

**South Carolina Epidemiologic Profile of  
HIV, AIDS, and Sexually Transmitted  
Infections  
2022**



Division of Surveillance, Assessment, and Evaluation  
Bureau of Disease Control  
South Carolina Department of Health and  
Environmental Control

# Epidemiologic Profile

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## Definitions

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

**HIV** – Human Immunodeficiency Virus, the cause of HIV infection.

**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. The CDC population was used from 2020, as the 2021 population data was unavailable.

## Executive Summary

This 2022 South Carolina Epidemiologic Profile highlights current Human Immunodeficiency Virus (HIV) and Sexually Transmitted Infection and STI data in the state showing geographic distinction, risk behaviors and how the ongoing epidemics of HIV and STIs affect different population groups. The information provided is intended to assist decision makers and stakeholders throughout the state to plan and develop a comprehensive, statewide HIV Prevention and Care Plan. The goal of the plan is a responsive, effective and efficient continuum of services for persons living with HIV/AIDS and those at risk for HIV infection, and prevention and control of STIs.

Health care providers and laboratories are required by law to report certain sexually transmitted infections (e.g. HIV, syphilis, chlamydia, gonorrhea and chancroid) to DHEC. The data sets are used to illustrate the South Carolina populations diagnosed with HIV/AIDS and STIs to characterize the nature of risk-taking behaviors. The data presented is compiled from multiple sources because no one epidemiologic data set will provide a complete picture of HIV/AIDS and STIs in a community or the state.

There are differences among certain populations in the number and rate of new and prevalent infections, as this profile will indicate. The HIV epidemic in South Carolina is predominantly driven by sexual exposure, primarily among men who have sex with men and heterosexuals at risk. Additionally, African Americans are disproportionately affected by HIV/AIDS, gonorrhea, chlamydia, and syphilis and are over-represented among all risk populations.

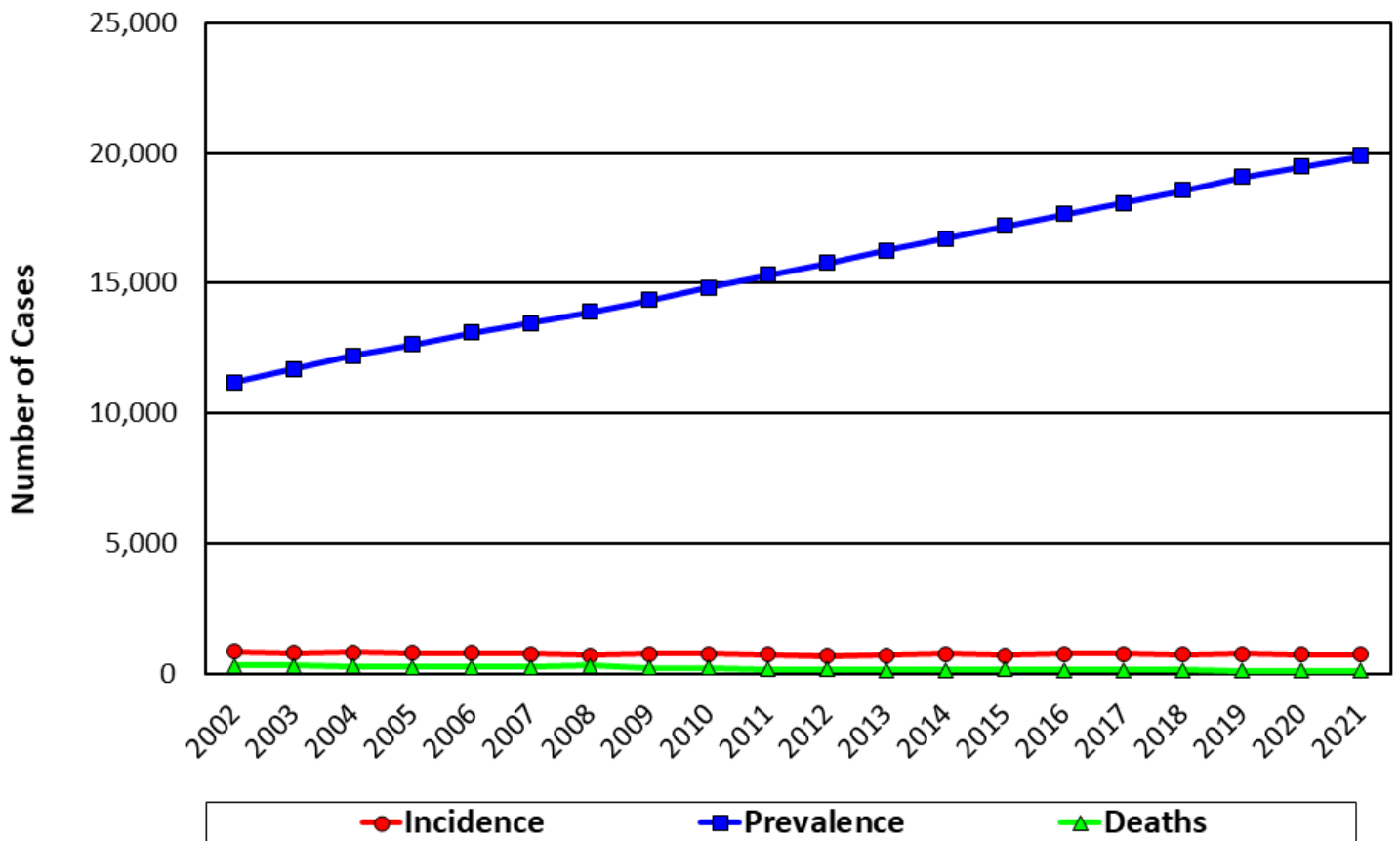
Information in this profile highlights the sociodemographic characteristics of South Carolinians pointing out the high levels of poverty and uninsured population as well as low education attainment. A more in-depth look into the patterns of service of utilization for persons living with HIV (PLWH) includes Ryan White Part B Services, the AIDS Drug Assistance Program (ADAP), and the HIV Continuum of Care. Of PLWH utilizing RW Part B services, medical case management services were the most widely used.

This profile also points the way to Ending the Epidemics in SC and provides information to the S.C. HIV Planning Council (HPC) on the number and characteristics of people becoming HIV infected. The HPC has a primary responsibility to review the Epidemiologic Profile and ensure that HIV prevention services and resources are directed by DHEC to the populations and geographic areas most affected by the disease. Ending the Epidemics in SC will be accomplished by providers and communities working together to reduce the number of South Carolinians with new HIV infections and increase the number of PLWH in SC who are consistently engaged in treatment and who have a suppressed viral load, which means the level of the virus in the blood has been reduced.

## Overview of HIV/AIDS in South Carolina

Figure 1.01: Total Incidence<sup>1</sup>, deaths, and Prevalence<sup>2</sup> of HIV/AIDS cases in South Carolina since 2002.

### Figure 1.01: 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.

<sup>1</sup>Incidence: The number of new HIV/AIDS cases newly diagnosed and reported each year.

<sup>2</sup>Prevalence: The number or proportion of people estimated to be living with Diagnosed and Reported HIV/AIDS at the end of a particular period (e.g. year).

The epidemic in South Carolina 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 US 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.

## Overview of Epidemiologic Profile

The Epidemiologic Profile provides information to the S.C. HIV Planning Council (HPC) on the number and characteristics of people becoming HIV infected. The HPC has a primary responsibility to review the Epidemiologic Profile and ensure that HIV prevention services and resources are directed by DHEC to the populations and geographic areas with the greatest disease burden.

This Epidemiologic Profile includes a list of definitions and describes the data sources used, the limitations of each data type, and presents data to answer the following questions:

**What are the socio-demographic characteristics of the population?**

**What is the impact of HIV/AIDS on the population?**

**Who is at risk for becoming infected with HIV?**

**What is the geographic distribution of HIV infection?**

**What are the patterns of service utilization of people living with HIV/AIDS?**

**What are the characteristics of people who know they are HIV-positive but who are not in HIV primary care?**

These questions are explored through analyses of data related to people currently living with HIV/AIDS (prevalence) and newly diagnosed (incidence) HIV/AIDS; data from HIV counseling and testing sites and other studies; a summary of other risk behavior profiles and community-based HIV risk assessment information; and a discussion of related sociodemographic, health and risk behavior indicators.

## 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 South Carolina 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. Individuals' reports are limited both 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 (sexually transmitted infection) 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 South Carolina.

