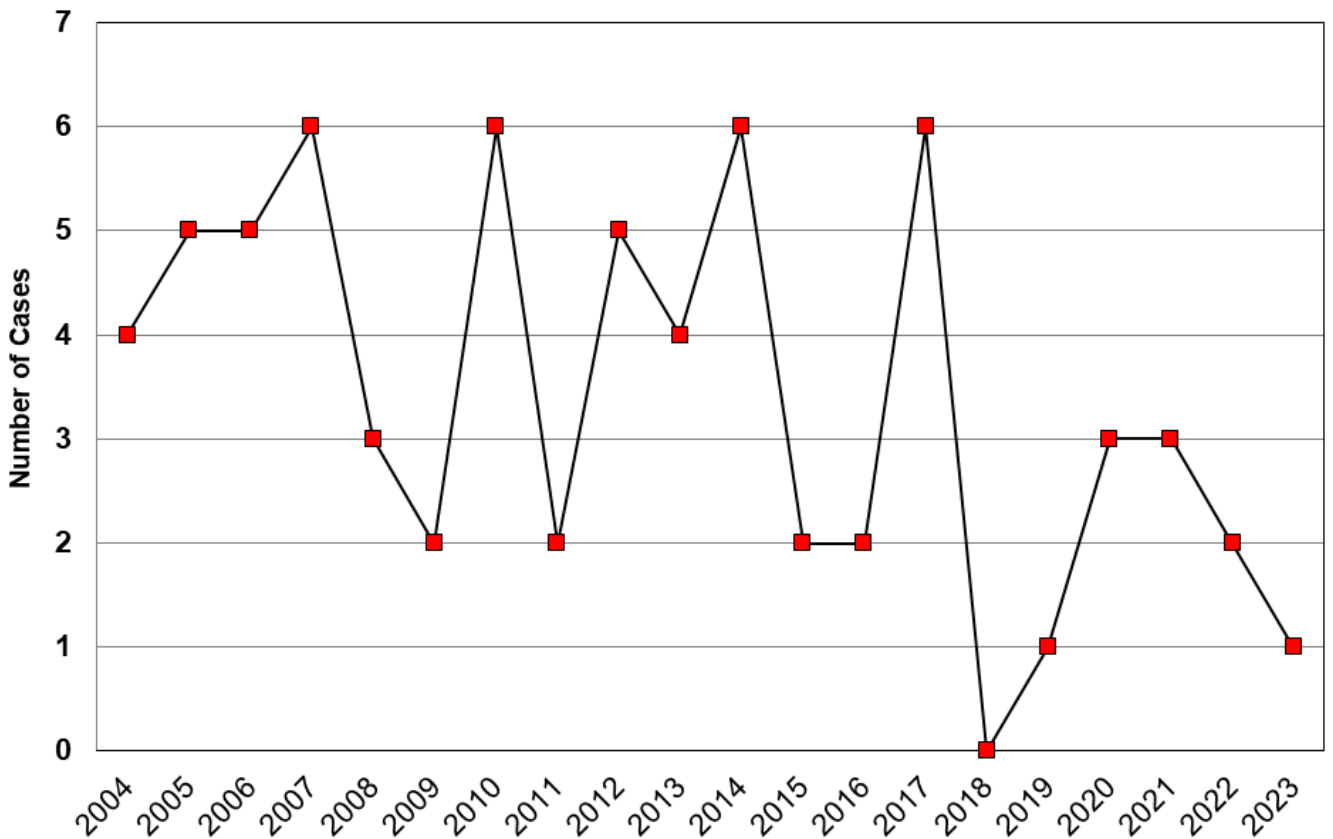
Source – Vital Records, S.C. Residence Data.

Note: The SC total value is different from regional total value due to suppressed value from several counties.

Infants and Children: (Children under 15 years of age)

Cumulatively, through December 2023, there have been 302 cases of HIV infection diagnosed among children less than 15 years of age; this represents 1% of the total reported AIDS and HIV infection cases.

Figure 2.1.34: Number of Children <15 years Old Diagnosed with HIV/AIDS in South Carolina, 2004-2023



Most infants and children with HIV acquired it perinatally from their mother. There has been significant progress over the past 20 years in reducing the number of infants with perinatally acquired HIV infection (see Perinatally HIV exposed births below). When reporting small numbers of cases, trend graphs, such as the one in Figure 2.1.34, tends to display fluctuations over the given time period. The highest number of cases reported was 21 in 1993 (not on graph); the lowest number is zero cases (2018). There were three cases reported in 2020 and 2021, two cases in 2022, and one case in 2023.

Other Populations at Risk

Other populations at varying risk for HIV are described below and include people with STIs and pregnant teenage women.

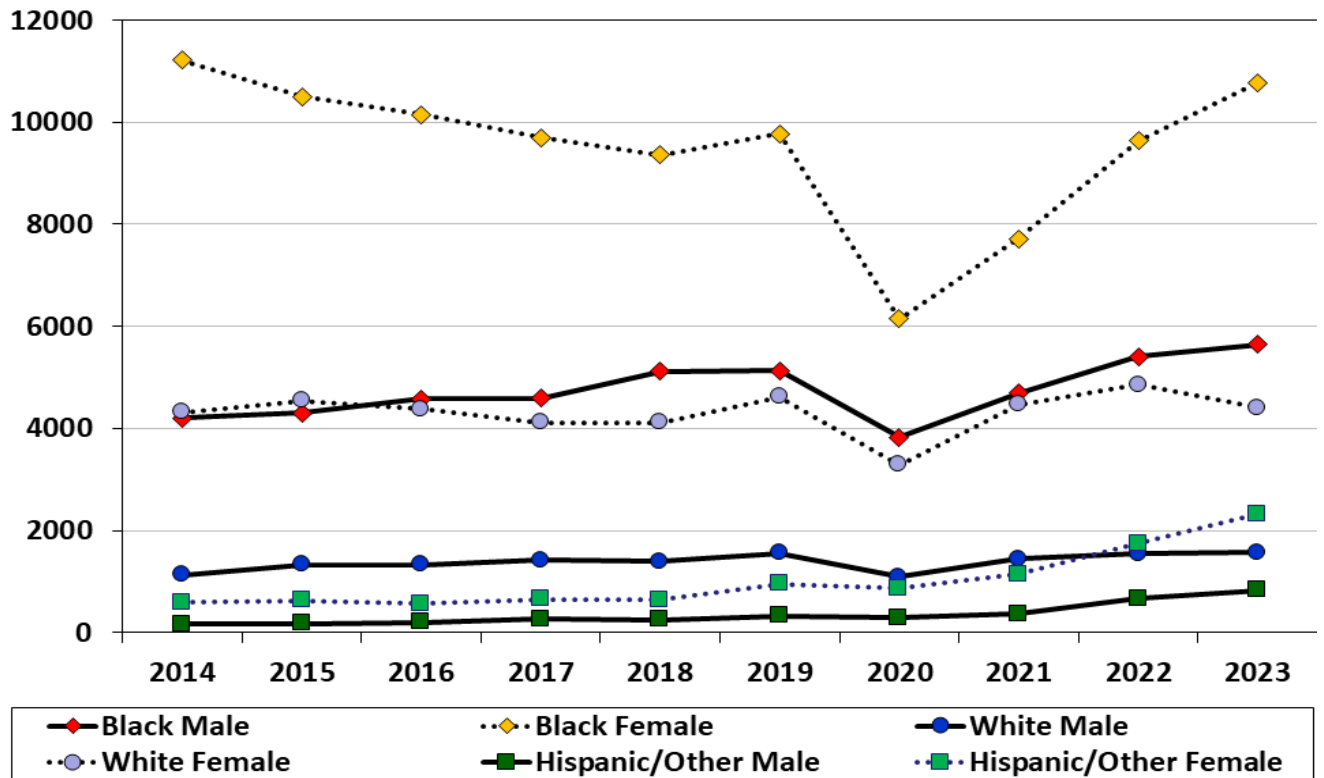
Sexually Transmitted Infections (STIs)

STIs are primary risk factors for HIV infection and a marker of high risk, unprotected sexual behavior. Many STIs cause lesions or other skin conditions that facilitate HIV infection. Trends in STI infection among different populations (e.g. adolescents, women, men who have sex with men) may reflect changing patterns in HIV infection that have not yet become evident in the HIV/AIDS caseload of a particular area.

Chlamydia

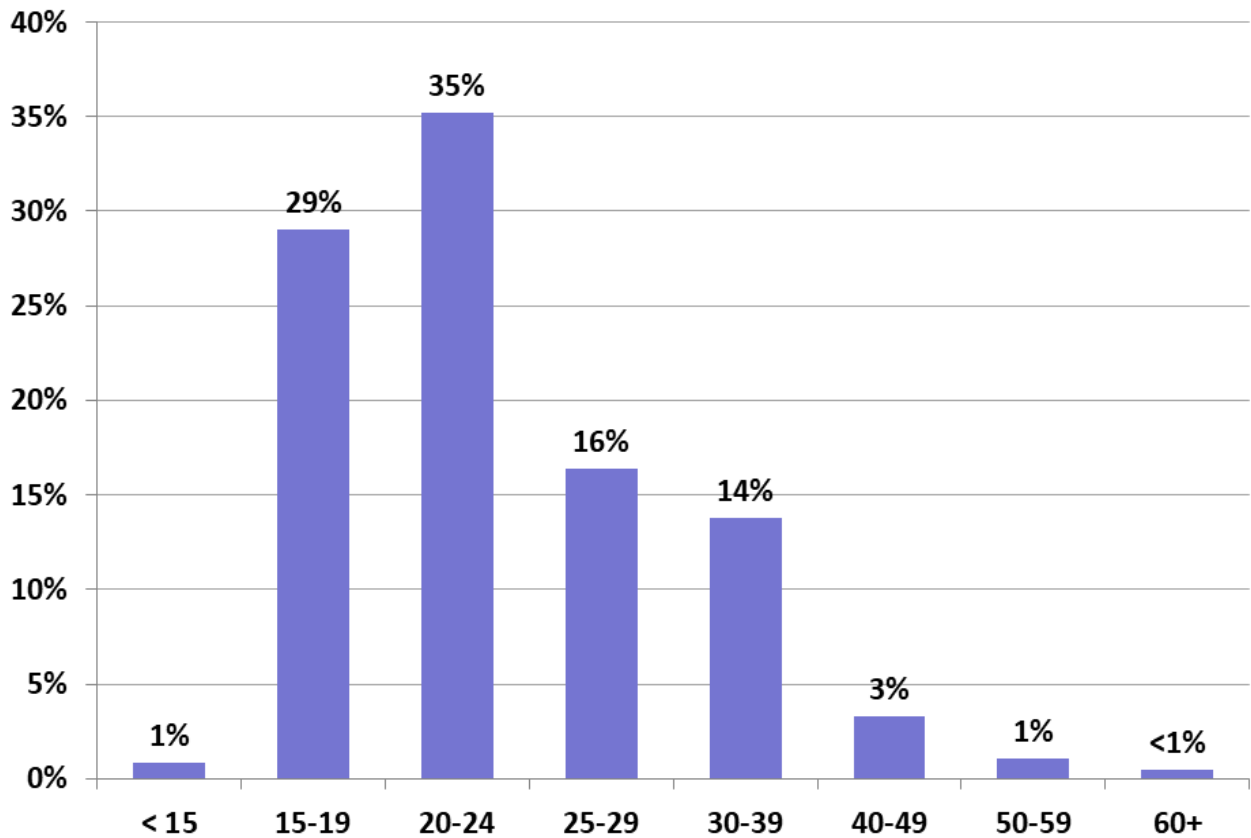
Over the past decade, reported cases of chlamydia have averaged about 29,656 per year. Some of this high number may be attributed to initiating routine screening for all young women attending family planning and STI clinics in health departments statewide. In 2022, there were 34,901 cases of chlamydia diagnosed in SC. Among those cases with a reported race, 40% were African American women and 20% were White women. African American men comprised 23% of chlamydia cases, and White men accounted for 6%, (Figure 2.1.35). Thirty-two percent of chlamydia cases have 'Unknown' race and/or gender; this is largely attributed to the fact that these conditions are primarily reported by labs, which frequently do not collect data for race.

Figure 2.1.35: South Carolina Count of Reported Chlamydia Cases by Year of Diagnosis, 2014-2023



Of cases diagnosed in 2023, 81% were adolescents and adults under the age of 30. Those aged 15-19 were (29%); 20-24 (35%); and 25-29 (16%). Persons aged 30 and over accounted for 19% of chlamydia cases, Figure 2.1.36.

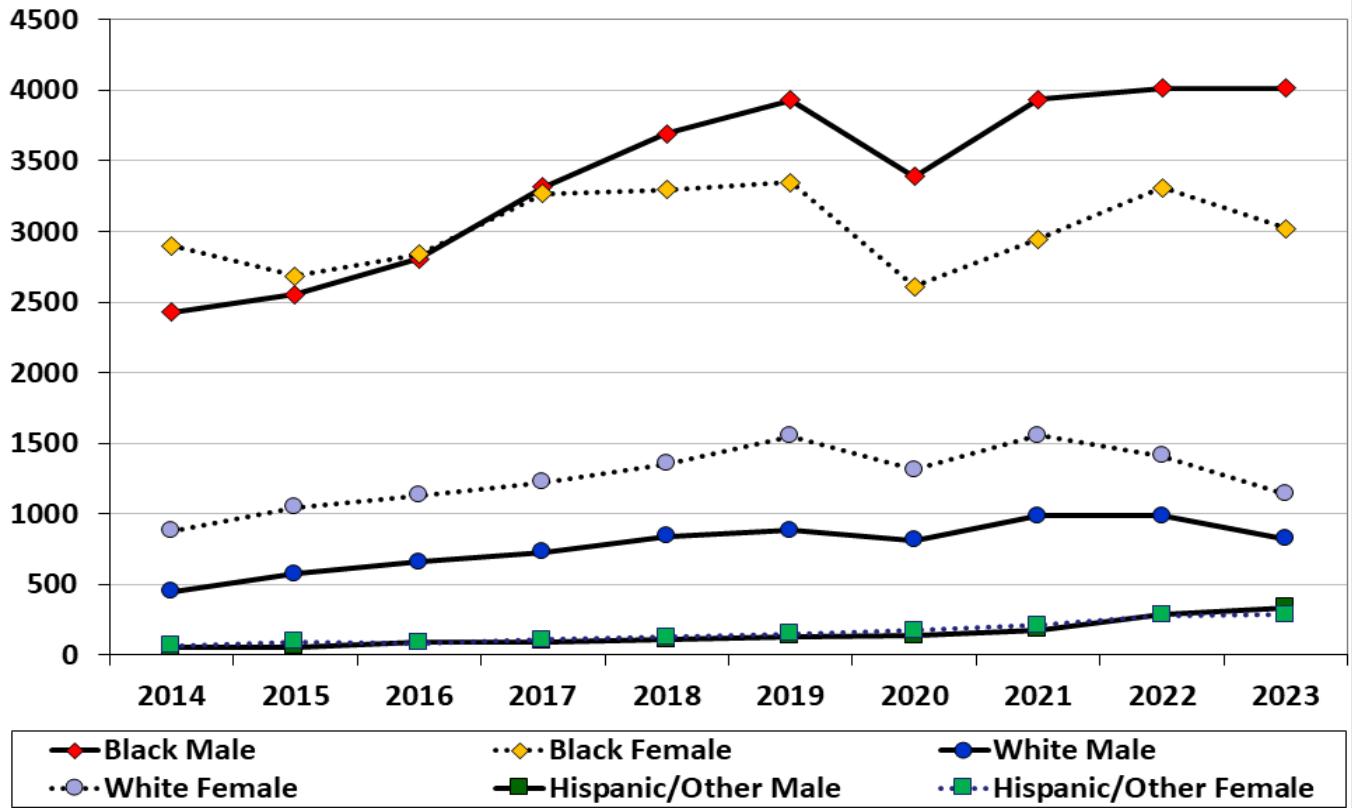
Figure 2.1.36: Proportion of 2023 Chlamydia Cases by Age Group