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

### **DHEC's Enhanced HIV/AIDS Reporting Surveillance System (eHARS)**

All health care providers, hospitals, and laboratories in South Carolina 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. DHEC'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, to note new cases reported may be among persons who acquired HIV prior to the reporting year, but which were not diagnosed until that year. In addition, because not all persons 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 is 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). This 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 above in HIV Counseling and Testing. There are some slight differences in the type of categories between HIV/AIDS surveillance reports and HIV Counseling and Testing reports. In South Carolina, about 34% of adult/adolescent HIV infection/AIDS cases reported in 2016 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."

### **DHEC's South Carolina Infectious Disease and Outbreak Reporting Network (SCION)**

Health care providers and laboratories are required by law to report certain sexually transmitted diseases (including syphilis, chlamydia, gonorrhea, chancroid, hepatitis) to DHEC. In 2019, South Carolina adopted a new data system, SCION, and some deviation from previous years could exist as the state adapts to the new system and adjusts their 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 accessing 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 utilized 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.

## **DHEC 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 individuals. The type of data collected in South Carolina 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 several years. Data in the "South Carolina Epidemiologic Profile of HIV, AIDs, Sexually Transmitted Infections", hereafter referred to as the Epi Profile, reflect the number of individual clients tested during a specific period of time. 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 voluntarily requesting services or referred through partner counseling services. Approximately one-third of the total of newly diagnosed and reported people with HIV infection each year is from DHEC counseling and testing sites. People tested in other settings, such as physician offices, hospitals, state facilities, etc. are not included in the DHEC 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), persons who inject drugs (PWID), or heterosexual contact with a person at risk for or infected with HIV. Since most clients acknowledge multiple risks, risk status is determined by using the CDC's hierarchy of risk. This process assigns the client's highest risk. The highest possible risk in the hierarchy is sex with a person with HIV/AIDS, while the least significant risk is "no acknowledged risk." A person is only represented in their highest risk category regardless of how many risks the client acknowledges.

The CDC's hierarchy of risk includes a category for the combined risks of MSM and PWID; in previous HIV/AIDS Epidemiologic Profiles, the combined risks of MSM and PWID have been grouped and reported within the single category of "persons who inject drugs." This report leaves the combined risks of MSM and PWID 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 South Carolina and nationally is distinct from blinded, HIV data surveys that generate an estimate of HIV data that is unbiased by client self-selection. The DHEC counseling and testing system only includes clients who seek outcounseling 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 actually receive HIV testing, (for example, maternity and STI clinics), data for those sites approximates the reliability of the blinded surveys.

## **Ryan White HIV/AIDS Program Services Report**

The annual Ryan White HIV/AIDS Program Services Report (RSR) captures information regarding the services provided by all Ryan White 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 Ryan White Parts A, B, C or D funding, regardless of the actual funding source used to pay for those services. The South Carolina Ryan White Part B contractors complete the RSR and submit the data directly to Health Resources and Services Administration (HRSA).

## **South Carolina 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 individuals aged 12 and older. The Substance Abuse and Mental Health Services Administration (SAMHSA), which funds NSDUH, is an agency of the U.S. Public Health Service in the U.S. Department of Health and Human Services (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 United States. 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; and
- identify those groups at high risk for substance use and abuse.

A scientific random sample of households is selected across the United States, 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 United States 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. Individuals 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 completed the interview in a professional manner.

### **Behavioral Risk Factor Surveillance System (BRFSS)**

Behavior Risk Factor Surveillance System is the world's largest random telephone survey of those in the non-institutionalized population aged 18 or older and it is used to track health risks in the United States. In 1981, the Centers for Disease Control and Prevention (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 sexually transmitted diseases, particularly AIDS.

### **Youth Risk Behavior Surveillance System (YRBSS)**

The Youth Risk Behavior Surveillance System (YRBSS) was developed cooperatively by the Centers for Disease Control and Prevention (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 South Carolina, the YRBS consists of questionnaires administered to middle school (sixth-eighth grade) and high school (ninth-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 that complete useable surveys. If this overall response rate is 60% or greater, the resulting data are weighted to be representative of the entire state.

There are 367 private K-12 schools in South Carolina. However, none of them 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 United States.

This survey is conducted by S.C. 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 (grades six through eight) or public high school students (grades nine through 12) in South Carolina.

## Sociodemographic Characteristics of the Population

The HIV epidemic in the United States, and in South Carolina, 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 an infected person.

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 South Carolina’s populations, which is essential for assessing potential HIV and STI impact. Gender refers to an individual’s assigned sex at birth.

### The State

South Carolina lies on the southeastern seaboard of the United States. 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 South Carolinians is 5,218,040 (2020 estimate, 2021 population data not available at the time this epi profile was created).

### Demographics

**Gender:** Of the 5,218,040 people living in South Carolina, 2,694,628 (52%) are female and 2,523,412 (48%) are male (Figure 1.02). There are only slight differences within each gender by age group. Males age 19 and under comprised 24% of the male population and those age 60 and over comprised 25%. Females age 19 and under comprised 23% of the female population and those age 60 and over comprised 27%. As a percentage of the total population, females age 60 and over were 14% and males age 60 and over were 11%.

Figure 1.02: Selected Demographics  
South Carolina

		South Carolina
Population		5,218,040
Median Age		39.9
Gender		
	Male	48%
	Female	52%
Distribution of Population by age		
	<19	24%
	20-29	13%
	30-39	13%
	40-49	12%
	50-59	13%
	60+	25%

Sources: U.S. Census Bureau and SC Vital Statistics 2021

**Age:** Persons age 19 and under made up 24% of South Carolina’s total population while people age 60 and over made up 25%. The age groups 20-29, 30-39, 40-49, and 50-59 comprised 13%, 13%, 12%, and 13% of the population, respectively. (Figure 1.02).

**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 with these six categories. However, in S.C. the combined categories of American Indian/Alaskan native, Asian, Native Hawaiian/Other Pacific Islander, and multiple races comprise less than 2% of the total population so are grouped into a category of "Other." Caucasians comprise the largest proportion of South Carolina's population, 64%; Black/African Americans comprise 27%; Hispanic origin comprise 6%; and Other comprise 3%.

### **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 percent of people over 25 years of age who have bachelor's degrees or higher. In South Carolina, 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, South Carolina remains among states with the highest percentage of people who live below the poverty level.

### **Employment**

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

### **Access to Care**

In South Carolina, it is estimated that 11 % 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: <..\Documents\nhsr176.pdf>

### **Housing**

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

**Summary**

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

## Impact of HIV/AIDS on the Population

In the United States, 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.

DHEC 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 preexposure prophylaxis (PrEP).

The epidemiologic 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.

In South Carolina, AIDS cases have been reported since 1981, and confirmed cases of HIV infection have been reportable since February 1986. During the calendar year of 2017, according to the CDC HIV/AIDS Surveillance Report, South Carolina ranked 11th among states, the District of Columbia, and U.S. dependent areas with an AIDS case rate of 8.6 per 100,000 population. The epidemic is continuing to grow with an average of 61 cases of HIV infection reported each month during 2021. The incidence rate in South Carolina for 2021 is 13.97 per 100,000 population. As of Dec. 31, 2021, there are an estimated 19,872 South Carolina residents living with diagnosed HIV infection (including AIDS).

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

### Gender

Figure 2.01 shows the impact of HIV on the men and women in South Carolina. Men are disproportionately affected by HIV/AIDS. Men make up 48% of South Carolina's total population but comprise 73% of PLWHA (prevalence). Individuals diagnosed with HIV/AIDS during the two-year period 2020-2021 gives an estimate of more recent infections or potentially emerging populations.

**Figure 2.01: S.C. Disproportionate HIV Impact by Gender**

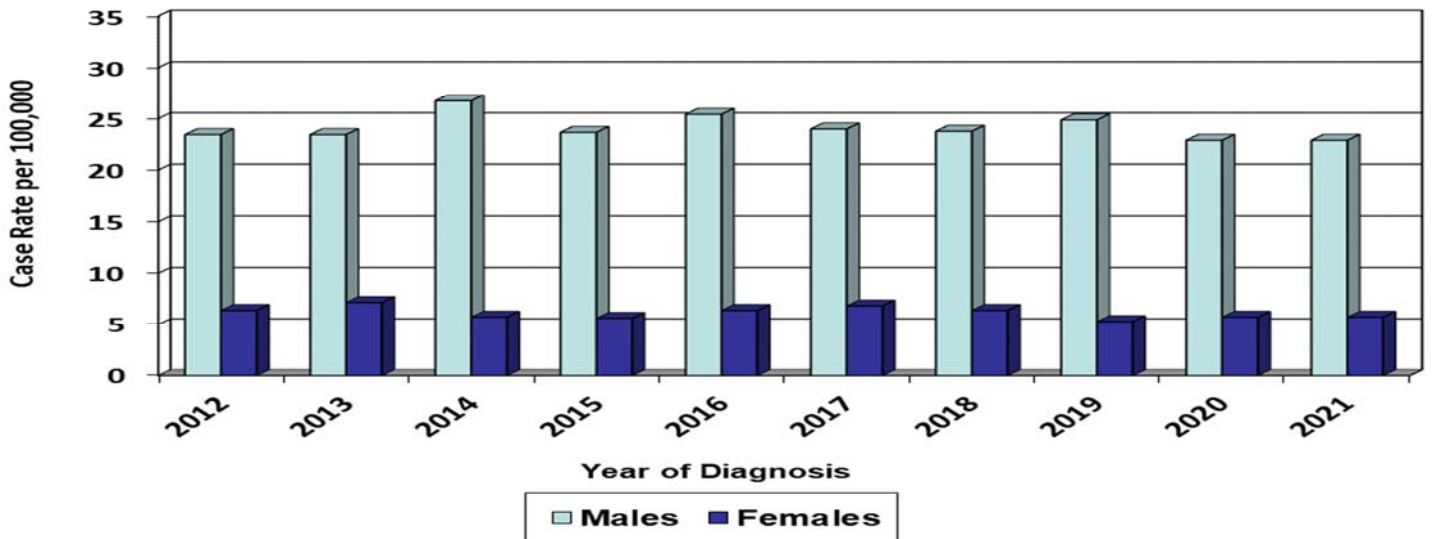
SEX	S.C. Total Population, 2021 est.		Total Estimated Living With HIV/AIDS, 2021		Total HIV/AIDS Diagnosis, 2020-2021	
	No.	%	No.	%	No.	%
Male	2,523,412	48%	14,414	73%	1,153	79%
Female	2,694,628	52%	5,458	27%	308	21%
Total	5,218,040		19,872		1,461	

Figure 2.02 shows the rate per 100,000 population for males and females diagnosed with HIV/AIDS from 2012 to 2021, as well as how the case rate fluctuates from year to year for both 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 10% from 2012 (6.38) to 2021 (5.72), 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 decreasing just 2% from 2012 (23.43) to 2021 (22.88). 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.

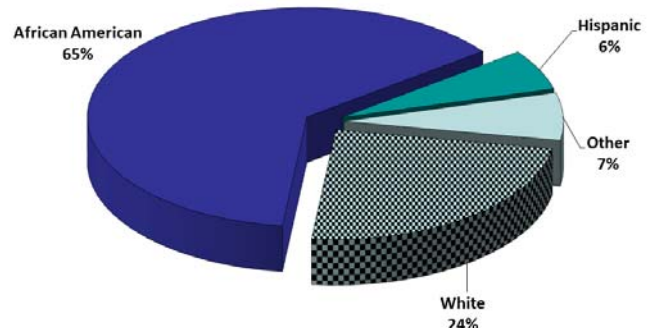
**Figure 2.02: S.C. HIV/AIDS Case Rate per 100,000 Males and Females, 2012-2021**



## Race/Ethnicity

African Americans are disproportionately impacted by HIV/AIDS in South Carolina. African Americans comprise 27% of the state's total population, yet 65% of the total people living with HIV are African American. Six percent of total cases are Hispanics, who comprise 6% of the state's population (Figure 2.03).

**Figure 2.03: Proportion of Persons Living with HIV/AIDS by Race/Ethnicity, 2021**



African American men, who comprise only 13% of the state's population, make up the largest proportion of both PLWHA in 2021 and new diagnosis in 2020-2021 (44% and 45%, respectively). African American women, who similarly comprise only 14% of the population, make up 13% of PLWHA in 2021 and 19% of new diagnosis in 2020-2021. Whites, who comprise the largest proportion of the population in South Carolina (31% males; 33% females), make up 25% of PLWHA in 2020-2021 (20% males; 5% females) and 25% of new diagnosis in 2020-2021 (20% males; 5% females), (Figure 2.04).

**Figure 2.04: Disproportionate HIV Impact by Race/Ethnicity/Gender, S.C.**

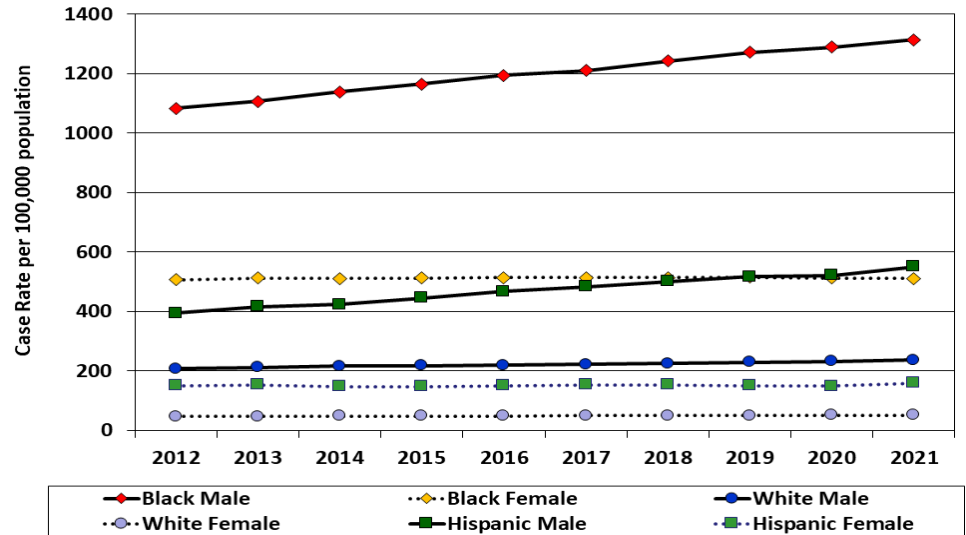
Race/Ethnicity & Gender	SC Total Population		Total Persons Living With HIV/AIDS, 2021		Total HIV/AIDS Diagnosis, 2020-2021	
	No.	%	No.	%	No.	%
<b>Black Males</b>	<b>655,720</b>	<b>13%</b>	<b>8,616</b>	<b>44%</b>	<b>642</b>	<b>45%</b>
<b>Black Females</b>	<b>752,244</b>	<b>14%</b>	<b>3,850</b>	<b>19%</b>	<b>177</b>	<b>13%</b>
<b>White Males</b>	<b>1,638,616</b>	<b>31%</b>	<b>3,881</b>	<b>20%</b>	<b>287</b>	<b>20%</b>
<b>White Females</b>	<b>1,723,318</b>	<b>33%</b>	<b>895</b>	<b>5%</b>	<b>70</b>	<b>5%</b>
<b>Hispanic Males</b>	<b>167,955</b>	<b>3%</b>	<b>925</b>	<b>5%</b>	<b>101</b>	<b>7%</b>
<b>Hispanic Females</b>	<b>152,106</b>	<b>3%</b>	<b>242</b>	<b>1%</b>	<b>27</b>	<b>2%</b>



**Figure 2.05: S.C. HIV/AIDS Prevalence Rates by Race/Gender, 2012-2021**

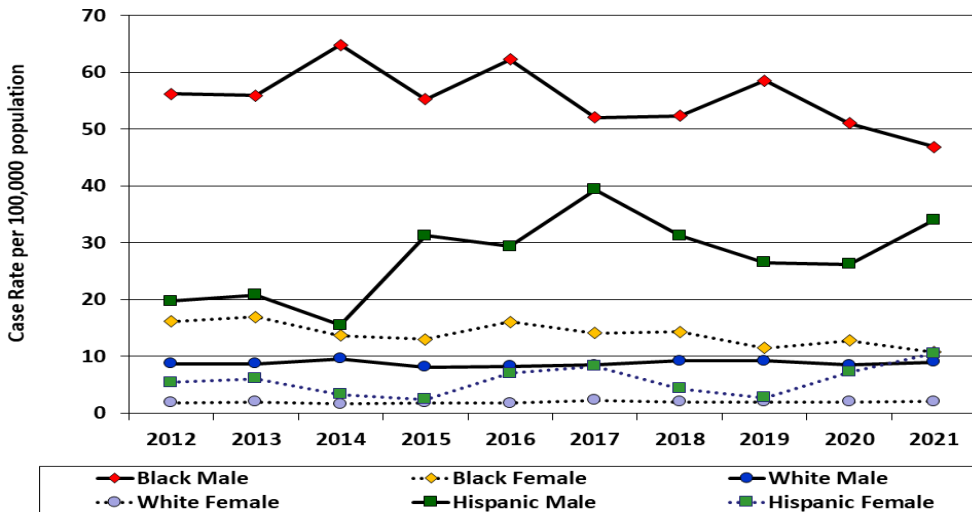
Each year the number of people living with HIV/AIDS continues to grow. Case rates per 100,000 by race and gender show the disparate burden of HIV among African Americans.