Gonorrhea

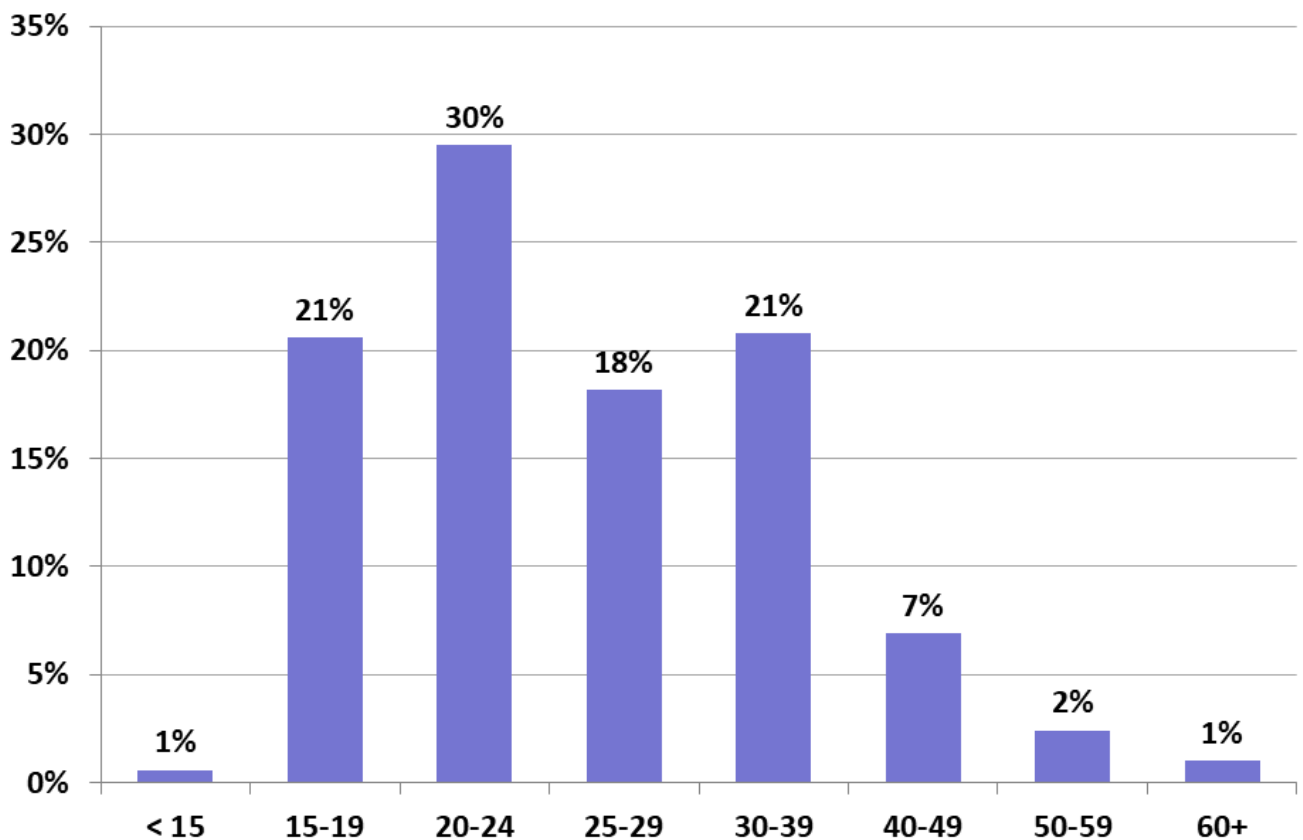
In 2023, 12,172 gonorrhea cases were diagnosed in SC. Of cases with a reported race, African American men and women account for 73% of reported cases; African American women 31% and African American men 42%. As with chlamydia, 27% of reported gonorrhea cases have an 'Unknown' race and/or gender. Figure 2.1.37 shows trends among reported race/gender by year.

Figure 2.1.37: South Carolina Count of Reported Gonorrhea Cases by Year of Diagnosis, 2014-2023



Sixty-nine percent of gonorrhea cases diagnosed in 2023 were between the ages of 15 and 29. Twenty-one percent of cases were ages 15 and 19, 30% were ages 20-24, and 18% were age 25-29. Persons aged 30 and over accounted for 31%, (Figure 2.1.38).

Figure 2.1.38: Proportion of 2023 Gonorrhea Cases by Age Group



Syphilis

The surveillance case definition for syphilis has changed over time. In January 2018, a revised case definition for syphilis was adopted, including changing the stage previously termed “early latent syphilis” to “syphilis, early non-primary non-secondary.” This change in terminology more accurately reflects this stage of infection, as neurologic symptoms, including ocular syphilis, can occur at this stage. Additionally, the stages of “late latent syphilis” and “late syphilis with clinical manifestations” were removed and “syphilis, unknown duration or late” was added. See Appendix for more information.

Total Syphilis

Figure 2.1.39: South Carolina Count of Reported Total Syphilis Cases by Year of Diagnosis, 2014-2023

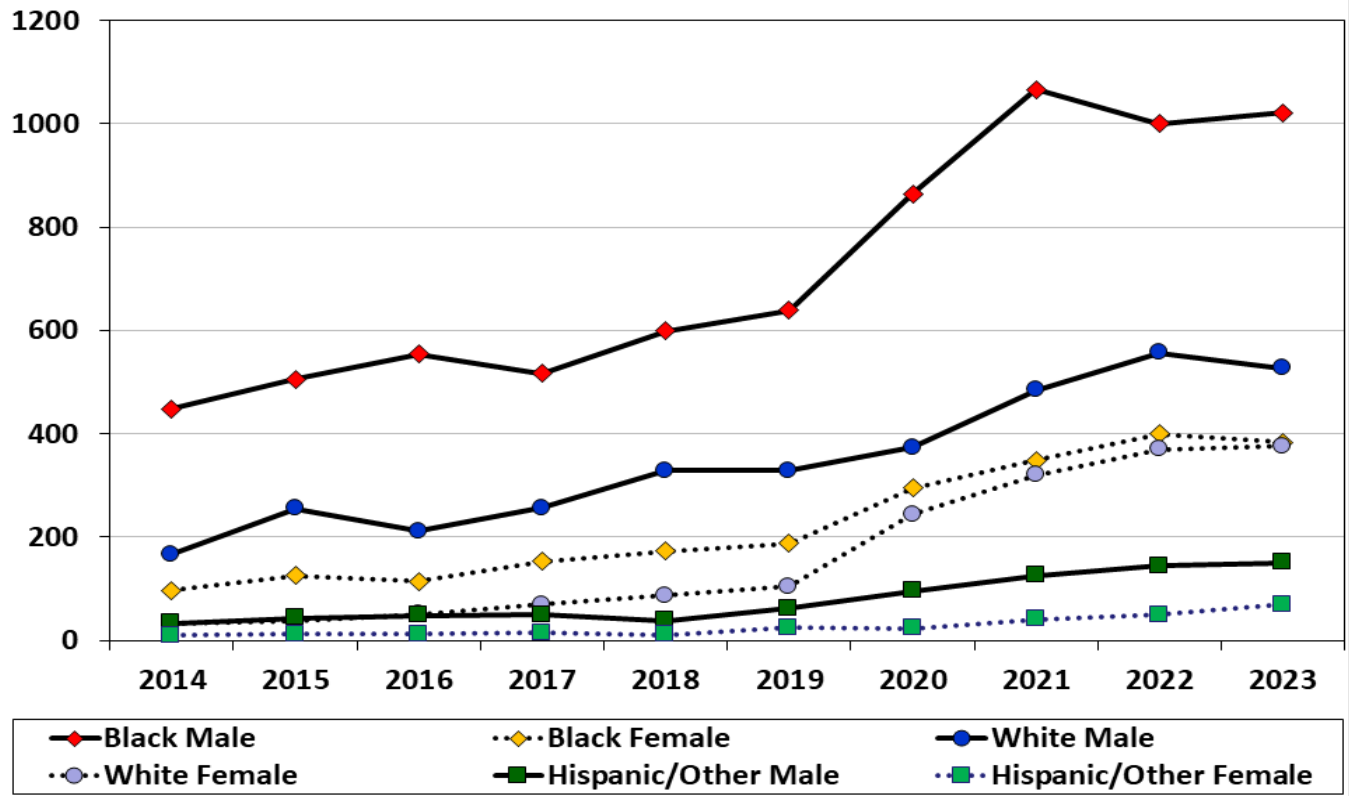
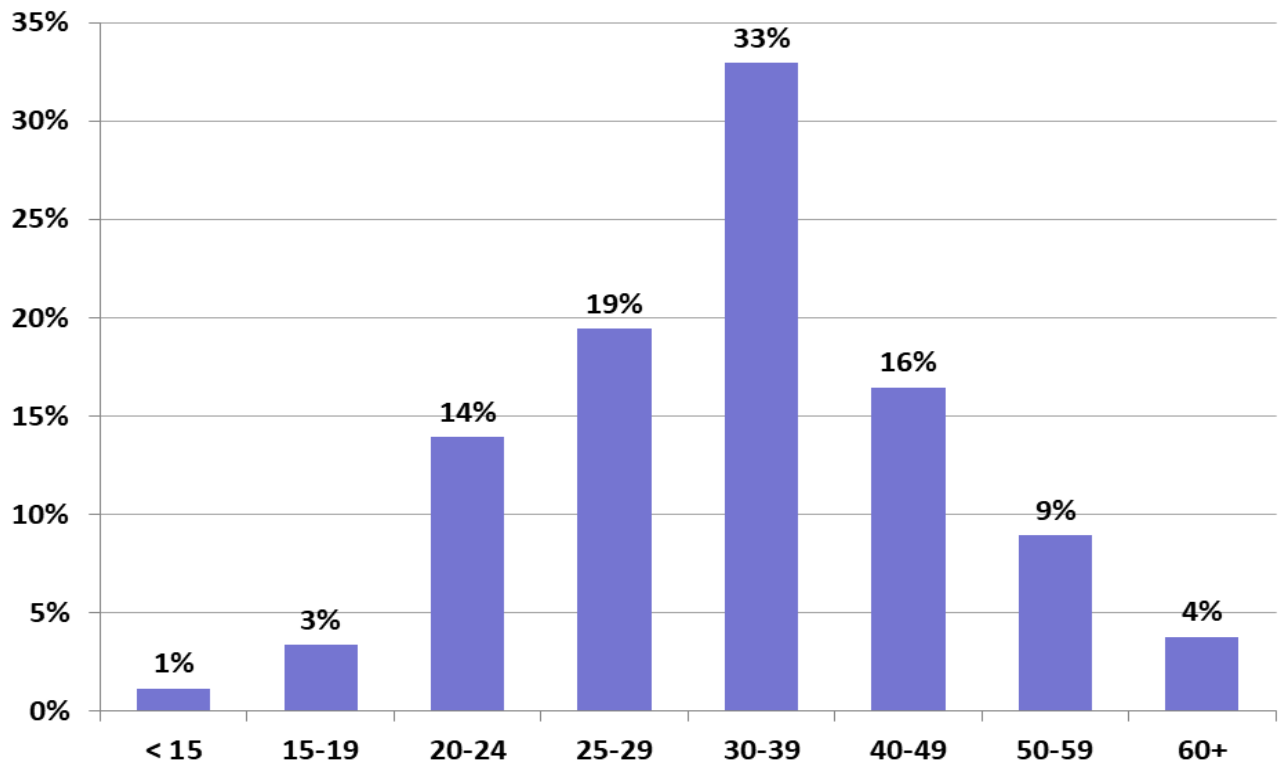


Figure 2.1.39 shows men continue to represent most cases (65%): African American men specifically, are most impacted, accounting for 39% of total cases, White men accounting for 20%, and Hispanic/other men 6%. Women account for 32% of the total syphilis cases: African American women comprised 15%, White women 14%, and Hispanic/other women 3%. One percent of total syphilis cases have 'unknown' race.

Thirty-seven percent of total syphilis cases diagnosed in 2023 were under the age of 30. Three percent aged 15-19, 14% were aged 20-24, 19% were aged 25-29 and 33% were aged 30-39. Sixty-two percent of total cases were over the age of 30; 33% 30-39, 16% 40-49, and 13% were 50+, Figure 2.1.40.

Figure 2.1.40: Proportion of 2023 Total Syphilis Cases by Age Group

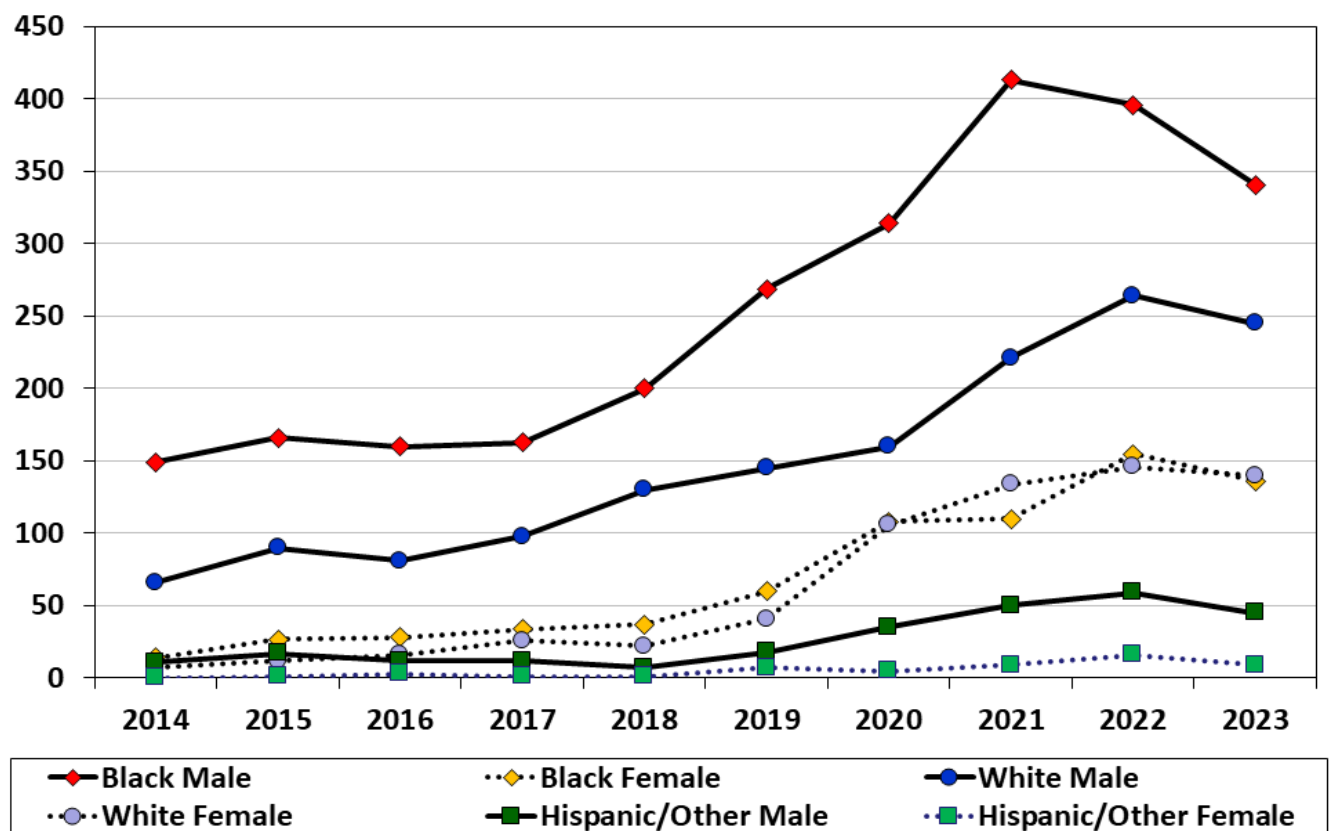


Primary and Secondary Syphilis

The number of infectious (primary and secondary) syphilis diagnosed each year in SC has dramatically increased over the past 10 years. In 2022, 1036 cases of primary and secondary syphilis were diagnosed; this is a 261% increase from 2013 (262 cases). On average, the number of primary and secondary syphilis cases diagnosed each year has increased 16% per year over the last decade.