As Figure 2.05 shows, the rate per 100,000 population in 2021 is five times higher for black males than for white males, and 11 times higher for black females compared to white females.



In South Carolina, the trend in the number and rate of people newly diagnosed with HIV/AIDS each year has been declining, with a 5% decrease in the rate per 100,000 population between 2012 (14.6) and 2021 (14.0).

**Figure 2.06: S.C. HIV/AIDS Incidence Rates by Race/Gender, 2012-2021**



However, during this 10-year time 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 2.06).

While women in general have seen a decline in the rate of newly diagnosed HIV/AIDS, African American women specifically have seen a 33% decrease between 2012 (16.2) and 2021(10.8) and on average, had a 3% per year decrease in the rate for new cases. While white women have seen an increase over the same time period: 2% increase from 2012 (1.9) to 2021 (2.1), white women averaged a 4.1% per year increase in the rate for new cases. Men have not seen the same decline in the rate of newly diagnosed HIV/AIDS as women. African American men had a 17% decrease in the rate between 2012 (56.2) and 2021 (46.9) and have averaged 1.3% per year decrease in the rate for new cases. The rate for

white men increased 4% over the same time period (8.7 to 9.0) and have also averaged less than 1% (0.7) per year increase 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.

With incidence, 68% of new cases diagnosed in 2020-2021 are under the age of 40, and with 2021 prevalence, 69% are over the age of 40. For incidence, people age 20-29 comprise the largest proportion, 46% of newly diagnosed cases (20-24 17% and 25-29 19%), and people 30-39 comprise 27%. People under the age of 20 comprise just over 6% of new diagnoses.

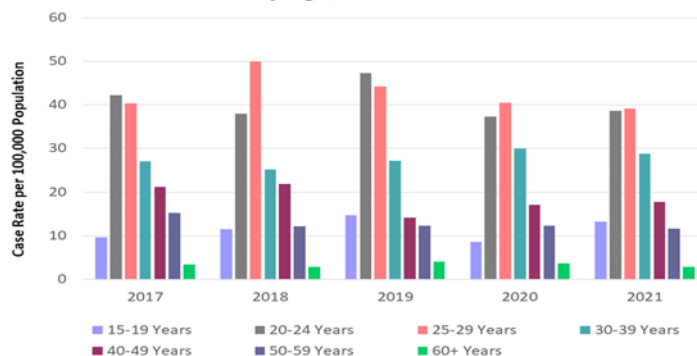
For prevalence, 19% are age 40-49, 28% are age 50-59, and 22% are age 60+. (Figure 2.07).

**Figure 2.07: Disproportionate S.C. HIV Impact by Age**

Age Range	SC Population		Total Persons Living with HIV/AIDS, 2021		Total HIV/ AIDS Diagnosis, 2020-2021	
	No.	%	No.	%	No.	%
<15 Years	927,435	18%	101	0.5%	6	0.4%
15-19 Years	325,272	6%	82	0.4%	71	5%
20-24 Years	333,970	6%	557	3%	253	17%
25-29 Years	347,980	7%	1,356	7%	277	19%
30-39 Years	664,743	13%	3,939	20%	390	27%
40-49 Years	621,024	12%	3,721	19%	216	15%
50-59 Years	675,468	13%	5,571	28%	162	11%
60+ Years	1,322,148	25%	4,545	22%	86	6%

Figure 2.08 shows the HIV/AIDS incidence rates by age groups. From 2017 to 2021, the average change in rate for 15-19 age group increased by 12% and for the 20-24 age group rate decreased by 3%, while 30-39 age group increased. The 25-29 age group decreased by 2.5%, the 30-39 age group increased by two, while the 40-49 age group increased by 4.7% and the 50-59 age group decreased by 6%. The 60+ age group saw a 5.5% decrease.

**Figure 2.08: S.C. HIV/AIDS Incidence Case Rate by Age, 2017-2021**



## Risk Exposure

Of the cases with an identified risk factor, men who have sex with men was the highest reported risk factor in 2021 for PLWHA (58%). Heterosexual contact accounted for 28% of reported risk factors. Eight percent reported a risk of PWID. Four percent reported a risk of MSM & PWID. Two percent reported a risk of Other.

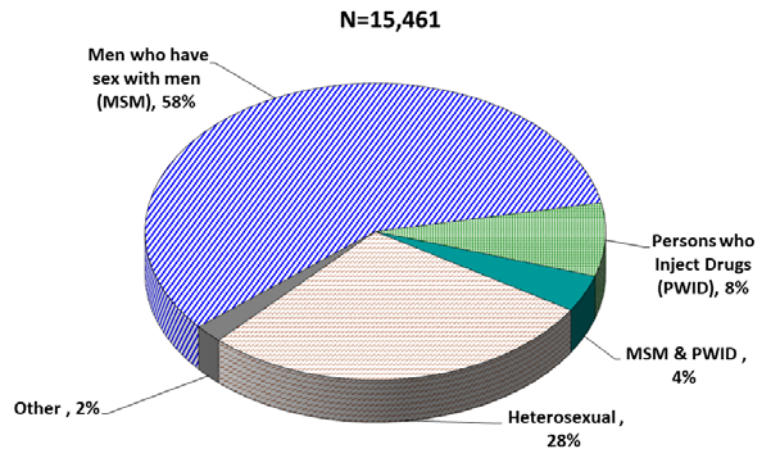
Four percent reported the combined risks of MSM and PWID (Figure 2.09). The risk category 'Other' includes blood transfusion, hemophilia, and perinatal transmission; all of which account for a very small proportion of PLWHA (2%). Of the total estimated

number of PLWHA in 2021 (22% had no risk identified).

Figure 2.10 shows reported risk for people newly diagnosed with HIV/AIDS during 2020-2021. The proportion of new cases with a reported risk of MSM was 83% and with a reported

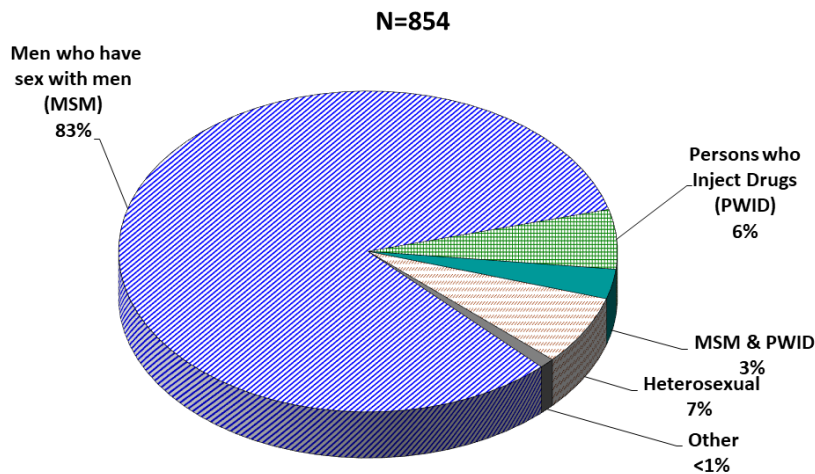
risk of heterosexual contact was 7%; PWIDs made up 6% and the combined risk of MSM and PWID 3%. Forty-two percent of new cases have no risk identified. Over time, the proportion of cases with no risk identified each year decreases as risks are determined through follow-up surveillance activities.

**Figure 2.09: Proportion of Persons Living with HIV/AIDS by Risk Exposure, 2021**



Note: Total excludes cases with no risk identified.

**Figure 2.10: Proportion of HIV/AIDS Cases Diagnosed 2020-2021 by Risk Exposure**



Note: Total excludes cases with no risk identified.

**Figure 2.11: New S.C. HIV/AIDS Cases (2020-2021)  
Race/Ethnicity and Gender: Proportion of No Risk Identified  
Compared to Proportion of Reported Cases**

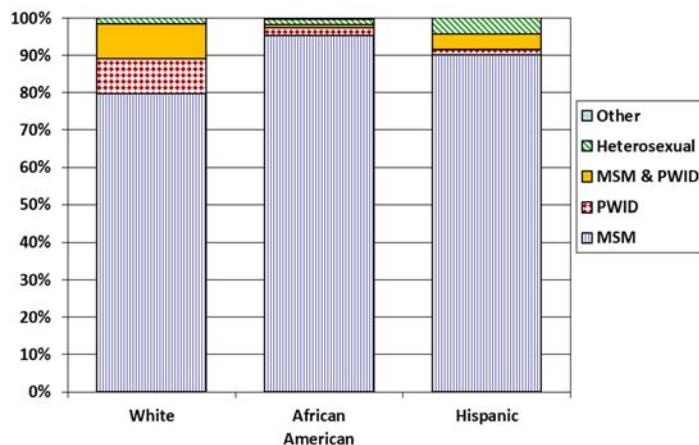
Race/Gender (Adult/Adolescent Cases)	New HIV/AIDS Cases 2020-2021	
	% with No Risk Identified (N=514)	% Cases Reported (N=1,304)
Black Male	36%	49%
Black Female	29%	14%
White Male	16%	22%
White Female	8%	5%
Hispanic Male	6%	8%
Hispanic Female	4%	2%

The race/gender profile of newly diagnosed cases in 2020-2021 with no risk reported is reflective of the total proportion of HIV/AIDS cases by race/gender (Figure 2.11).

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

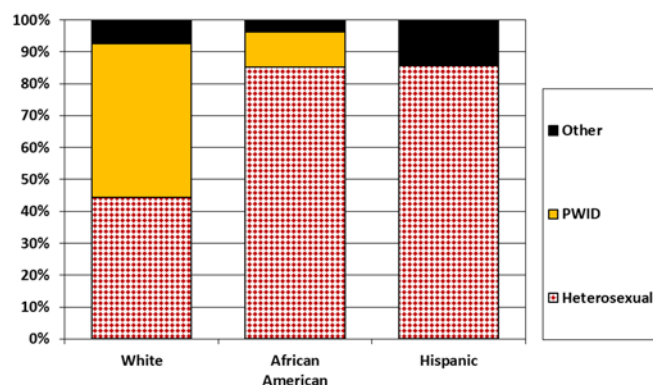
Of reported risks for newly diagnosed cases in 2020-2021: among African American men, most cases were attributed to MSM contact (95%), heterosexual risk (7%), and PWID (9%). For white men, most cases were attributed to MSM contact (80%), PWID (9%), the combined risk of MSM and PWID (9%), and heterosexual risk (1%). Of Hispanic men with reported risk factors, most cases were attributed to MSM contact (90%), heterosexual risk (4%), both PWID and the combined risk of MSM and PWID (4%) (Figure 2.12). Thirty-two percent of men diagnosed in 2020-2020 had no indicated risk. Among women diagnosed during 2020-2021 heterosexual contact is the most often reported risk (67%). Eighty-five percent of African American women reported heterosexual

**Figure 2.12: Proportion of Male HIV/AIDS Cases by Exposure Category, Diagnosed 2020-2021**



Excludes persons with no risk reported.

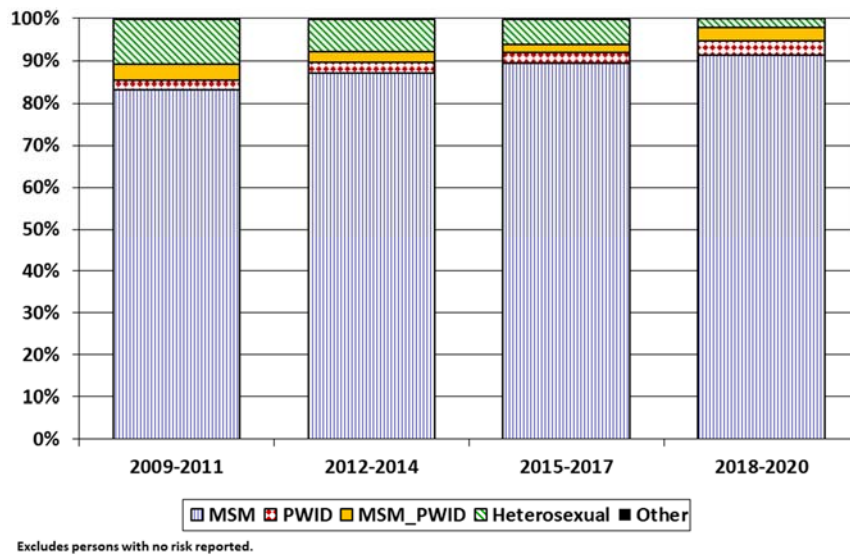
**Figure 2.13: Proportion of Female HIV/AIDS Cases by Exposure Category, Diagnosed 2020-2021**



Excludes persons with no risk reported.

contact as their risk, while 86% of Hispanic women and 44% of white women reported a risk of heterosexual contact. White women report Injecting Drug Use more often (48%) than Hispanic women (0%), and African American women (11%), (Figure 2.13). Seventy-seven percent of women diagnosed in 2020-2021 had no indicated risk.

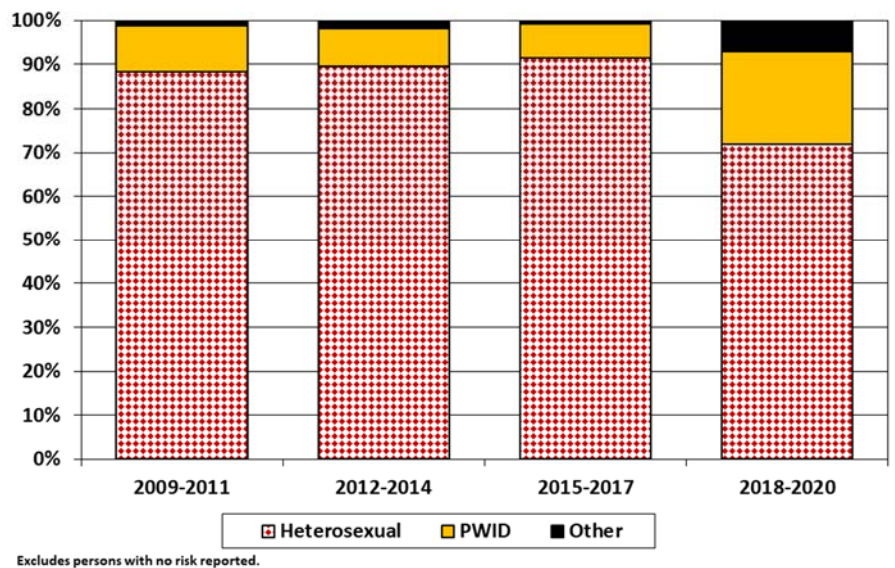
**Figure 2.14: Proportional Distribution of Male HIV/AIDS Cases by Exposure Category, Diagnosed 2009-2020**



Figures 2.14 and 2.15 show the proportion of total HIV/AIDS cases diagnosed during four periods from 2009 to 2020 by gender and risk exposure category for males and females in South Carolina. Heterosexual Contact has decreased 81% from 2009/2011 to 2018/2020 as a reported risk for men, while the reported risk of MSM has increased 10% over the same time period.

The proportion of reported risks for women is consistent across all the time periods until 2018-2020. The proportion of cases due to PWID has increased 171% (8% to 21%), since 2015-2017 heterosexual contact was consistent at 88-91% until 2018-2020 (72%).