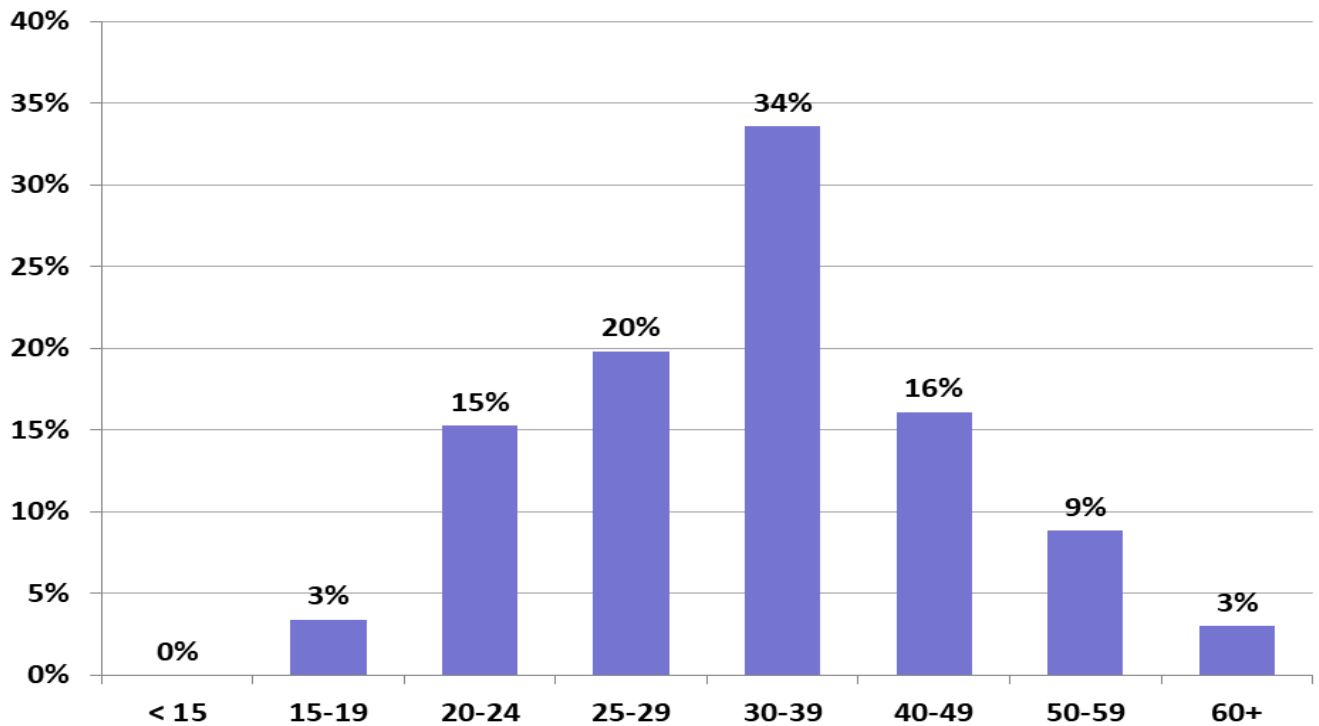
Figure 2.1.41 shows men continue to represent most cases (67%): African American men specifically, are most impacted, accounting for 36% of total cases, White men accounting for 26%, and Hispanic/other men 5%. Women account for 30% of the total primary and secondary syphilis cases: African American women comprised 14%, White women 15%, and Hispanic/other women less than 1%. Two percent of primary and secondary syphilis cases have 'unknown' race.

Figure 2.1.41: South Carolina Count of Reported Primary and Secondary Syphilis Cases by Year of Diagnosis, 2014-2023



Thirty-eight percent of primary and secondary syphilis cases diagnosed in 2023 were under the age of 30. Three percent were aged 15-19, 15% were age 20-24, and 20% were age 25-29. Sixty-two percent were over the age of 30; 34% 30-39, 16% 40-49, and 12% 50+, (Figure 2.1.42).

Figure 2.1.42: Proportion of 2023 Primary and Secondary Syphilis Cases by Age Group



Geographic Distribution

People living with HIV/AIDS are widespread throughout the state. Figure 2.2.1 shows the 2023 prevalence rate and Figure 2.2.2 shows the three-year average (2021-2023) incidence rate for African Americans. Thirty percent of SC counties have a prevalence rate greater than the state prevalence rate for African Americans (910.8). Thirty-seven percent of SC counties have a three-year average (2021-2023) incidence rate for African American greater than the state three-year average incidence rate for African Americans (30.4).

Figure 2.2.1: SC HIV/AIDS Prevalence Rates

**2023 HIV/AIDS
African American Rate**

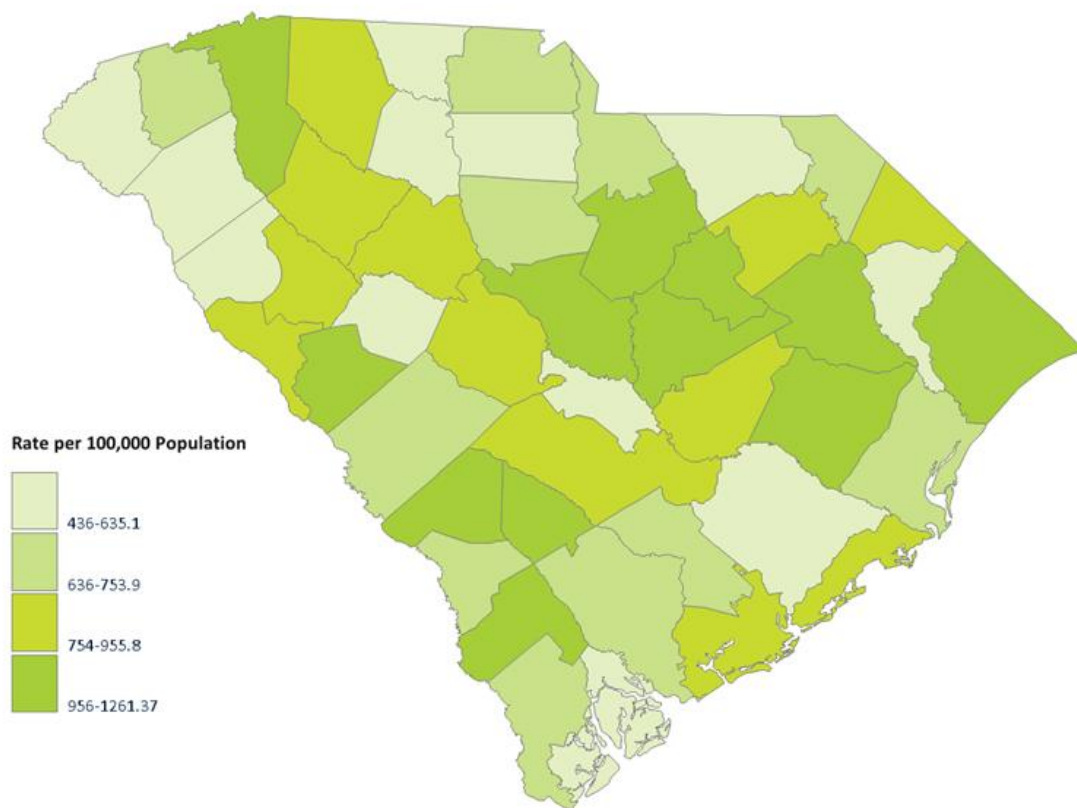
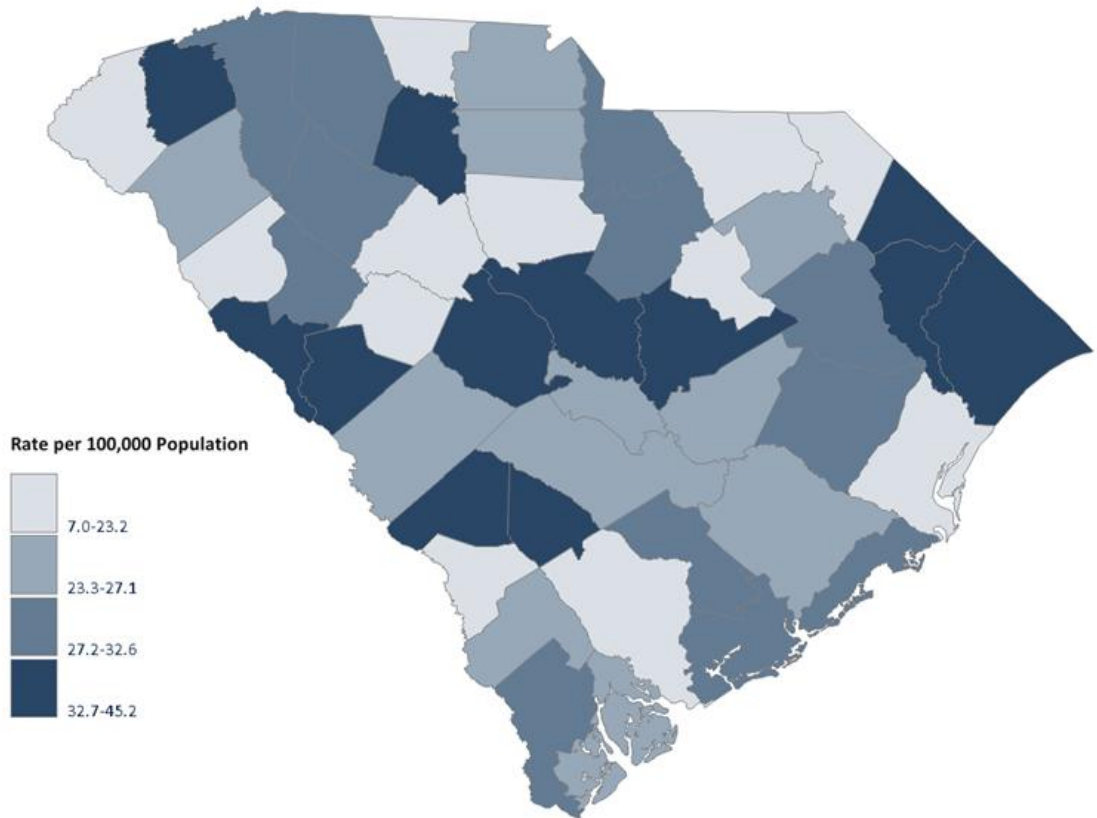


Figure 2.2.2: SC HIV/AIDS Incidence Rates
2021-2023 HIV/AIDS: Three Year Average Rate
African American Rate



While the HIV/AIDS rate for Whites in SC is significantly lower than for African Americans, the distribution throughout the state is not dissimilar. Figure 2.2.3 shows the 2023 prevalence rate and Figure 2.2.4 shows the three-year average (2021-2023) incidence rate for Whites. Forty-six percent of SC counties have a prevalence rate greater than the state prevalence rate for Whites (142.1). Forty-eight percent of SC counties have a three-year average (2021-2023) incidence rate for Whites greater than the state three-year average incidence rate (5.6).

Figure 2.2.3: SC HIV/AIDS Prevalence Rates
2023 HIV/AIDS
White Rate

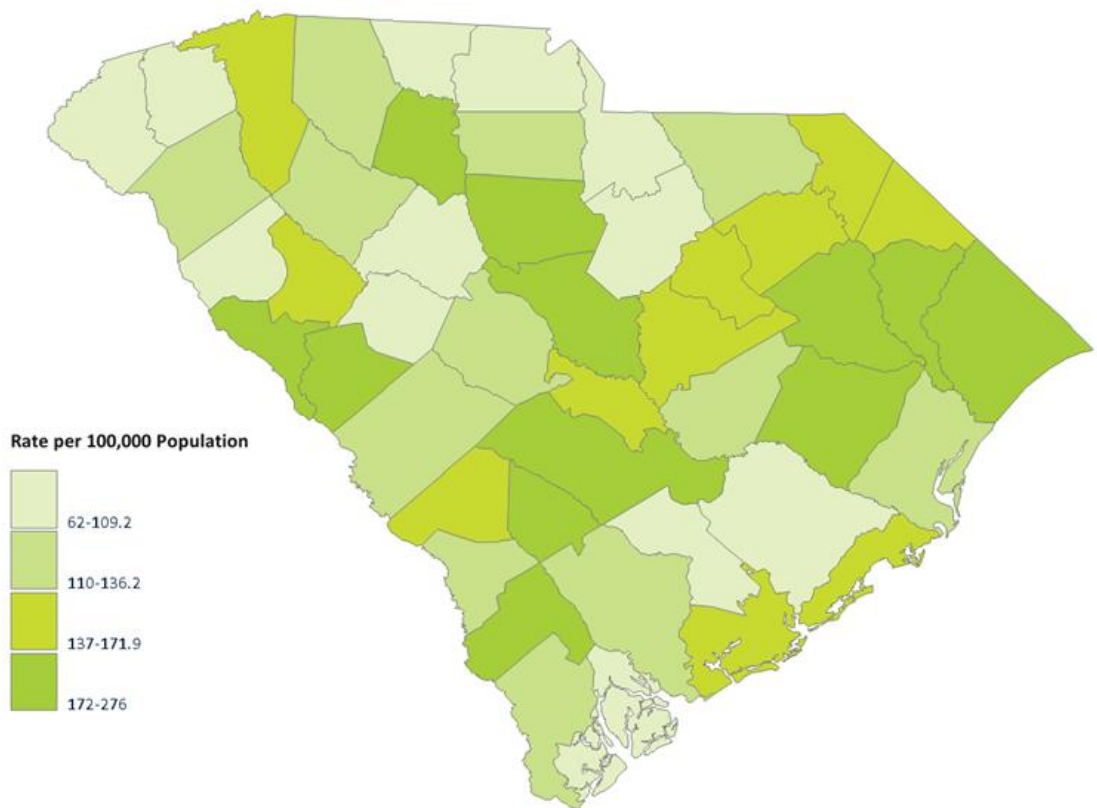


Figure 2.2.4: SC HIV/AIDS Incidence Rates
2021-2023 HIV/AIDS: Three Year Average Rate
White Rate

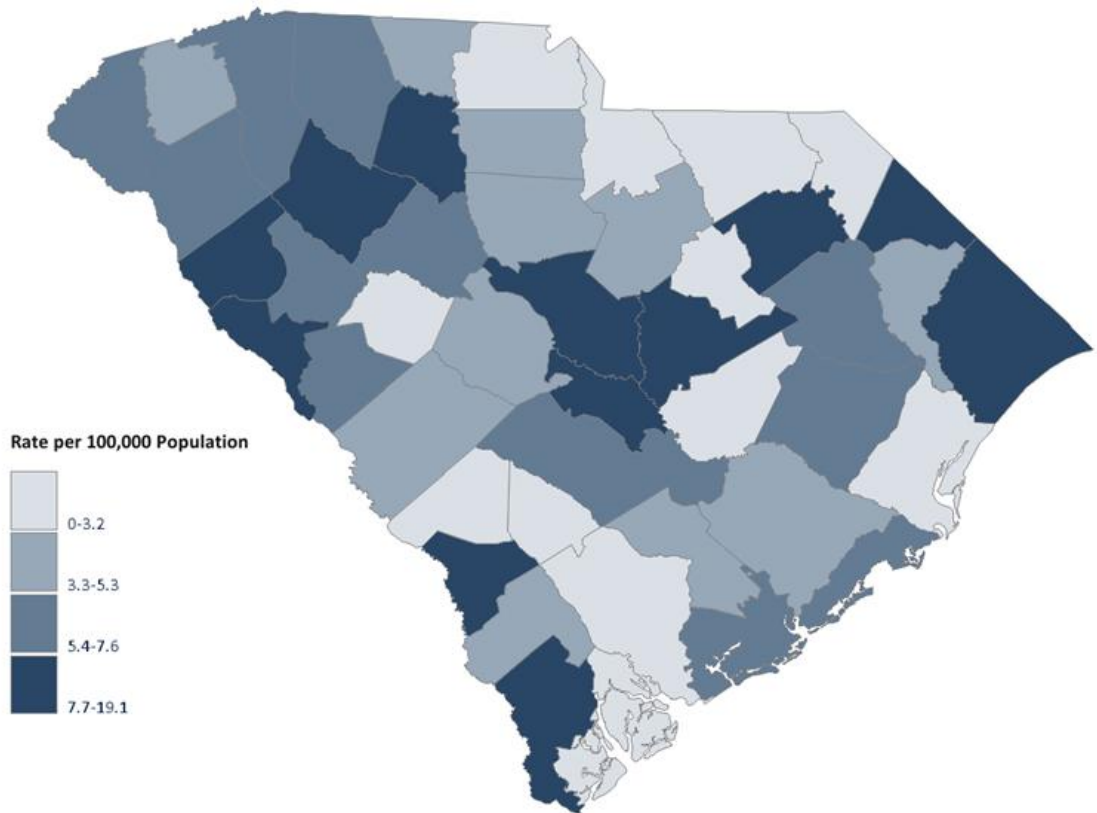


Figure 2.2.5: SC HIV/AIDS Incidence Rates
2021-2023 HIV/AIDS: Three Year Average Rate
Female Rate

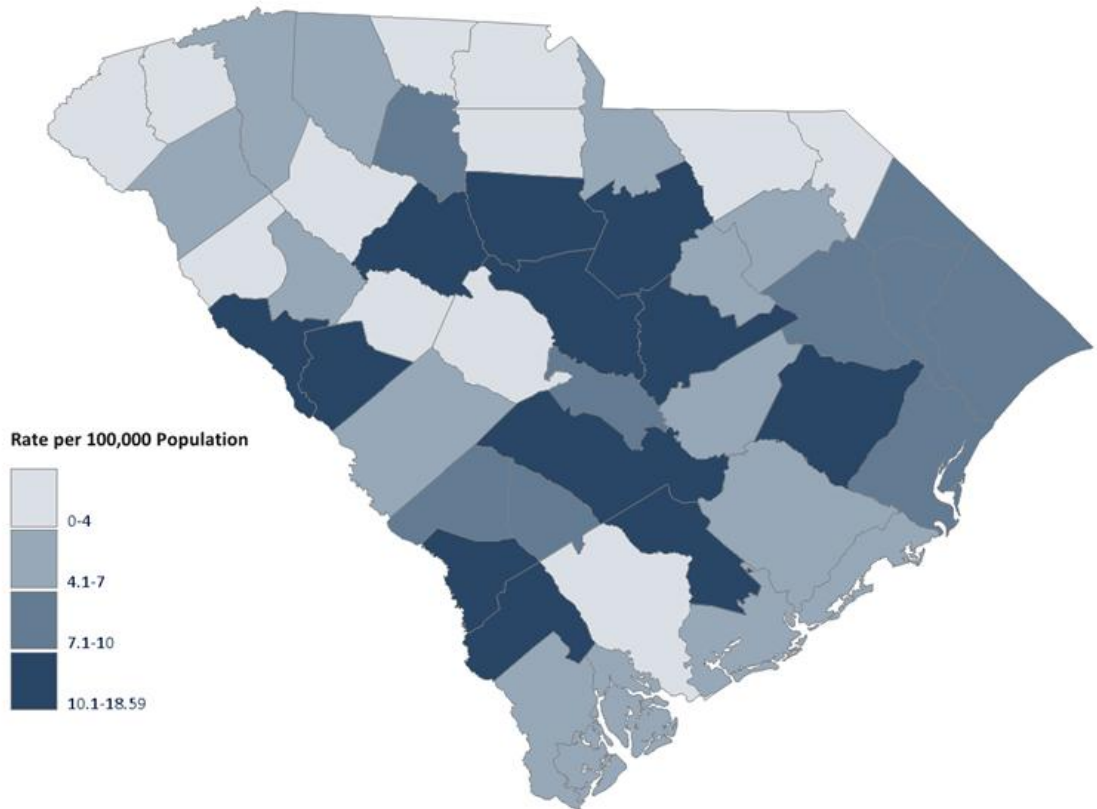


Figure 2.2.5 shows the three-year (2021-2023) average incidence rate among women, an indicator for more recent heterosexual risk. Hampton, Allendale, and Sumter counties have the highest case rates in the state (18.6, 18.4, and 14.9 per 100,000 population respectively). Fifty percent of counties have case rates below 5.9 (the state rate is 6.3).