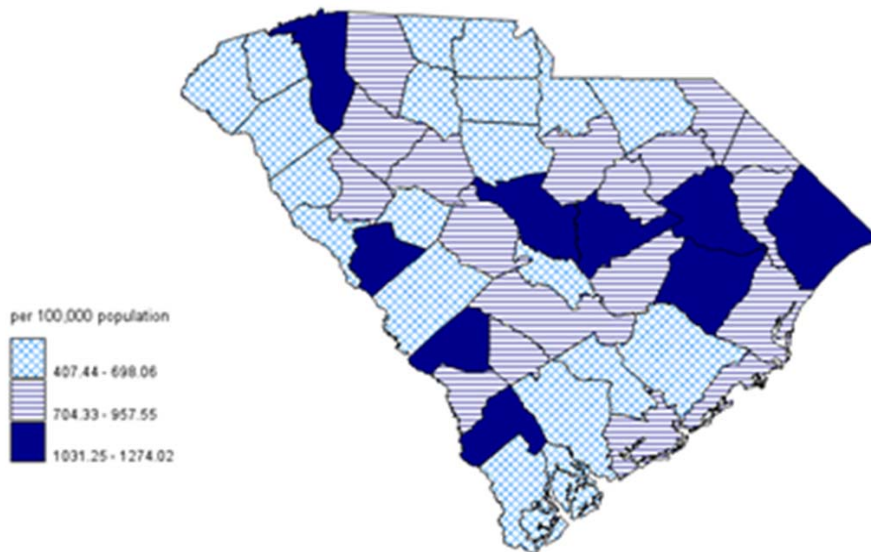
**Figure 2.15: Proportional Distribution of Female HIV/AIDS Cases by Exposure Category, Diagnosed 2009-2020**



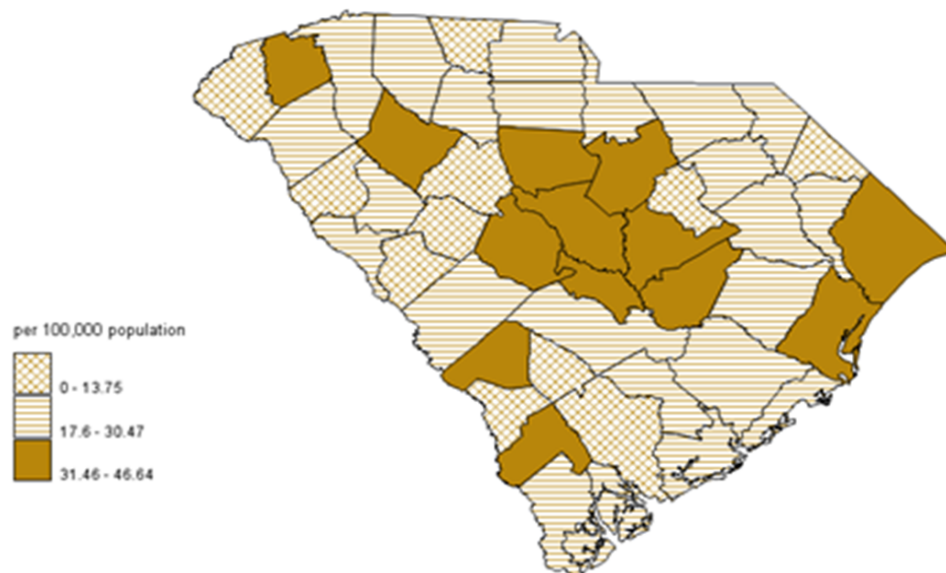
## Residence

People living with HIV/AIDS are widespread throughout the state. Figure 2.16 shows the 2021 prevalence rate and Figure 2.17 shows the three-year average (2019-2021) incidence rate for African Americans. Thirty percent of South Carolina counties have a prevalence rate greater than the state prevalence rate for African Americans (937.0). Thirty-seven percent of South Carolina counties have a three-year average (2019-2021) incidence rate for African American greater than the state three-year average incidence rate for African Americans (33).

**FIG 2.16: SC HIV/AIDS Prevalence Rates**  
2021 HIV/AIDS  
African American Rate

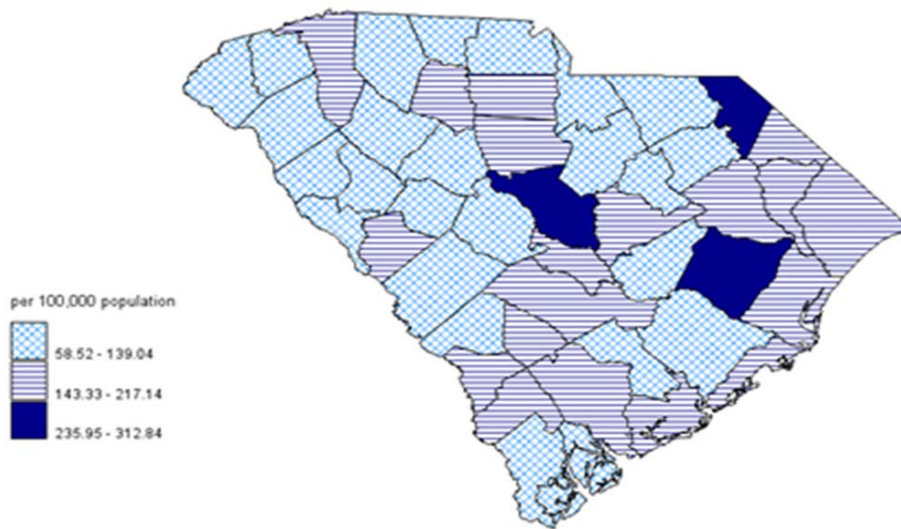


**Figure 2.17: SC HIV/AIDS Incidence Rates**  
2019-2021 HIV/AIDS: Three Year Average Rate African American Rate

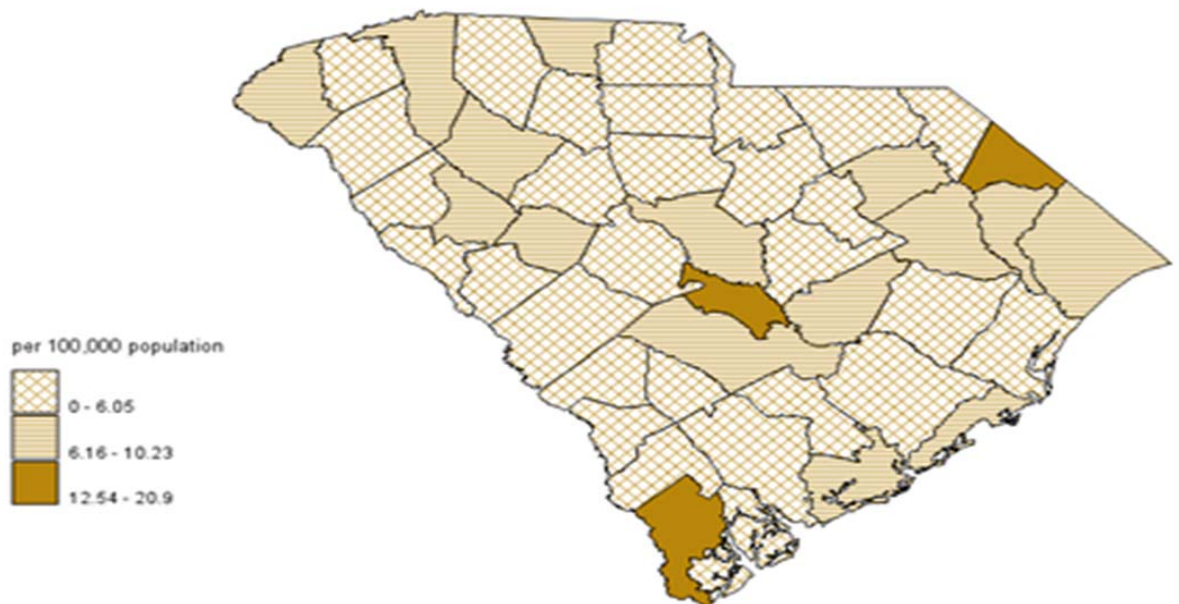


While the HIV/AIDS rate for whites in South Carolina is significantly lower than for African Americans, the distribution throughout the state is not dissimilar. Figure 2.18 shows the 2021 prevalence rate and Figure 2.19 shows the three-year average (2019-2021) incidence rate for whites. Thirty-seven percent of South Carolina counties have a prevalence rate greater than the state prevalence rate for whites (139.4). Fifty percent of South Carolina counties have a three-year average (2019-2021) incidence rate for whites greater than the state three-year average incidence rate (5.4).