Figure 2.2.6: SC HIV/AIDS Incidence Rates
2021-2023 HIV/AIDS: Three Year Average Rate
Male Rate

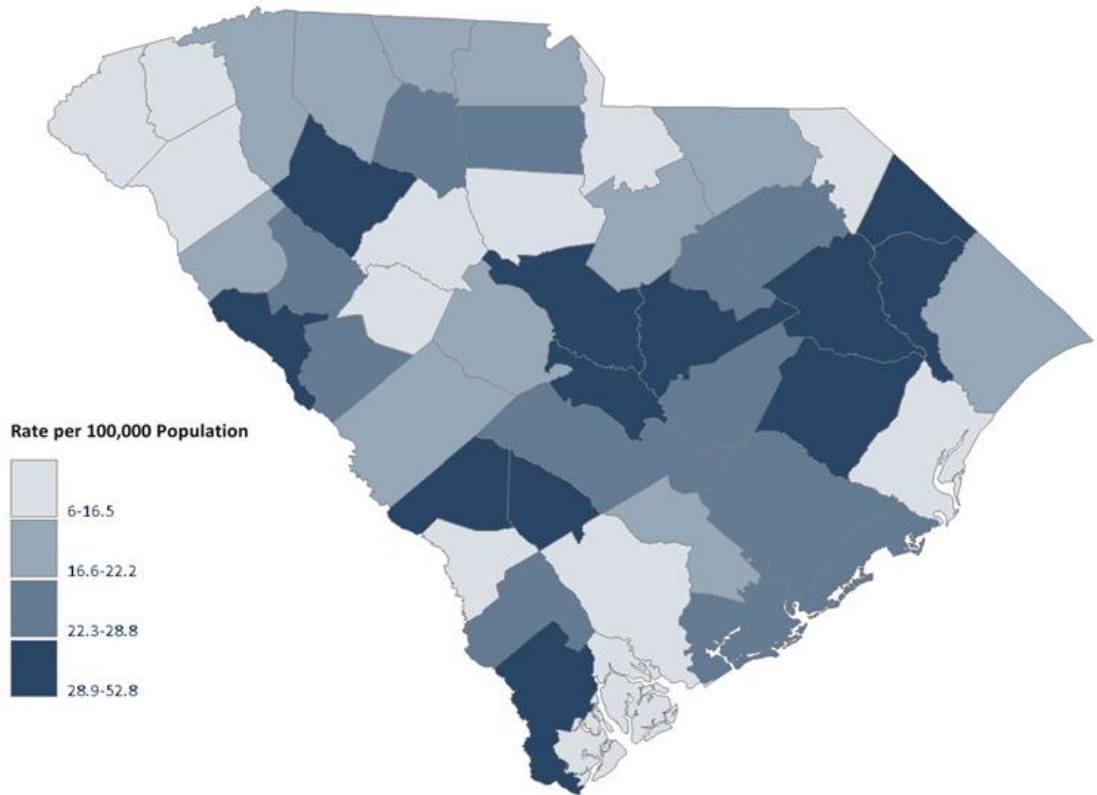


Figure 2.2.6 shows a three-year average incidence rate for males for 2021-2023. Williamsburg County has the highest average incidence rate of 52.8, followed by Jasper (51.9) and Dillon (48.6) Counties. Slightly more than half (54%) of the counties are below the state rate of 23.2.

Richland County has the greatest number of MSM living with HIV/AIDS in 2023 (1,522), with Greenville (1,012) and Charleston (889) having the next highest numbers. The median value for is 76 and 50% of the counties are below the median value. Most SC counties had fewer than 135 MSM living with HIV/AIDS, (Figure 2.2.7).

Figure 2.2.7: SC HIV/AIDS MSM Prevalence
2023 HIV/AIDS: MSM Risk

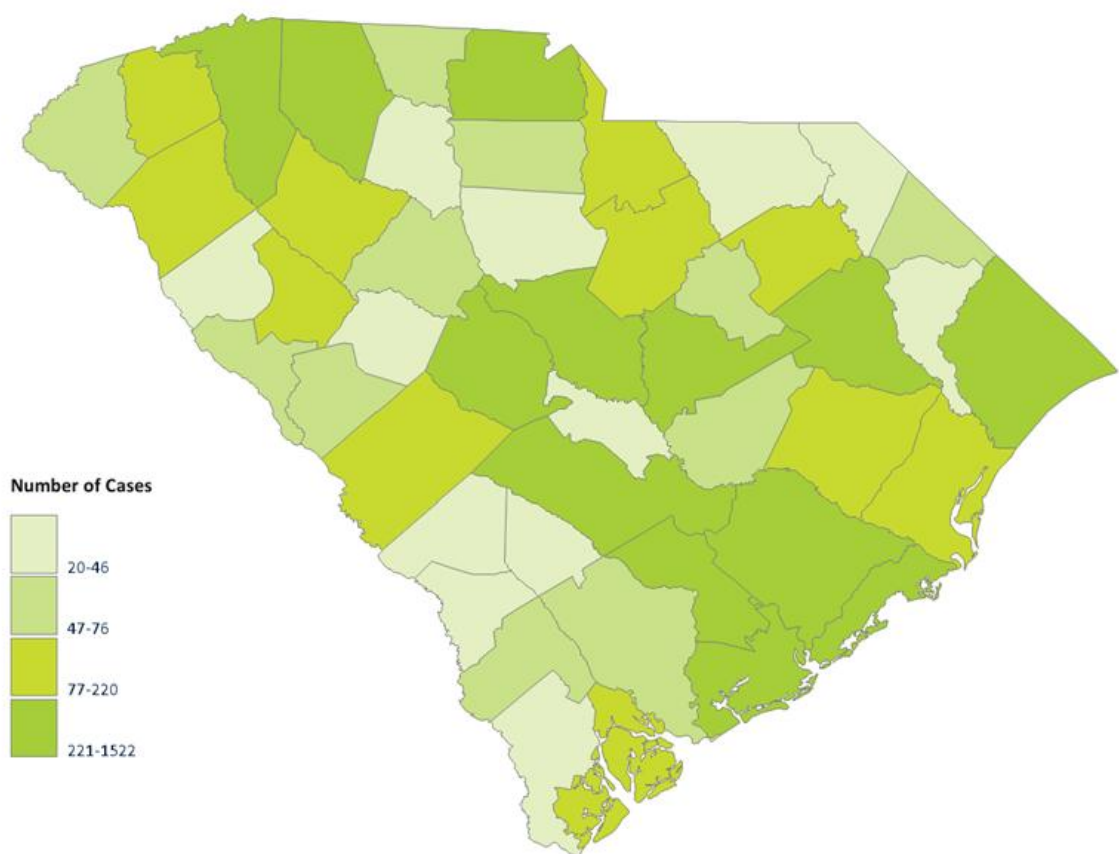


Figure 2.2.8 shows the counties with the prevalence of PLWHA due to heterosexual transmission. Counties with highest number of reported PLWHA include Richland (626), followed by Charleston (353), Greenville (295). Others are Florence, Horry, Sumter, and Spartanburg. Eighty-seven percent of SC counties each have less than 169 PLWHA who reported a risk of heterosexual contact.

Figure 2.2.8: SC HIV/AIDS Heterosexual Prevalence
2023 HIV/AIDS: Heterosexual Risk

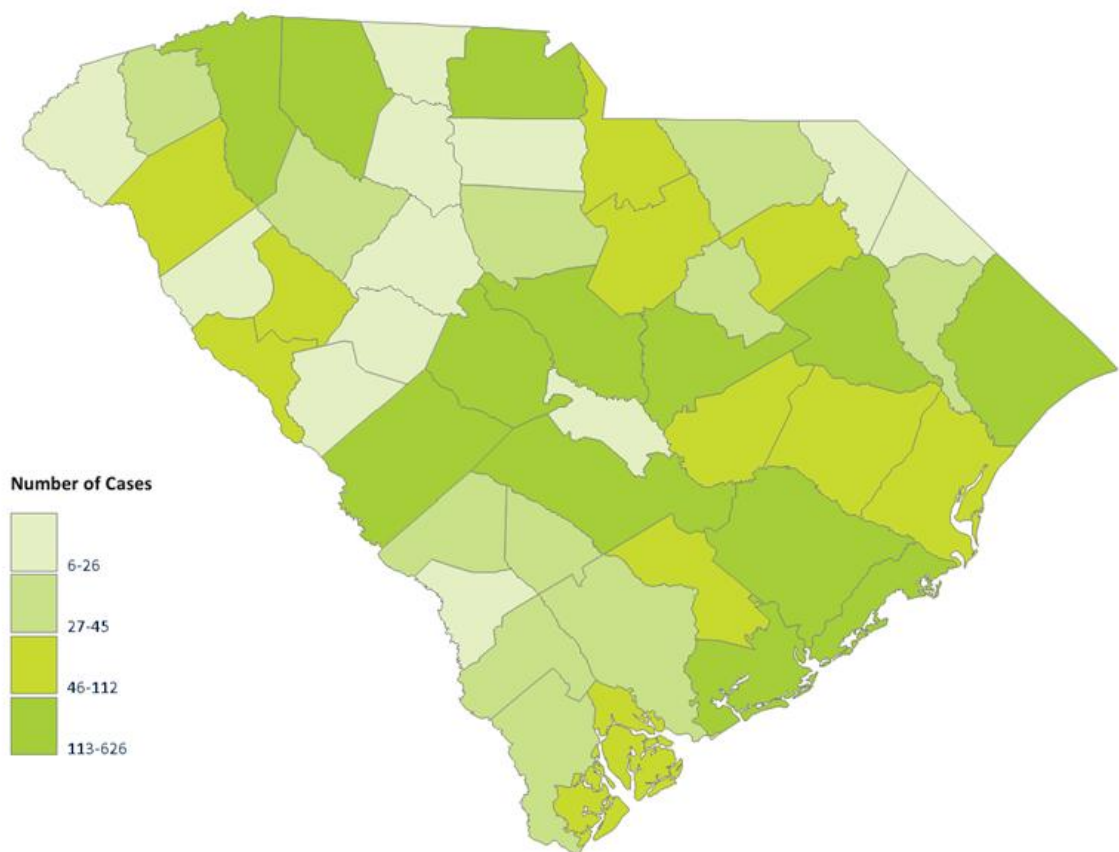


Figure 2.2.9 shows the counties with the prevalence of PLWHA due to IDU related transmission. Richland County has the highest number of PLWHA with IDU (184) as an identified risk factor, followed by Greenville (95), and Horry (94). As with other risks, the more urban counties have the greatest numbers.

Figure 2.2.9: SC HIV/AIDS IDU Prevalence
2023 HIV/AIDS: IDU Risk

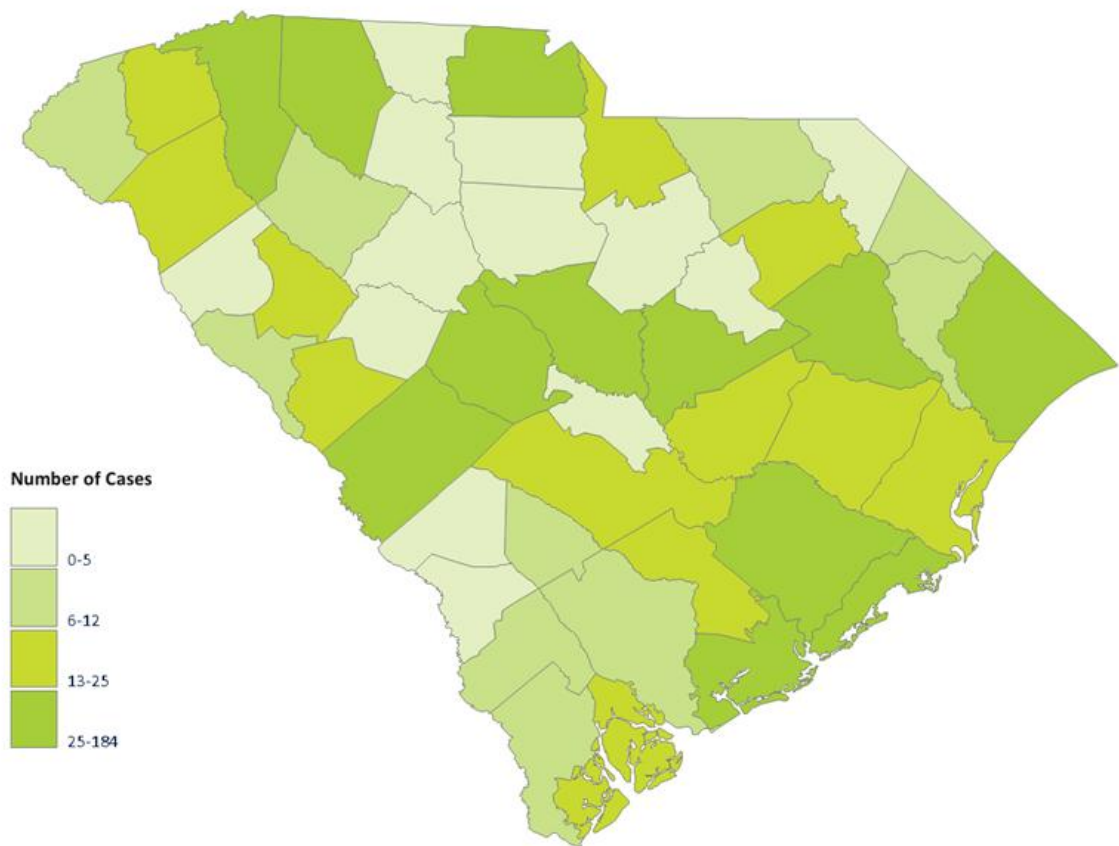


Figure 2.2.10 shows new HIV infection diagnosis rate for 2023 and three-year average rate by Social Vulnerability Index (SVI) for SC counties. County level SVI rankings were assigned to all HIV newly diagnosed cases based on their county of residence.

SVI rankings (ranged from 0 to 1) are grouped into quartiles (low, <0.25 ; moderately low, $0.25- <0.5$; moderately high, $0.5- <0.75$; and high, >0.75). Most people diagnosed with HIV infection in 2023 in SC were diagnosed in areas with high (35.1%) or moderately high (26.7%) social vulnerability. Similarly, for three-year average HIV incidence rate, most people were diagnosed in areas with high (32.2%) or moderately high (30%) social vulnerability (Figure 2.2.10).

SVI percentile ranking values range from 0 to 1, with higher values indicating greater social vulnerability, and counties with such rankings face greater challenges addressing HIV transmission in their communities due to social determinants of health: lack of resources, manpower, and structural barriers. Conversely, counties with lower SVI scores have a stronger resilience to address the burden of HIV in their communities.

Figure 2.2.10: SC HIV New Infection Diagnosis Rate by Social Vulnerability Index - 2023 and Three-Year Average

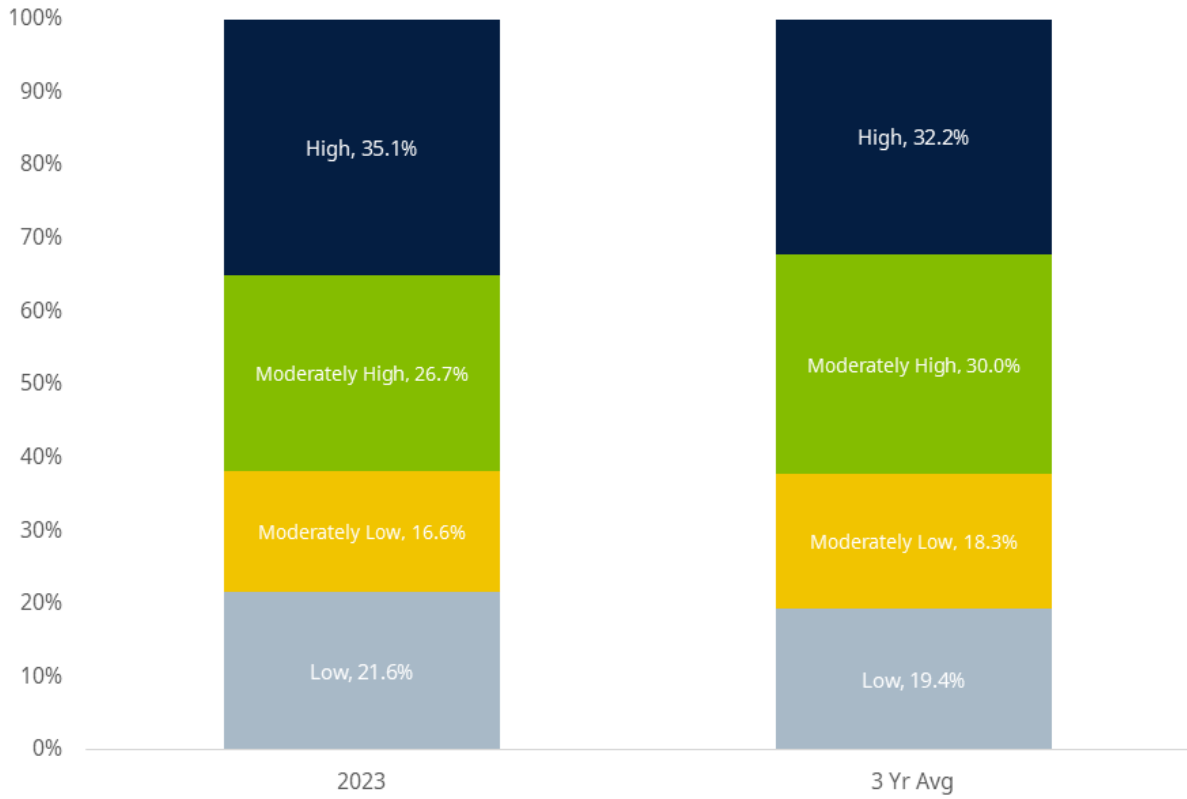


Figure 2.2.11 shows the top 10 counties of SC with high three-year average HIV incidence rates and their corresponding SVI scores and rankings. Williamsburg and Jasper counties have the highest three-year average HIV incidence rates of 24 and an SVI score and ranking of 0.9778 (High) and 0.6889 (Moderately High) respectively. All the top 10 counties in SC had a high burden of three-year average HIV incidence and a social vulnerability index ranking of High or Moderately High, (Figure 2.2.11), (See the appendix section for additional information on SVI rankings).

Figure 2.2.11: Top 10 SC Counties with High HIV Incidence Rate (3-Year Average) with Corresponding Social Vulnerability Index Score and Ranking

County Name	HIV Incidence Rate (3-Year Average)	Social Vulnerability Index Score	Social Vulnerability Index Ranking
Williamsburg	24.31	0.9778	High
Jasper	24.31	0.6889	Moderately High
Marion	21.01	0.7333	Moderately High
Sumter	20.46	0.6	Moderately High
Richland	19.36	0.5333	Moderately High
Hampton	18.37	0.9111	High
Marlboro	18.04	0.7556	High
Dillon	18.00	0.9556	High
Allendale	17.97	1	High
Barnwell	17.93	0.8444	High

Patterns of Service Utilization of People with HIV

Ryan White (RW) Part B

In 1990, Congress enacted the RW CARE Act to provide funding for states, territories, and Eligible Metropolitan Areas to offer medical care and support services for people living with HIV infection who lack health insurance and financial resources for their care. Congress reauthorized the RW CARE Act in 1996 and 2000 to support Titles I through IV, Special Projects of National Significance (SPNS), the HIV/AIDS Education Training Centers and the Dental Reimbursement Program, all of which are part of the CARE Act. The legislation was reauthorized again in 2006 when it became the RW HIV/AIDS Treatment Modernization Act and, finally, in 2009 with the RW HIV/AIDS Treatment Extension Act.

RW Part B funding is used to assist states and territories in developing and/or enhancing access to a comprehensive continuum of high quality, community-based care for low-income individuals and families living with HIV.

Figure 3.1.1: Characteristics of Ryan White Part B Clients Compared to S.C. Persons Living with HIV/AIDS in 2023

	Ryan White Part B Clients, N=12,432	Persons Living with HIV/AIDS, N=20,096
Race/Ethnicity		
White, not-Hispanic	23%	24%
Black, not-Hispanic	69%	62%
Hispanic	6%	7%
Other	2%	7%
Sex		
Male	70%	72%
Female	29%	28%
Transgender	<1%	---
Age Group		
< 24	4%	---
25-44	39%	---
45+	57%	---

During 2023, 12,432 clients received services through the RW Part B funds. Figure 3.1.1 presents the distribution of Part B clients by race/ethnicity, sex, and age as well as for PLWHA in SC through December 2023. Clients served through Part B are representative of the population affected with HIV/AIDS in all categories.

HRSA has directed that states should allocate funds for essential core services, including:

- Primary Medical Care consistent with Public Health Service (PHS) Treatment Guidelines
- HIV Related Medications
- Mental Health Treatment
- Substance Abuse Treatment
- Oral Health
- Medical Case Management

Figure 3.1.2 shows a breakdown of RW Part B clients who received six of the core services through funding and the average number of visits per clients. Among the 12,432 clients who received services, most clients obtained medical case management services (n=10,620) followed by medical care (n=10,520), Medication Assistance (utilization of HIV related medications is described in the ADAP section), mental health services, dental care, and substance abuse services.

Figure 3.1.2: South Carolina Ryan White Part B Service Utilization by Service Type, 2023

	No. of clients receiving service	No. of visits per category	Avg. no. of visits per client
Medical Care	10,520	36,400	3
Oral/Dental Care	1,668	3,543	2
Mental Health	3,129	7,392	2
Substance Abuse	2,026	2,375	1
Medical Case Management	10,620	95,444	9

Of those services used most by clients (visits/client), medical case management services were among the highest (9 visits per client), followed by medical care (3 visits per client), mental health services (2 visits per client), dental care (2 visits per client), and substance abuse (1 visit per client).

Additional services obtained by clients in 2023 included health education/risk reduction, case management (non-medical), housing services, medical transportation, food bank/home delivered meals, referral for health care and supportive services, and psychological support services.

AIDS Drug Assistance Program (ADAP)

The SC AIDS Drug Assistance Program (SC ADAP) operates under the RW HIV/AIDS Treatment Modernization Act to provide access to medications that treat HIV disease and to prevent the serious deterioration of health arising from HIV disease in eligible people. The SC ADAP provides medication assistance via the following service tiers: 1) Direct Dispensing to provide medications via mail-order through a contracted pharmacy; 2) Insurance Assistance to reimburse costs for private insurance premiums, copayments, and deductibles; and 3) Medicare Assistance to provide support for Medicare Part D copayment and deductible costs. SC ADAP enrollment and services are centrally managed by DPH.

Currently there are 108 drugs on the approved SC ADAP Formulary, including 45 HIV antiretroviral drugs. In the past, once an antiretroviral medication received FDA approval, it was automatically added to the SC ADAP formulary. With the new development of extremely expensive therapies, such drugs are added as appropriate, after a thorough medical and fiscal review and in compliance with ADAP performance measures. Selzentry, Sunlenca, Trogarzo, Egrifta currently require prior authorization for approval. As of April 1, 2014, prior authorization is not required for abacavir-containing medications or ribavirin. There are no restrictions or caps on the number of antiretroviral medications per client.

Eligibility for SC ADAP includes verified HIV-positive status, SC residency, and an income criteria requirement measured according to the Federal Poverty Guidelines (FPL). Eligibility for the ADAP direct dispensing service tier and for the ADAP insurance assistance service tier is 550% of FPL. Eligibility for the Medicare Assistance service tier is also 550% of FPL and applies for people who do not qualify for the Medicare Part D Full Low-income Subsidy (FLIS). Expenditures are carefully monitored, and projections are reviewed monthly.

Figure 3.1.3 lists the characteristics of clients enrolled in ADAP during 2023. Clients served through ADAP have a similar distribution to that of PLWHA in SC. The majority of the clients are non-Hispanic African American (64%), male (76%) and female (21%); age 40 and over (62%).

Figure 3.1.3: Characteristics of ADAP Clients Compared to S.C. Persons Living with HIV/AIDS in 2023

	ADAP Clients, N=5,237	Persons Living with HIV/AIDS, N=20,232
Race/Ethnicity		
White, not-Hispanic	23%	24%
Black, not-Hispanic	64%	62%
Hispanic	11%	7%
Sex		
Male	76%	72%
Female	21%	28%
Transgender	2%	--
Age Group		
>15	0%	1%
15-19	0%	1%
20-24	3%	3%
25-29	8%	6%
30-39	27%	21%
40-49	21%	18%
50-59	23%	25%
60+	18%	27%

Figure 3.1.4 shows a similar list of characteristics by service type. Men comprise the largest proportion across all three service types. The RW Insurance Program served the largest number of clients and has a similar distribution to that of PLWHA in SC African Americans also comprise the largest proportion within the Insurance Program and Whites comprised the largest proportion within Medicare Part D Assistance.

Figure 3.1.4: 2023 ADAP Patient Profile Compared to Persons Living with HIV/AIDS

	S.C. HIV/AIDS Prevalence N= 20,234	Direct Dispensing N= 2,505	Insurance Program N= 2,835	Medicare Part D Assistance N= 418
Race/Ethnicity				
White, not-Hispanic	24%	17%	26%	51%
Black, not-Hispanic	61%	62%	68%	46%
Hispanic	7%	18%	4%	2%
Sex				
Male	72%	79%	74%	75%
Female	28%	17%	24%	24%

Figure 3.1.5 shows a breakdown of SC ADAP clients who received each of three types of services that support access to medications and the average number of services per client. Most SC ADAP enrollees received prescriptions via mail order for uninsured clients and at retail pharmacies with insurance copayment/deductible assistance from SC ADAP. The SC ADAP paid health insurance premiums for enrollees with access to private insurance and supported out-of-pocket costs for enrollees with Medicare Part D coverage.

Figure 3.1.5: South Carolina ADAP Service Type, 2023

	Number of clients receiving service	Number of visits per category	Average number of Services per client
Prescription Refills: (Direct Dispensing & Insurance Copayments/Deductibles)	4823	64476	13
Premiums: Health Insurance Premiums (including Pre-existing Condition Plans)	1812	16981	9
Medicare Copayments/Deductibles*	418	8465	20

***Insurance Copayments and Deductibles are associated with specific prescriptions and are reported as Refills/Medications.**

Gaps in SC RW Part B HIV Care and Treatment Resources

Of the 20,232 people living with diagnosed HIV/AIDS in SC in 2023, 12,432 received care and treatment services through the RW Part B funding while 5,237 were enrolled in ADAP. Input from focus groups involving people living with HIV (PWH), Outreach workforce, Medical Case Managers, and HIV providers as part of the RW Needs Assessment identified gaps in HIV care and treatment in 4 broad areas:

- **Structural:** High staff turnover among local RW HIV service providers, exacerbated by the COVID-19 epidemic and low salaries, has led to poor service coverage and low client reach. Other challenges include lack of dental partnerships and housing instability leading to homelessness and low retention in care and viral suppression rates.
- **Access:** Much of SC is rural in nature with associated health care deserts. Unreliable transportation is a major barrier for PWH to access care and be retained in care. This often leads to clients falling out of care and lost to follow-up. Other gaps in care include technology challenges, language barrier, mistrust in the health care system, and fear of deportation for clients with legal immigration challenges.
- **Psychosocial:** People living with HIV oftentimes experience mental health and substance use challenges, which if left untreated pose a barrier to clients accessing and retaining in care with associated poor viral suppression. Referral to mental health and substance abuse services has been identified as a major gap for clients receiving HIV care through the RW Part B program in SC. Stigma, discrimination, and lack of support are additional barriers highlighted by the focus groups.
- **Economic:** High copays, financial insecurity, and food insecurity have been linked to poor linkage and retention in care, and these are some of the gaps in HIV treatment and care for clients receiving RW Part B services in SC.

Intervention Strategies to Address Gaps in HIV Care and Treatment

The SC RW Part B program has put in place certain intervention strategies to address the gaps and barriers experienced by clients accessing HIV care and treatment services in the state. These include:

Stigma Reduction Policy:

This strategy is intended for all RW-funded agencies that choose to adopt the policy with the purpose of providing a standardized framework for addressing HIV-related stigma. The policy aims to foster environments of compassion, acceptance, and support for people living with HIV/AIDS, and provides a unified approach for infectious disease clinics across the state to challenge stereotypes, promote education, and foster supportive environments for people living with HIV. The focus population is health care providers, administrators, support personnel, as well as external partners involved in the delivery of HIV-related services within the RW-funded agency. The objectives of the Stigma Reduction Policy are therefore to promote awareness by increasing healthcare providers' understanding of HIV transmission, prevention, and treatment modalities and to ensure patient dignity by treating all individuals with respect and empathy. The policy also fosters inclusivity by creating a welcoming environment that is free of discrimination and bias, safeguards patient information by strictly adhering to HIPAA regulations, and enhances communication by using respectful and nonjudgmental language during all patient encounters.

RW Oral Health Initiative Project:

The RW Oral Health Initiative (RWOHI) seeks to fill a long-standing gap in dental care access for people living with HIV (PLWH) across SC. The primary purpose of the project is to increase equitable access to oral health services for PLWH by building a state-managed dental network supported by case management, streamlined payment systems, and data transparency. The project outlines a sustainable, state-coordinated model that leverages dedicated dental case management, a contracted dental network, and transparent tracking through Provide Enterprise (PE). This initiative targets people living with HIV who are enrolled in the RW program supported by RW-funded agencies.

RW Outreach Program:

The South Carolina RW Outreach Program was launched in 2017 to identify people living with HIV who either do not know their HIV status or know their HIV status but are not currently engaged in medical care. The primary goal of the program is to link or re-engage these individuals back into HIV medical care and support services provided through a RW-funded provider. Outreach efforts are tailored to meet people where they are, focusing on communities with high HIV prevalence or where high-risk behaviors are more common. A key function of the program is to use data-driven tools, such as reports from the PE system to identify individuals who are at risk of being out of care or have been lost to

follow-up. Once individuals are identified, Outreach Specialists initiate contact with the client, build rapport, and conduct a Return to Care (RTC) assessment. This assessment helps to uncover the reasons a person may have fallen out of care and guides the approach to supporting their re-engagement. All outreach is performed with a focus on voluntary participation, without coercion.

Rapid Response Initiative:

Rapid START refers to the immediate, or as-soon-as-possible, initiation of antiretroviral therapy (ART) for individuals newly diagnosed with HIV or those re-engaging in care after a period of disengagement. The goal is to begin ART within 2-3 days, ideally on the same day as diagnosis or re-engagement. Early initiation of HIV treatment has been shown to achieve faster viral suppression, improve retention in care, reduce the risk of HIV transmission, and support statewide efforts to End the HIV Epidemic (EHE). Rapid Start may not be appropriate for individuals with certain untreated opportunistic infections (OIs), such as cryptococcal meningitis, Tuberculosis (TB) meningitis). In these cases, OI treatment should begin first, and ART should be initiated in consultation with clinical experts. Each RW-funded agency implementing the Rapid START initiative must develop and implement site-specific Rapid START protocols.

Increasing HIV Care through Telehealth:

Telehealth implementation allows for an alternate means to connect persons to HIV care and prevention services that are not being reached through conventional methods. RW-funded agencies with technological capabilities to provide telehealth services take advantage of this strategy to improve retention in care by providing telehealth services, when appropriate, for people living with HIV who receive RW services. Clients living in rural areas in SC who have access to technological software or those with challenges receiving in-person services benefit from this initiative. Examples of services offered via telehealth include Outpatient Ambulatory Health Services, Medical Nutrition Therapy, Mental Health Services, Medical Case Management, Non-Medical Case Management, Health Education/Risk Reduction, Outreach Services, Psychosocial Support Services, EHE Initiative Services, including Linkage to Care.