**FIG 2.18: SC HIV/AIDS Prevalence Rates**  
2021 HIV/AIDS  
White Rate



**Figure 2.19: SC HIV/AIDS Incidence Rates**  
2019-2021 HIV/AIDS: Three Year Average Rate African American Rate



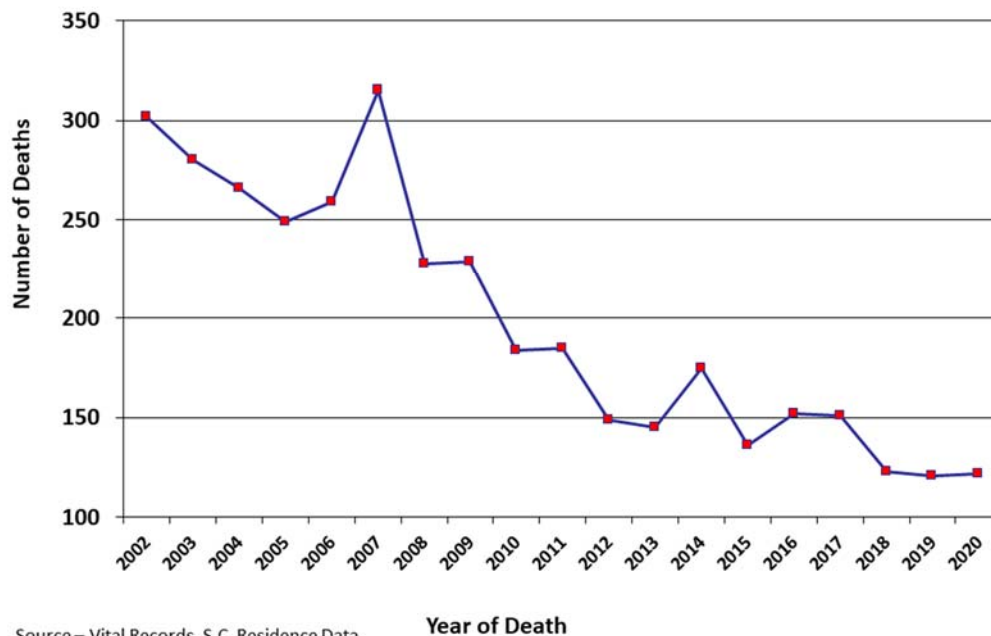
## Mortality

**Note:** 2020 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 Centers for Disease Control and Prevention (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 South Carolina 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 2.20).

**Figure 2.20: Deaths Due to AIDS (HIV) in South Carolina, 2002-2020**



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



In addition to representing 44% of PLWHA (2019), African American males accounted for the majority of people who died from AIDS (52%) in 2020. 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 age 45 and older (75%) (Figure 2.21).

**Figure 2.21: Characteristics of Persons who Died of AIDS, 2020**

	Number	Percent
<b>Race/Sex</b>		
Black Male	63	52%
Black Female	28	23%
White Male	23	19%
White Female	6	5%
Hispanic/Other Male	1	1%
Hispanic/Other Female	1	1%
<b>Age Group</b>		
<19	0	0%
20-24	4	2%
25-34	18	7%
35-44	38	16%
45-54	60	25%
55-64	60	25%
65+	64	26%

Source – Vital Records, S.C. Residence Data. 2020 mortality data were not available at the time Epi Profile was generated.

## HIV Risk Factors

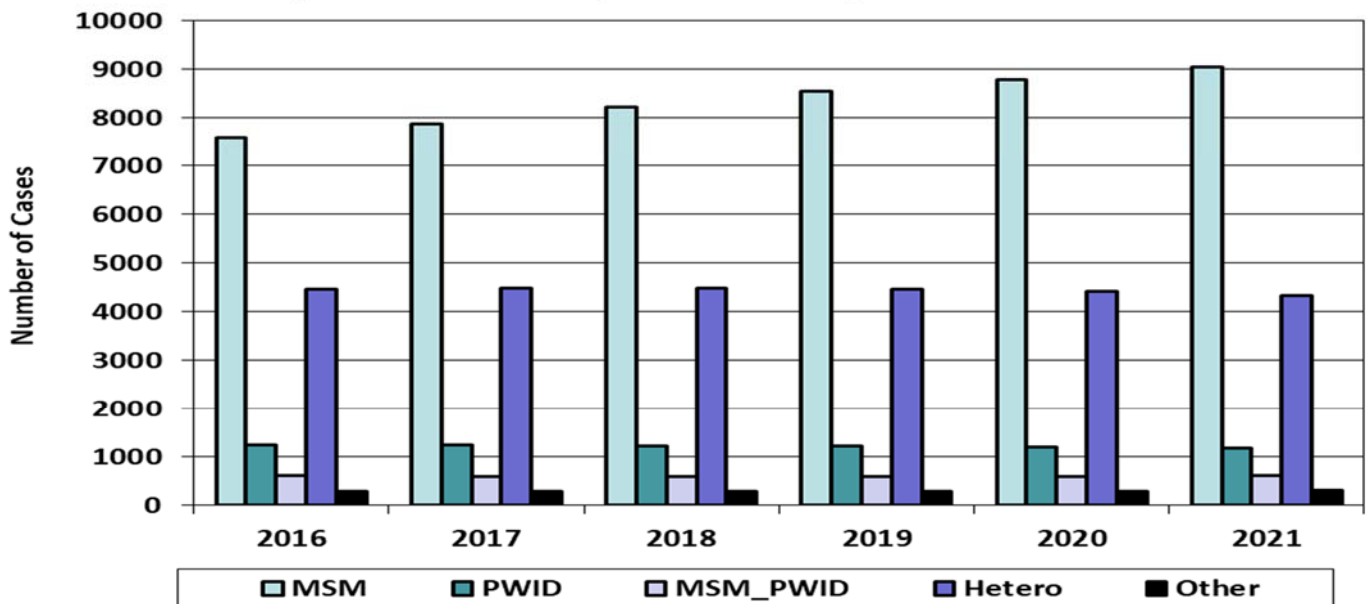
HIV can be transmitted when an individual comes in contact with an infected person’s blood, breast milk, or sexual fluids. The people most likely to become infected with HIV are those who engage in high-risk behaviors which place them at greater risk. Transmission happens most often during sexual or 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 for 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 sexually transmitted disease 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 becoming infected. 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 3.01 shows the number of people in South Carolina 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. PWID, MSM and PWID, and other risks comprise fewer numbers.

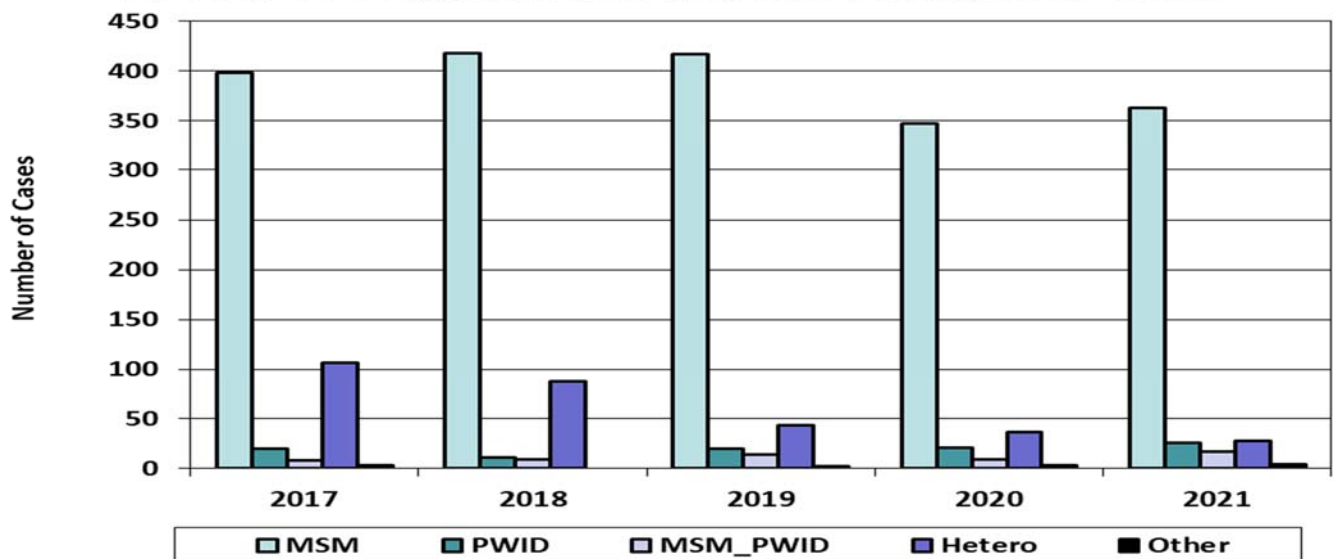
**Figure 3.01: Number of People Living with HIV/AIDS by Year and Reported Risk, 2016-2021**



Excludes persons with no risk reported.

Figure 3.02 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, PWID, combined MSM and PWID, and other risks.

**Figure 3.02: Number of new HIV/AIDS Cases by Year of Diagnosis and Reported Risk, 2017-2021**



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 (PWIDs), and men who have sex with men and injecting drug use. 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 Behavior

According to the U.S. Census Bureau, there are an estimated 1,456,304 males in South Carolina between the ages of 15-65, which is the age range when people are most sexually active. Review of literature and other state profiles indicates that the estimated percentage of men who have sex with men (MSM) ranges from 1.7% to 12.9%. This would mean the number of MSM in South Carolina could be estimated to between 24,757 and 187,863.