Evidence-Based Interventions Implemented to Link, Retain, and Re-Engage People with Diagnosed HIV in Care and Treatment

South Carolina has implemented various strategies to rapidly link people with a confirmed HIV diagnosis within 30 days of diagnosis, and to ensure they are

retained in care and virally suppressed. These strategies also ensure that people living with HIV who have fallen out of care are reengaged in care to continue antiretroviral treatment and receive other ancillary services to support their HIV Care Continuum. These include:

DTC Initiative:

DTC is a public health strategy that aims to use HIV surveillance data to identify HIV-diagnosed people, not in care, link them to care, and support their HIV care continuum. The South Carolina Department of Health (DPH) is responsible for implementing the statewide DTC initiative in collaboration with participating providers to successfully link and reengage people living with HIV back to primary HIV medical care. DPH executes DTC by securely exchanging Protected Health Information (PHI) through Provide Enterprise (PE) or Secure File Transport Protocol (SFTP) on a quarterly basis. As part of this initiative, the DTC team conducts client investigations through phone calls, mail, or field visits to engage with clients and rapidly connect them to medical providers to commence antiretroviral therapy (ART). In addition, the DTC team coordinates and facilitates client referral to other services such as transportation, housing, food, and sends regular reminders and educational support to ensure clients are linked and retained in care.

"I am a Work of Art" Campaign:

The "I am a Work of Art" campaign is a CDC-led community-informed national initiative that encourages people living with HIV who are not in care to seek, stay in care, and achieve viral suppression through antiretroviral therapy (ART). South Carolina is currently implementing this initiative to help people with HIV live long, healthy lives and prevent transmission to their HIV-negative partners. The campaign supports linkage and retention in care for people living with HIV through songwriting, storytelling, and sharing of videos and helps to de-stigmatize HIV, highlight the benefits of HIV testing and care, provide awareness to supportive services, and improve viral suppression.

Rapid Linkage to HIV Treatment and Care Program:

The DTC staff work collaboratively with the RW Part B and AIDS Drug Assistance Program (ADAP) to rapidly connect and re-engage people living with HIV in care while providing access to ART within seven days of HIV diagnosis. South Carolina's Rapid HIV Care Model allows for a comprehensive and rapid linkage and re-engagement of clients to medical providers as well as accelerated eligibility and access to care services. The rapid linkage initiative also allows for accelerated ADAP approval processes to enable clients to commence on ART during their initial

medial visits, including overnight shipments of antiretroviral medications to clients.

Ending the HIV Epidemic (EHE) Community Health Worker Initiative:

The Department of Health's EHE Community Health Workers (CHWs) provide and coordinate services to clients in rural communities throughout the four Public Health Regions (PHRs) of the state. These services include outreach and educational sessions in community centers, schools, and workplaces to raise awareness about HIV, its prevention, and the importance of testing, linkage to and retention in care, and viral suppression. CHWs assist people living with HIV in navigating the health care system, including helping with scheduling medical appointments and understanding medical advice. In addition, CHWs conduct direct client engagement through home visits to provide information, support and follow-up care, and antiretroviral medications, especially for those with difficult assessing the healthcare system. Staff with proficiency in Spanish language support people living with HIV within Hispanic communities in rural areas to promote linkage to, and retention in HIV treatment and care services with the goal of achieving viral suppression and reducing HIV-related mortality and morbidity.

Reconnect Us Program- A Prison Initiative:

This is a collaborative between DPH, the SC Department of Corrections (SCDC), and Prisma Health Immunology Center to support HIV viral suppression among previously incarcerated individuals diagnosed with HIV who are re-entering the community. Activities under this collaboration include enhanced pre-release planning, linkage to and/or re-engagement into HIV medical care, assistance in reaching and maintaining viral suppression, retention services, and resources for partners and associates.

RW Peer Adherence Program:

This program focuses on improving adherence to HIV treatment and care by using people living with HIV who are trained as peer advocates to provide peer support to people with HIV and help them adhere to their treatment plans and access necessary services, ultimately improving their health outcomes.

HIV Continuum of Care

Methodology

The HIV Continuum of Care is a framework developed by the Center for Disease Control and Prevention (CDC) to monitor and report on the objectives outlined in the National HIV/AIDS Strategy for the United States, specifically: linked to care, received any care, retained in care, and viral suppression. Although the CDC developed the Continuum of Care metrics, each state has the discretion to modify the variables used in the metrics to meet a specific need. For the SC Epi Profile, the following methodology was used.

- All persons with reported diagnoses of HIV infection (regardless of stage of disease) through the end of the analysis year, who were alive at year-end
- All ages
- Last known state of residence is SC
- CD4 and viral load tests (used as a surrogate for evidence of HIV care)
- 'Linked to care' is defined as "persons with a CD4 or viral load test within three months after HIV diagnosis, among persons newly diagnosed with HIV infection in the analysis year"
- 'Received Any Care' is defined as "persons with ≥ 1 CD4 or viral load test result during the analysis year"
- 'Retention in Continuous Care' is defined as "persons who had ≥ 2 CD4 or viral load test results at least three months apart during the analysis year"
- Per CDC guidelines 'Viral Suppression' is defined as "persons who had a Viral Load ≤ 200 copies/mL at most recent test during the analysis year"

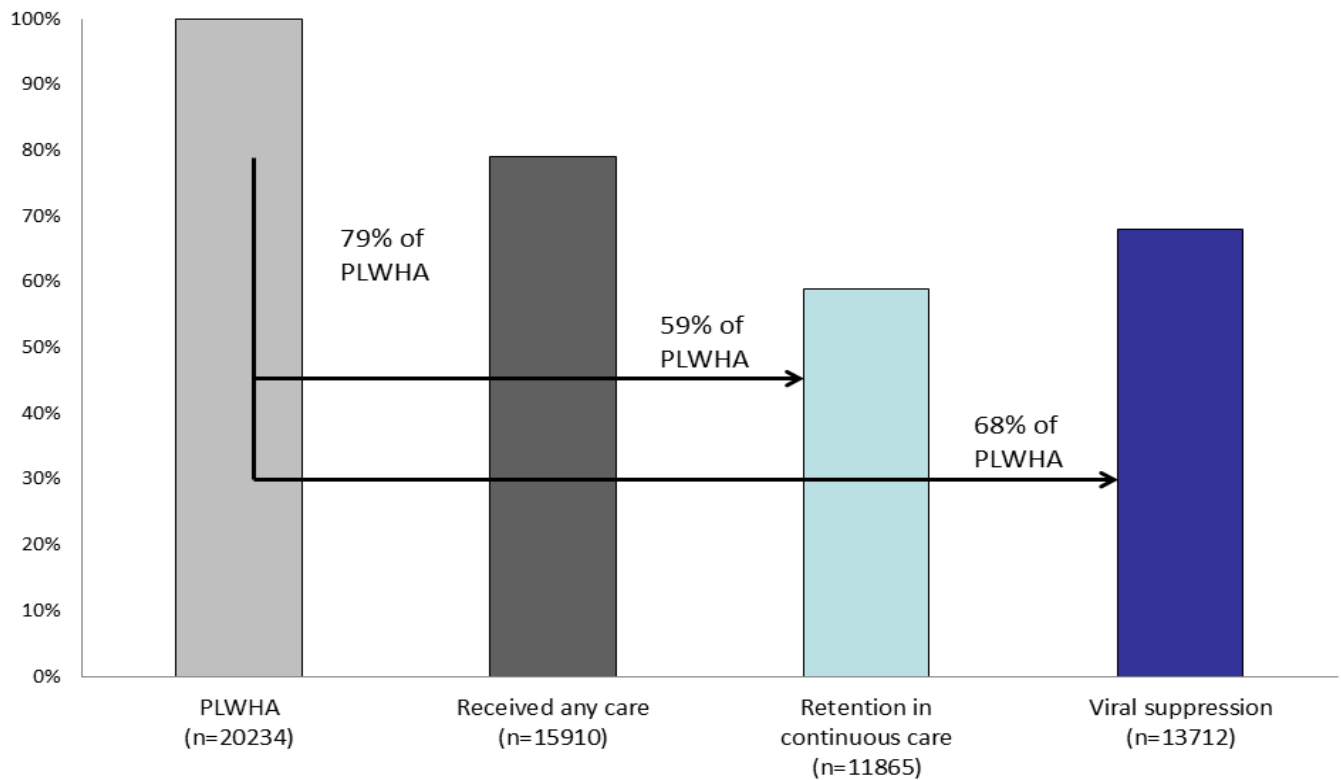
NOTE: Because the HIV Continuum of Care in this Epi Profile uses a different methodology from the CDC methodology, this Continuum of Care should **not** be used for comparison with national or other states' Continuum of Care.

HIV Continuum of Care – Diagnosed Prevalence

The National HIV/AIDS Strategy objectives of received any care, retained in care, and viral suppression in this Epi Profile use Diagnosed Prevalence (all people living with diagnosed HIV/AIDS). The objective Linked to Care uses incidence data (only people newly diagnosed with HIV/AIDS in 2023) and is discussed later.

Figure 3.2.1 shows the number and percentage of PLWHA engaged in each step of the HIV continuum of care. Of the 20,234 PLWHA, 79% had at least one CD4 or viral load test during 2023; 59% of PLWHA had two or more CD4 or viral load tests at least three months apart during 2022; and 68% of PLWHA had a Viral Load ≤ 200 copies/mL at most recent test during 2023.

Figure 3.2.1: Number and Percentage of Persons Engaged in Each Step of the HIV Continuum of Care, 2023



The following figures (3.2.2- 3.2.6) show the HIV continuum of care stratified by stage of HIV diagnosis, gender, race/ethnicity, age group and transmission category (risk).

Figure 3.2.2: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Diagnosis (2023)

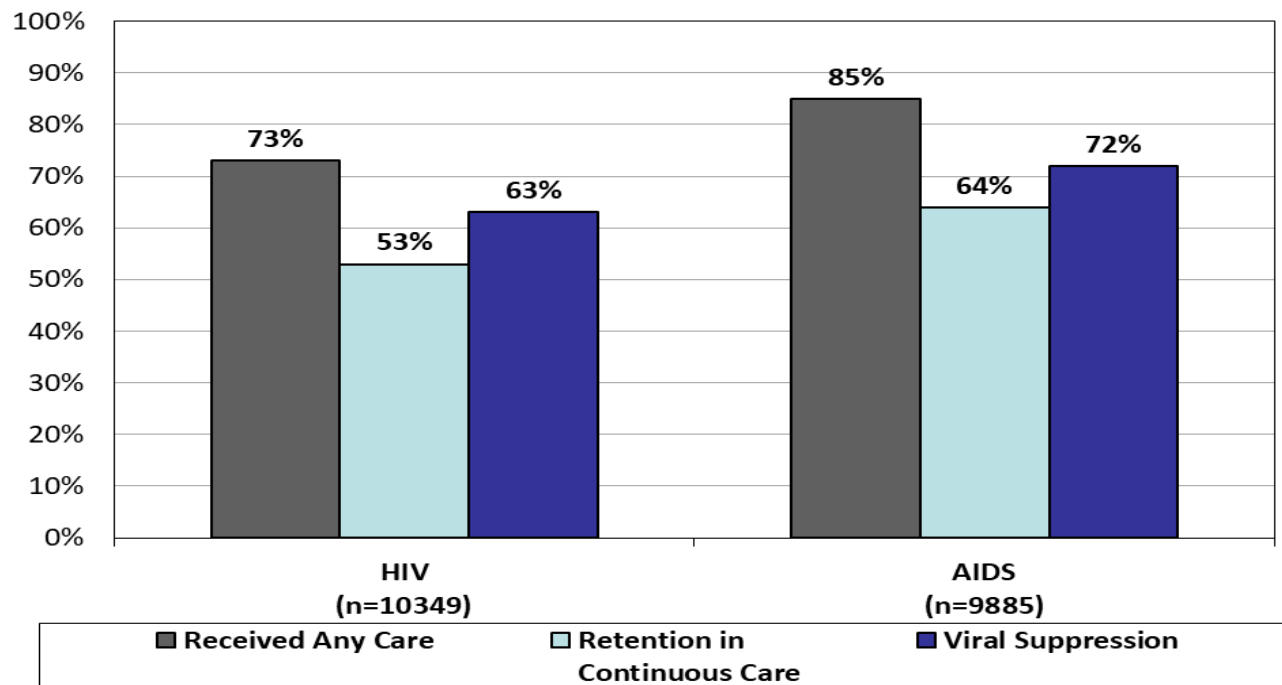


Figure 3.2.3: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Gender (2023)

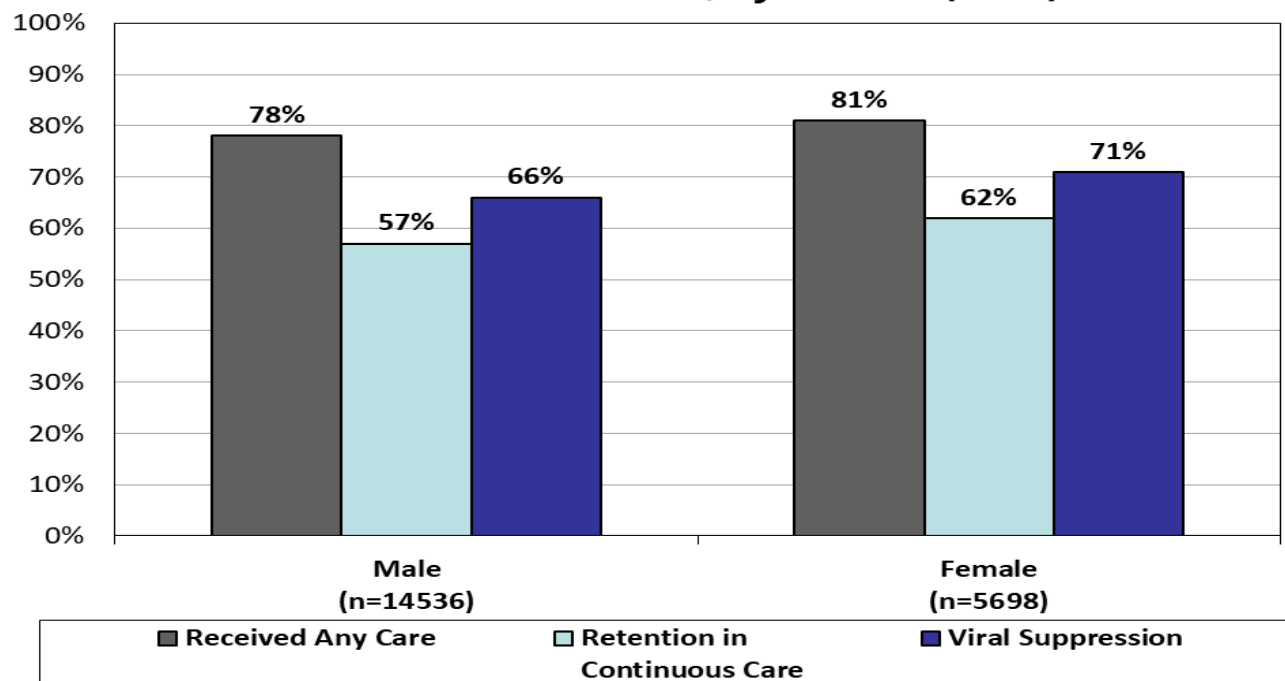


Figure 3.2.4: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Race/Ethnicity (2023)

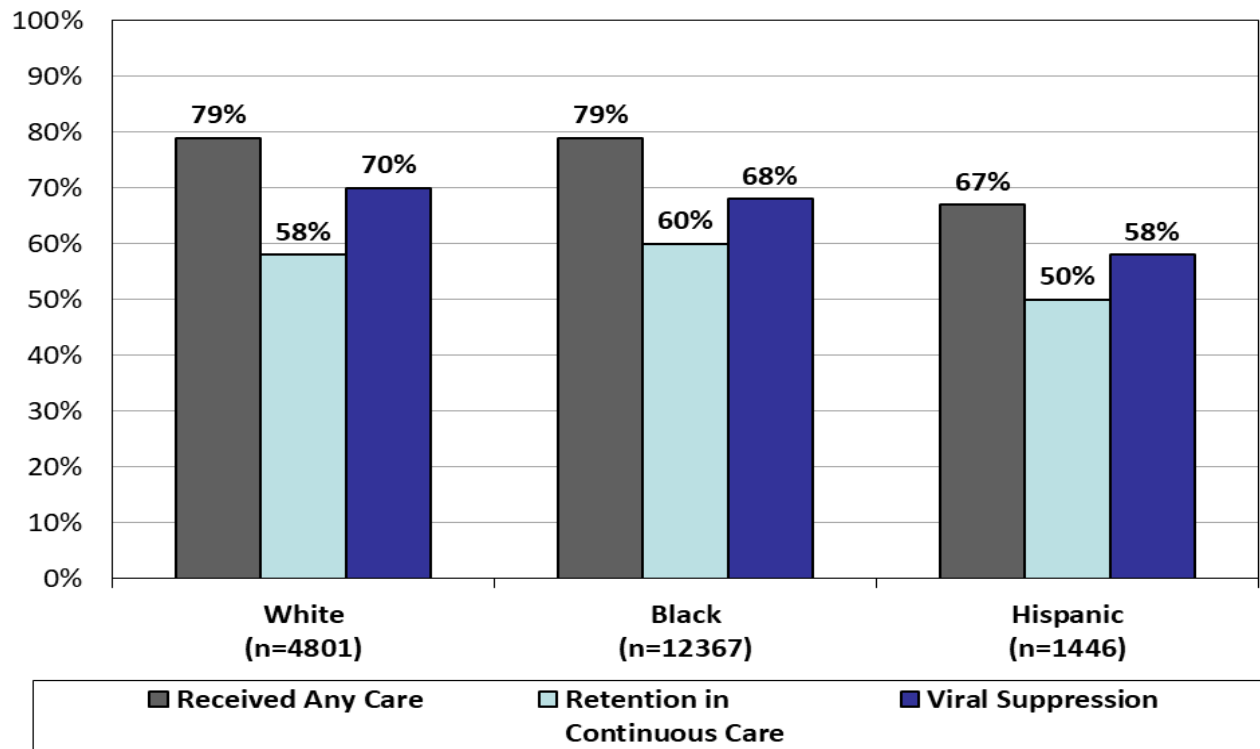


Figure 3.2.5: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Age Group (2023)

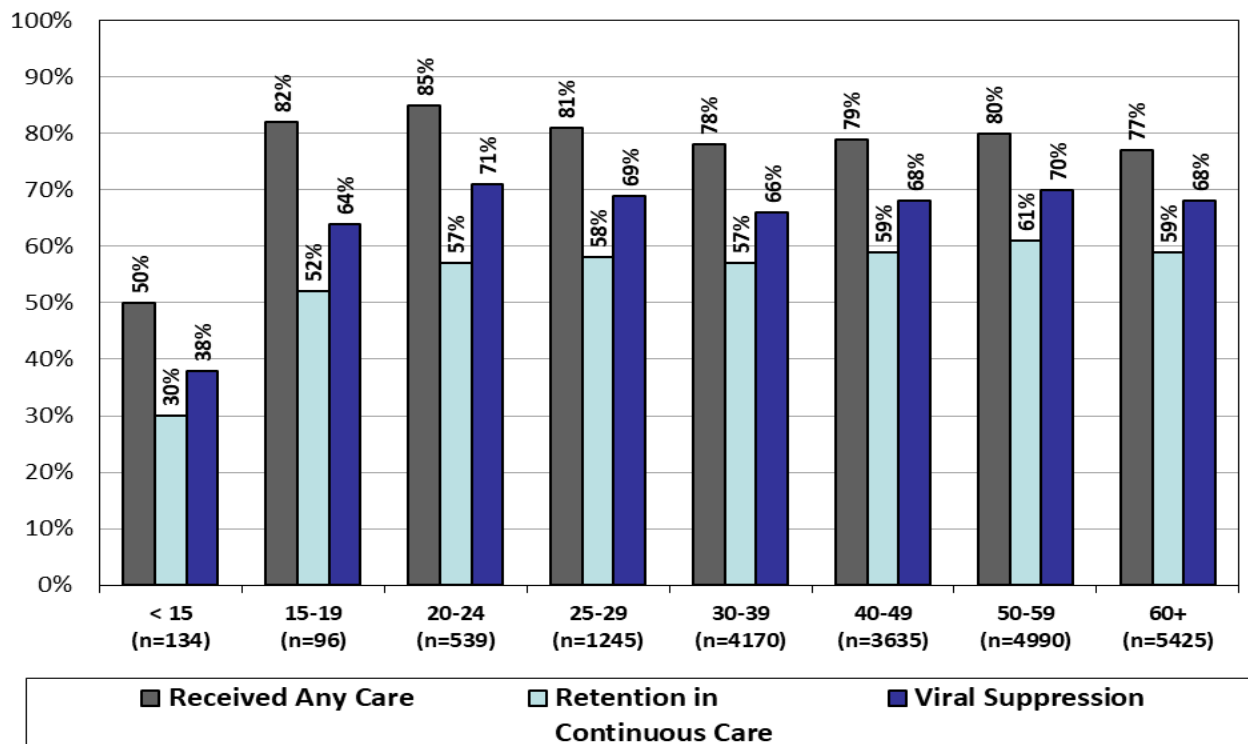
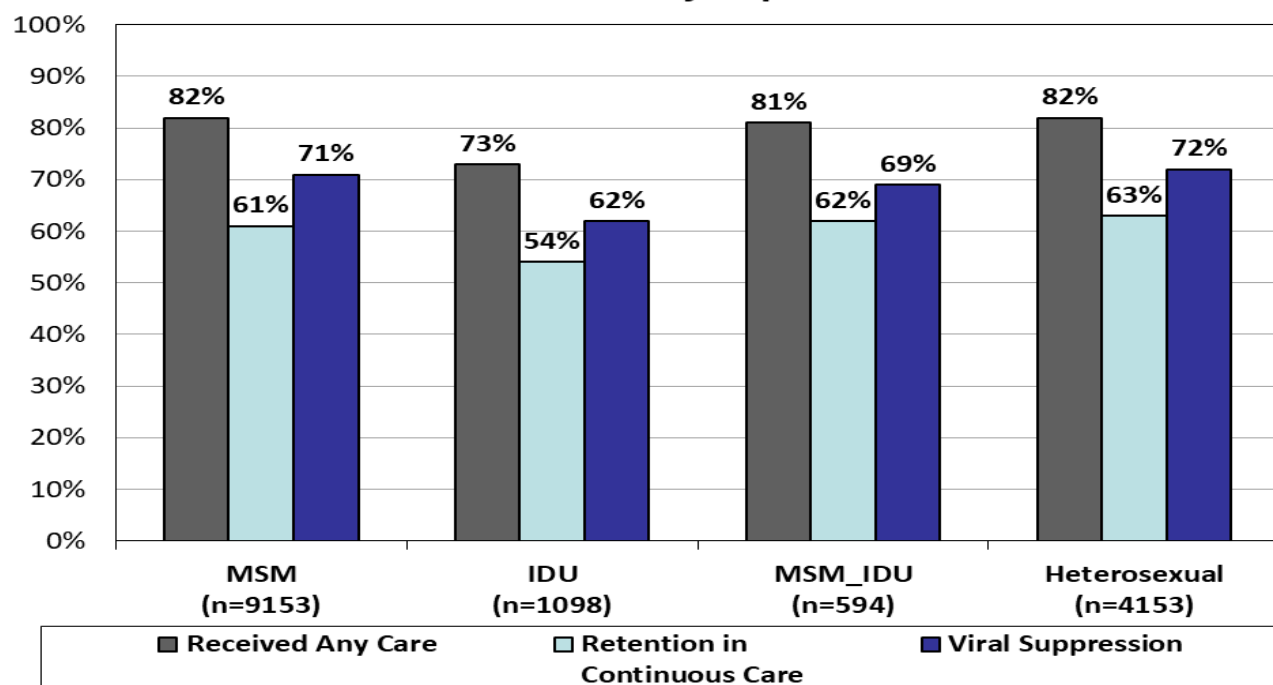


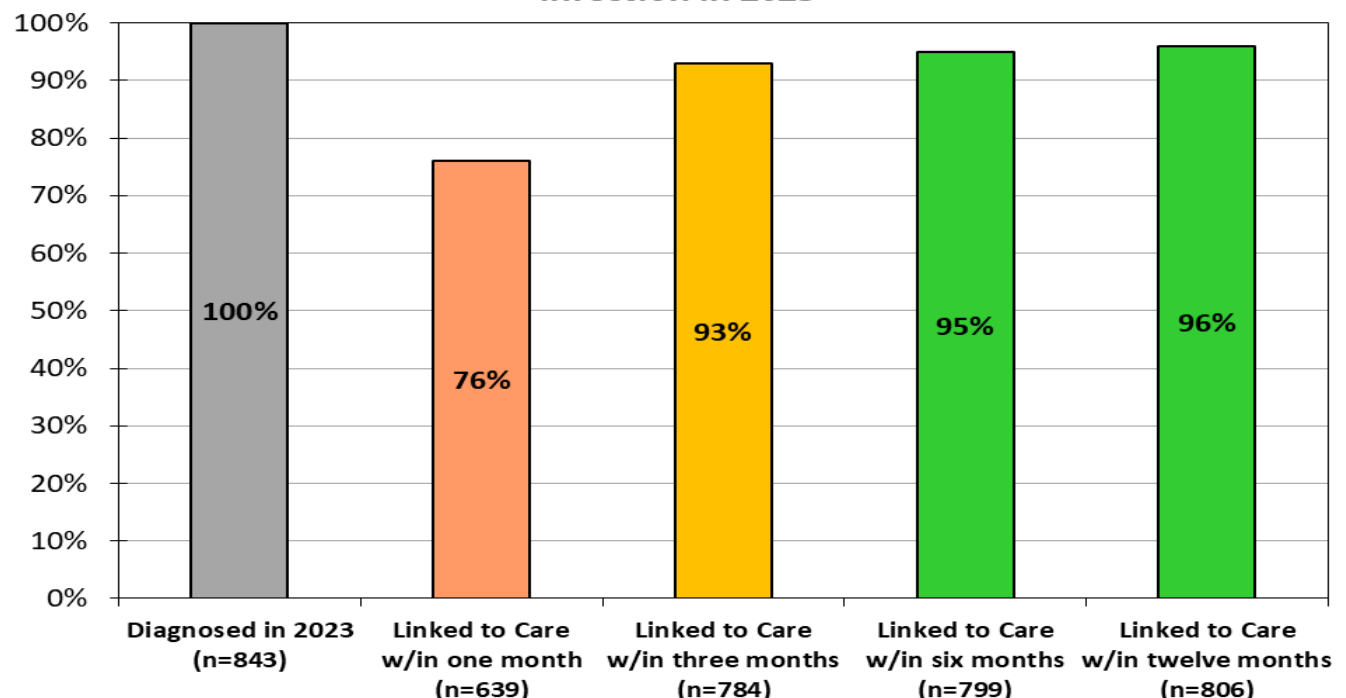
Figure 3.2.6: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Reported Risk (2023)



HIV Continuum of Care - Linked to Care

To optimize HIV outcomes, prompt linkage to HIV medical care is necessary, ideally ensuring that persons enter HIV medical care very soon after initial HIV diagnosis. A person is considered linked to HIV medical care if there is at least one CD4 or viral load test result within three months of the initial diagnosis. Figure 3.2.7 shows the percentage of people diagnosed in 2023 who were linked to care within one, three, six and 12 months of diagnosis.

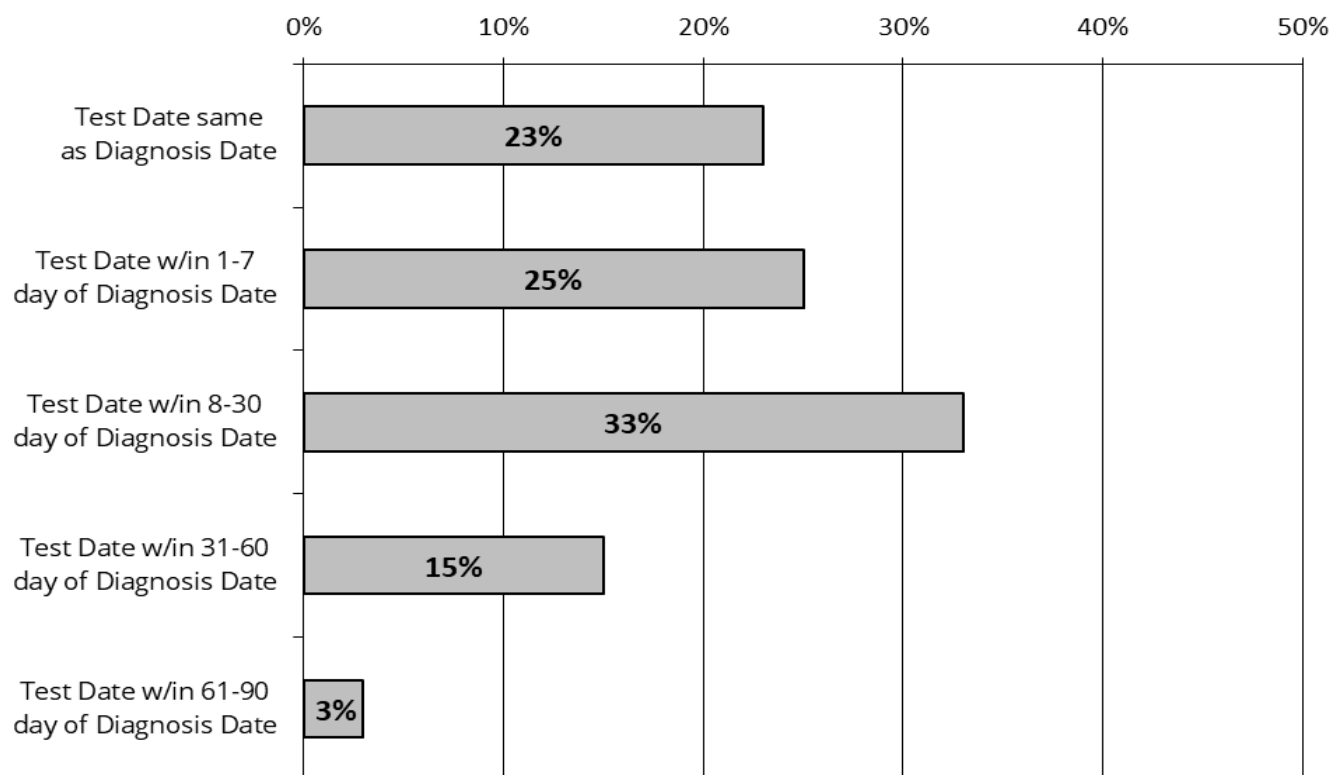
Figure 3.2.7: Percentage of Persons Linked to Care within 3, and 6 Months After HIV Diagnosis Among Total Number of Persons Diagnosed with HIV infection in 2023



In July 2015, the new National HIV/AIDS Strategy 2020 changed the “linked to care” objective from linkage within 90 days to linkage within 30 days. This change generated much discussion because, within the first 30 days, there is no accurate way to distinguish between a lab test done as part of the diagnosis confirmation process and a lab test done at a follow-up medical visit.

Figure 3.2.8 shows a break-down of the timing between the date of diagnosis and the lab test used to determine if the person was linked to care within 90 days. Of the 784 linked to care within 90 days of diagnosis, 30% had a lab date the same as the date of diagnosis; 20% had a lab date between one and seven days of diagnosis; 26% had a lab date between eight and 30 days of diagnosis; 19% had a lab date between 31 and 60 days of diagnosis; and 5% had a lab date between 61 and 90 days of diagnosis.

Figure 3.2.8: Of Persons Linked to Care within 3 Months of Diagnosis: Timing of Test Date Relative to Diagnosis Date.



HIV Prevention and Testing Services:

HIV prevention and testing services in South Carolina are completed by funded subrecipients through the South Carolina Department of Public Health (DPH) as well as other CBOs and HIV services providers. Various HIV testing modalities have been implemented in SC, including the HIV self-testing program, HIV Mobile testing, Retail pharmacy HIV testing program, and HIV testing in clinical settings. DPH HIV prevention and testing services are free of cost or considered on a sliding scale basis depending on an individual's salary, for all residents of the state.

People Receiving HIV Counseling and Testing at County Health Departments

Data from local HIV counseling and testing sites (county health departments) generally reflect similar trends as HIV/AIDS surveillance data in terms of who is most likely to be in the HIV-infected risk category, and county of residence. As stated in the introduction, the data reflect only those people tested voluntarily in

local health departments. These data reflect the number of people tested, not the number of tests.

In 2023, there was a total of 27,603 HIV tests conducted in the DPH health department clinics and 163 HIV positive results were recorded.

Blacks/African Americans comprised 62% (17,140) of the total people tested, and 60% (97) of the total positives, followed by Whites with 33% (9,201) tested and 32% (52) positive results.

Females accounted for most of the people tested, 63% (17,372) with a total of 11 positive results reported, while men accounted for 36% (9,836) and with a total of 82% (133) of the positive results. Seven percent (12) of the positive test results were recorded from 395 people who were reported as Unknown gender.

PrEP Coverage

PrEP coverage in SC has increased from 2017 (6.9%) to 2023 (30.9%). Of the 10,390 persons of both sexes, race/ethnicities, and age groups 13 years and older who were eligible for PrEP in 2023, 3,212 received a PrEP prescription, accounting for a PrEP uptake of 30.9%. There was a racial disparity in PrEP use, with 1 out of 10 Blacks/African Americans eligible for PrEP actually receiving a PrEP prescription, despite accounting for 56% of all newly diagnosed HIV cases in 2023. Whites, on the other hand, accounted for 25% of all newly diagnosed cases of HIV in SC in 2023, yet the PrEP uptake among Whites was 65% for that same reporting year.

Note: The CDC has currently paused PrEP coverage reporting to determine the best methodology for calculating PrEP coverage, and to update PrEP coverage estimates using updated methods and sources. Due to a formula error that affects a subset of race/ethnicity data, all race/ethnicity data for PrEP coverage have been removed from data reporting sites. CDC plans to resume PrEP coverage reporting in the next HIV Monitoring Report in June 2025.

Condom Distribution and Use

DPH supports condom ordering and distribution through HIV prevention funds received from the CDC. The HIV prevention program focuses on providing access to condoms for persons with HIV and their partners, as well as people with behaviors that place them at risk for HIV and STI acquisition. Condoms are available at DPH's 46 county health department clinics, funded community-based organizations, and other partnering organizations such as Federally Qualified

Health Centers (FQHCs), Historically Black Colleges and Universities (HBCUs), local drug and alcohol treatment centers, other clinics, etc.

Harm Reduction Services

In our current HIV prevention grant's initial application (submitted Spring, 2024), we indicated the following plans in support of harm reduction activities:

The SC Code of Laws does not permit syringe exchange programs or the distribution of drug paraphernalia. DPH will increase the availability of harm reduction services through naloxone distribution and additional resources. DPH supports the continued provision of naloxone and harm reduction supplies in regional health department clinics. DPH reinforces existing partnerships with law enforcement and emergency responders, who administer naloxone. These partnerships can provide resources for substance use treatment, as well as HIV, HCV, and STI testing. Community-based partners also conduct harm reduction activities in non-clinical settings and DPH has funded five agencies to provide education and harm reduction supplies to IDU.

The 2023 National Substance Use and Mental Health Services Survey (N-SUMHSS) provides data on substance use treatment facilities characteristics, services offered, client numbers and a mapping of treatment facility locations within South Carolina. According to the data, there were 105 facilities in South Carolina by the end of March 2023, including private for-profit organizations, private non-profit organizations, state, tribal, and federal government. A total of 19,945 clients (1,582 under the age of 18) received treatment services across these facilities ranging from both alcohol and substances other than alcohol, only alcohol, and only substances other than alcohol. Majority of the clients received treatment on outpatient basis (89%), while the rest were treated in residential (non-hospital), or hospital inpatient care settings. In addition to receiving assessment and pre-treatment, medical, transitional, recovery support, education and counseling, and ancillary services, clients were also tested for infections such as HIV, STI TB screening, hepatitis B and C. Services were specifically targeted towards adolescents, young adults, adult women and men, pregnant or postpartum women, seniors or older adults, LGBTQ clients, veterans, among others, (See the appendix for a detailed Substance Abuse and Mental health Report).

Mental Health Services

Forty-two thousand and ninety-seven (42,097) clients received mental health treatment services across 86 facilities in SC by the end of March 2023, according to N-SUMHSS data. A majority of the treatment services were offered in a community mental health center (79%), while the remaining clients received services in psychiatric hospitals, outpatient mental health facilities, the Veteran Affairs Medical Center (VAMC). Services range from individual psychotherapy sessions to group activities oftentimes involving couples and families with supportive services ranging from case management and assisted outpatient treatment to chronic disease/illness management, HIV, STI, TB testing, and supportive employment and vocational rehabilitation services. The dedicated or exclusively designed programs or groups targeted for these services include children/adolescents with serious emotional disturbance (SED), young adults, people 18 years and older with serious mental illness (SMI), older adults, LGBTQ groups, persons with HIV or AIDS, and other groups. These groups are further disaggregated into various age groups: young children (0-5), children (6-12), adolescents (13-17), young adults (18-25), adults (26-64), and older adults (65 and older).

Gaps in HIV Prevention

Gaps exist in HIV testing and prevention despite the efforts the state has made to deliver HIV treatment, care, and prevention services to those who need them:

- Approximately 16% of people living with HIV do not know their HIV status and are, therefore, not taking advantage of available HIV treatment and care services. Stigma, discrimination, lack of education about HIV, fear of deportation, mistrust in the health care system, lack of insurance, healthcare deserts are some of the reasons why people are not getting tested to know their HIV status and commence treatment.
- There's disparity in PrEP coverage as certain populations such as Blacks/African Americans, women, transgender population, and young adults are left behind in PrEP coverage. Also, shortage of PrEP prescribers, PrEP deserts, lack of health insurance, and myths about PrEP are some of the drivers of low coverage.
- Gaps in rapid linkage to and/or retention in HIV care and viral suppression rates still exist despite available funding, manpower, and data support to identify and reengage people back to care.
- Delays in data entry and reporting, lack of provider buy-ins, rising rates of STIs, substance use disorders, and viral hepatitis (HIV syndemics) are drivers of HIV transmission and poor health outcomes in the state.

Other Behavioral/Risk Factors Contributing to HIV/AIDS and STIs

Behavioral Risk Factor Surveillance System (BRFSS)

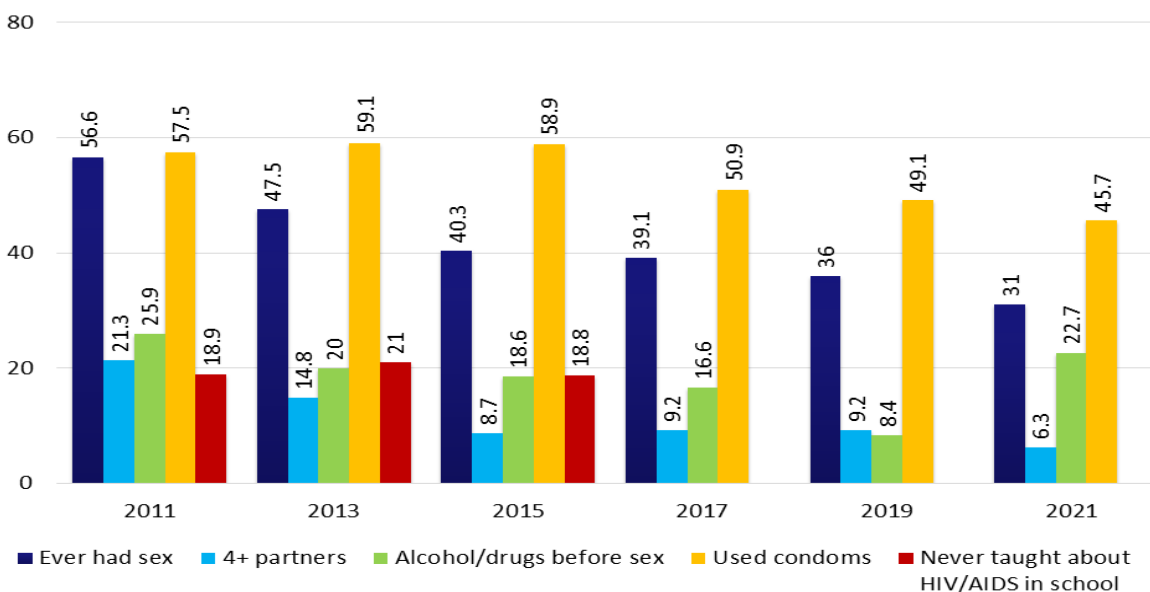
The Behavior Risk Factor Surveillance System is the world's largest random telephone survey of non-institutionalized population age 18 or older that is used to track health risks in the U.S. Several core questions address knowledge, attitudes, beliefs, and behaviors regarding STIs, particularly AIDS.

The HIV/AIDS questions for the 2022 BRFSS survey focused on respondents HIV/AIDS testing history. Results show that when asked about ever being tested for HIV themselves, 36.1% of respondents indicated ever being tested. African Americans were more likely (50%) to have been tested than Caucasians (30.8%). Men are only slightly less likely to have been tested than women (35.6% versus 36.5%).

Youth Risk Behavior Surveillance Survey (YRBSS)

The YRBSS has been conducted in SC high schools every other year since 1991 and in middle schools since 2005. Figure 6.12 shows the proportion of high school students who have been sexually active, report having had four or more lifetime partners, and report using a condom at last sexual intercourse (had intercourse in past three months). Number of partners and condom use are important because of the increased risk of exposure to HIV.

Figure 4.2.1: Proportion of High School Students Indicating Sexual Risks, 2011-2021



People with Substance Use Disorder

Drug use is known to be a major factor in the spread of HIV infection. The CDC specifically includes IDU as a transmission category for the classification of cases that summarizes a person's possible HIV risk factor. IDU is considered high risk because shared equipment (primarily used needles, but also other equipment) can retain HIV, which is drawn up into a syringe and then injected along with the drug by the next user of the syringe. Sharing equipment for using drugs can also be a means for transmitting hepatitis B, hepatitis C and other serious diseases.

Additionally, non-injecting drug use, including methamphetamine or alcohol, is linked with unsafe sexual activity, which increases the risk of acquiring HIV or other STIs. Often, people who use substances have multiple sexual partners and do not protect themselves during sexual activity which may increase the risk of acquiring STIs including HIV.

According to the Office of Substance Use Services (OSUS)** with the SC Department of Behavioral Health and Developmental Disabilities, 4% of discharged episodes in federal fiscal year 2022 reported active or historical injection use. Additionally, 63% of the discharged episodes reported using an illicit drug other than marijuana (25% opiates, 18% cocaine and 20% amphetamines).

SC reported a 1.99% decrease in alcohol hospitalizations in 2022 when compared to the previous year as well as a 37% decrease in DUI-related crashes during the same reporting period. There was, however, a slight increase in reported binge drinking of 2% while the percentage of heavy drinking in the state remained the same between 2021 and 2022, according to OSUS** reports for 2022.

Opioid use and opioid-related EMS naloxone administration was up by 28% and opioid overdose deaths also increased by 25%. The percentage of opioid-related hospitalizations and opioid prescriptions dispensed in the state reduced by 2% and 13%, respectively.

While binge drinking and opioid use and opioid overdose deaths increased between 2021 and 2022, there was however no direct bearing on social indicators across the state: Child mistreatment investigations were down by 10%, children in poverty decreased by 3%, drug law violations were down by 2%, DUI arrests decreased by 6%, and unemployment also decreased by 16%.

The OSUS** report for 2022 ranks counties based on their rates or percentages of

reported substance use disorders, and a county rank of “1” represents the highest risk for an indicator. Horry County, for example, ranked 15th in alcohol hospitalizations, 14th in binge drinking, 7th in DUI crashes, and 7th in heavy drinking in the reporting year 2022. However, when compared with other counties for other drugs, Horry County ranked 1st for fentanyl overdoses, 1st for total drug overdoses, 1st for prescription drug overdoses, 2nd for psychostimulants with abuse potential overdoses, and 2nd in cocaine overdoses.

Note:

Data derived from the Department of Public Health Vital Statistics show a 6.1% decrease in drug overdose deaths in SC, from 2,296 deaths in 2022 down to 2,157 in 2023, accounting for a rate of drug overdose death of 41.0 per 100,000 population. This was the first time since 2014 that SC had seen a decrease in the number of reported drug overdose cases in the state. Majority (95.6%) of the drug overdose cases were described as “unintentional intent” while the remainder were suicide related.

While overdose deaths involving prescription drugs, opioids, psychostimulants with abuse potential, fentanyl, heroin, and methadone decreased in 2023 when compared to 2022 data, drug overdose deaths involving cocaine, on the other hand, increased 5.2%.

Fifteen out of the 46 Counties of SC saw a decrease in overdose deaths between 2022 and 2023, while High School graduates and people aged 35-44 reported the highest number of deaths.

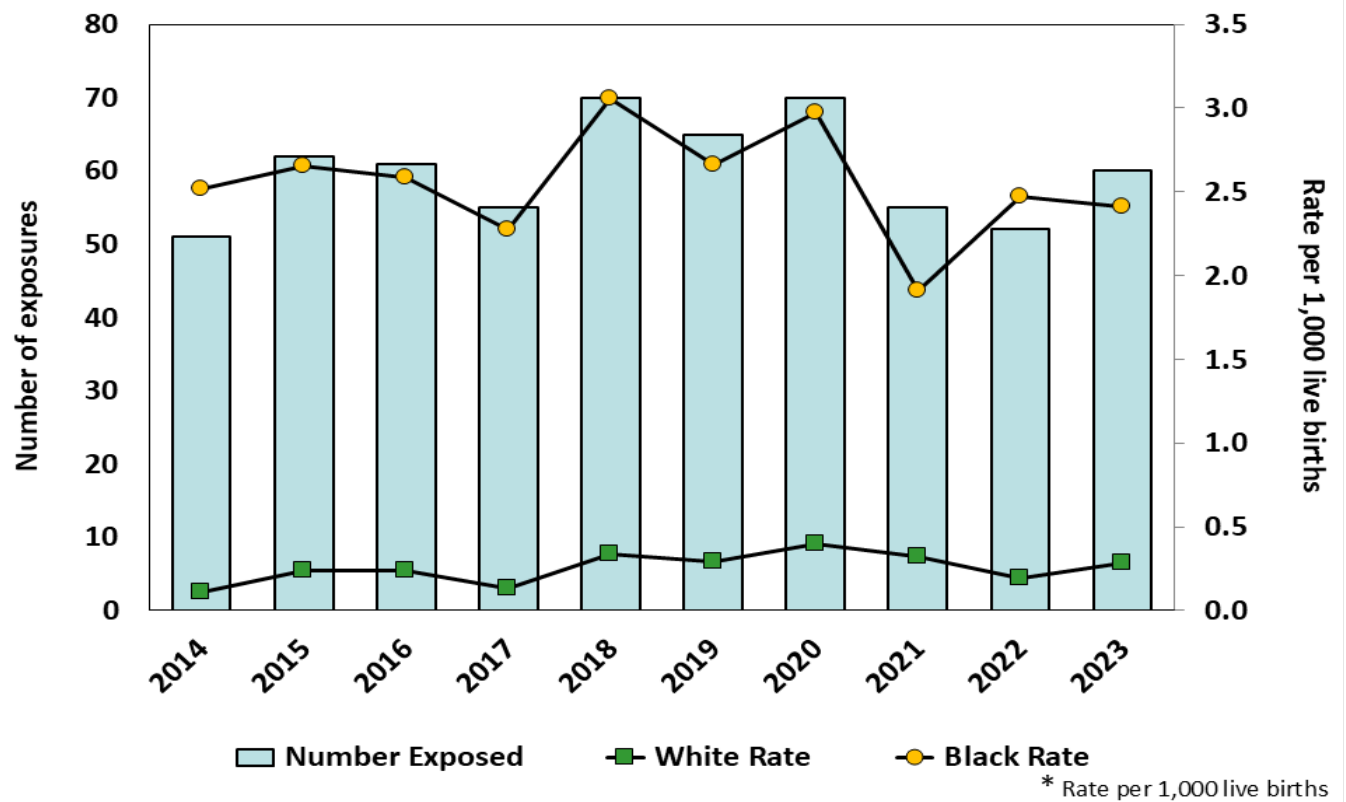
**Formerly known as Department of Alcohol and Other Drug Abuse Services (DAODAS)

Special Populations

Perinatally HIV exposed births

The number of perinatally HIV exposed births averages around 57 per year, while perinatally acquired HIV cases average one per year. This translates into 1.9% of perinatally HIV exposed births testing positive for HIV. Figure 4.2.2 shows the number of perinatally HIV exposed births (values on left) and the rate by race of mother (values on right). In 2022, the exposure rate for African American women is 10 times higher compared to White women.

Figure 4.2.2: Perinatally HIV Exposed Births by Year of Birth and Rate* by Race and Year of Birth



Appendix

Reference:

1. Centers for Disease Control and Prevention and Health Resources and Services Administration. *Integrated Guidance for Developing Epidemiologic Profiles: HIV Prevention and Ryan White HIV/AIDS Program Planning*. Atlanta, Georgia: Centers for Disease Control and Prevention; 2022.
Retrieved from <http://www.cdc.gov/hiv/guidelines/> and at <http://hab.hrsa.gov/>.
2. Gant, Z., Dailey, A., Hu, X. *et al.* A Census Tract–Level Examination of Diagnosed HIV Infection and Social Vulnerability among Black/African American, Hispanic/Latino, and White Adults, 2018: United States. *J. Racial and Ethnic Health Disparities* **10**, 2792–2801 (2023).
<https://doi.org/10.1007/s40615-022-01456-7>
https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html
3. Massachusetts Department of Public Health, Bureau of Infectious Disease and Laboratory Sciences. Massachusetts HIV Epidemiologic Profile, Statewide Report – Data as of 1/1/2024 <https://www.mass.gov/lists/hivaids-epidemiologic-profiles> Published June 2024. Accessed 04/02/2025.
4. [Social Vulnerability Index | Place and Health - Geospatial Research, Analysis, and Services Program \(GRASP\) | ATSDR](#)
5. South Carolina Department of Public Health. (2025). Drug Overdose Deaths South Carolina 2023. Prepared as of 3/27/2025. Retrieved from [Drug-Overdose-Report-2023.pdf](#)
6. Substance Abuse and Mental Health Services Administration. (2024). National Substance Use and Mental Health Services Survey (N-SUMHSS) State Profiles 2023. Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration Retrieved from <https://www.samhsa.gov/data/>
7. U.S. Census Bureau, Understanding and Using American Community Survey Data: *What All Data Users Need to Know*, U.S. Government Publishing Office, Washington, D.C, 2020.