Of PLWHA in South Carolina with a reported risk, the largest proportion is men who have sex with men (58%). MSM also accounted for the highest proportion (83%) of recently diagnosed cases.

The majority of MSM cases diagnosed during 2020-2021 were African American (61%). Whitemen accounted for 23% of the new cases and 16% were Hispanic or other races. (Figure 3.03)

Figure 3.03: Proportion of Men Diagnosed with HIV/AIDS in 2020-2021 who Reported a Risk of MSM by Race/Ethnicity

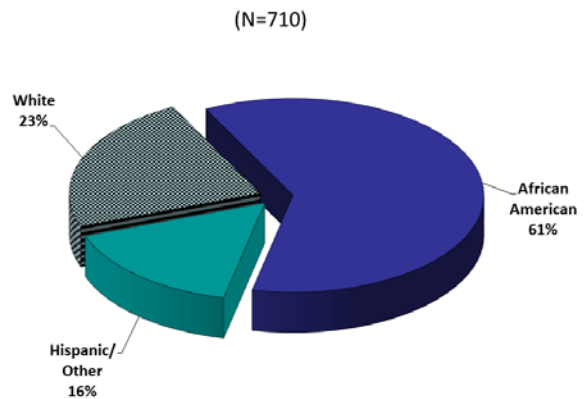
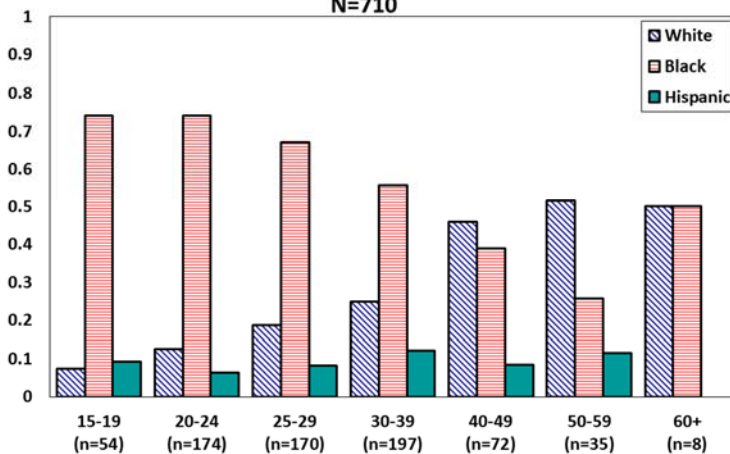


Figure 3.04: Percent of MSM HIV/AIDS Cases Diagnosed 2020-2021 by Age Group & Race/Ethnicity N=710



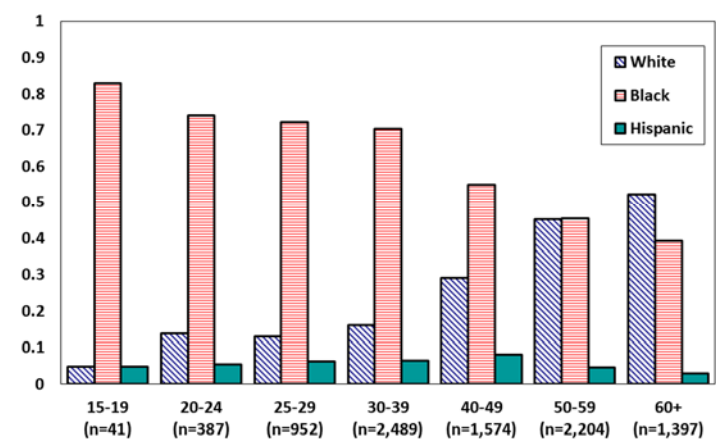
Total N includes race/ethnicity not included in graph.

The majority of MSM diagnosed during 2020-2021, were 20-29 years of age (49%); 28% were 30-39 years of age, 10% were 40-49 years of age, and 5% 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 the highest proportion over the age of 40 (Figure 3.04).

Of men who have sex with men living with HIV/AIDS in 2021, 57% were African American, 31% were white, and 6% were Hispanic. The majority of MSM living with HIV/AIDS, were over the age of 40 (56%), with the highest percentage in the 50-59 age group (24%). Twenty-eight percent were 30-39 years of age, and 15% are 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 3.05).

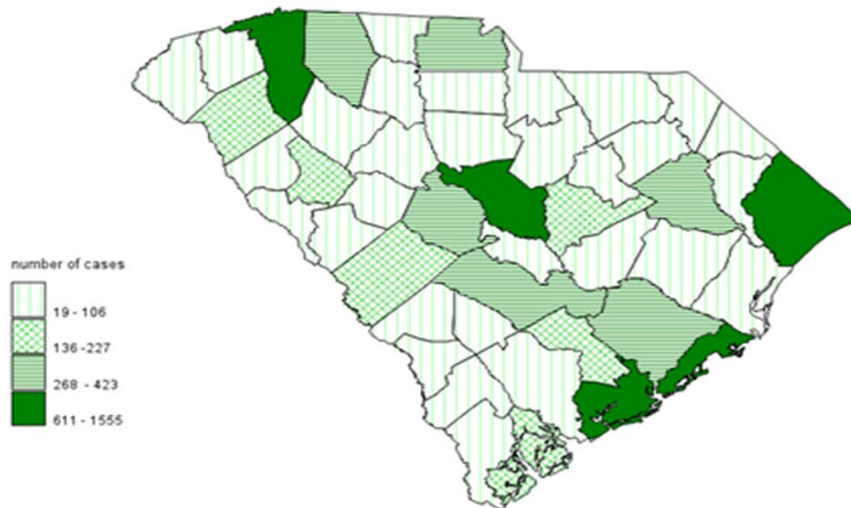
Figure 3.05: Percent of MSM Living with HIV/AIDS by Age/Race, 2021 (N=9,044)



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

Richland County has the greatest number of MSM living with HIV/AIDS in 2021 (1,503), with Greenville (957) and Charleston (903) having the next highest numbers. Most South Carolina counties had fewer than 135 MSM living with HIV/AIDS (Figure 3.06).

**Figure 3.06: SC HIV/AIDS MSM Prevalence**  
2021 HIV/AIDS: MSM Risk



## Summary

Among men who have sex with men, African American men account for over half the proportion of both living with HIV/AIDS (59%) and newly diagnosed HIV/AIDS cases (61%). And of men who have sex with men, ages twenty to forty, African American men comprised 75% of cases living with HIV/AIDS and 65% 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 South Carolina who engage in heterosexual contact that puts them at high risk for 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 individual is engaging in unsafe sexual practices.

During 2019, 36,258 cases of chlamydia, 14,317 cases of gonorrhea and 521 cases of infectious syphilis were reported in South Carolina. More data on STIs, as well as other behavioral indicators such as teenage pregnancy and condom use, is described later.

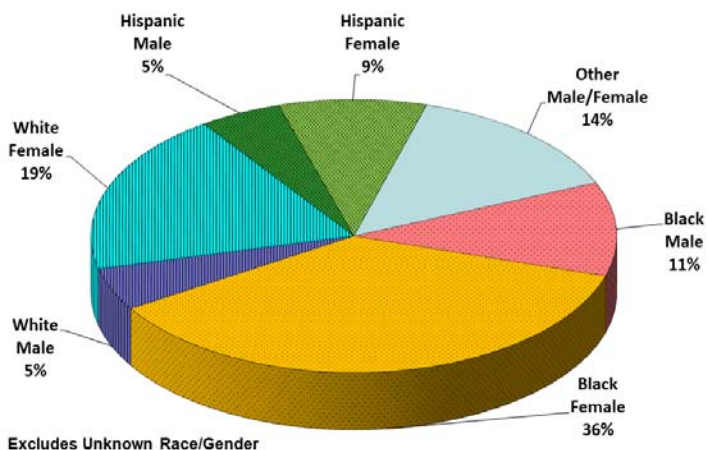
In order for a case of HIV or AIDS to be considered as heterosexual transmission, it must be reported that the individual had heterosexual contact with a person who has documented HIV infection or AIDS or had heterosexual contact with a person who is in a high risk group for HIV (MSM or PWID).

People with reported high-risk heterosexual contact comprise 28% of the total PLWHA at the end of 2021. Of PLWHA who reported a risk of heterosexual contact, were African American women (50%), 24% were African American men, 10% were white women, and 3% were white men (Not shown in a graph).

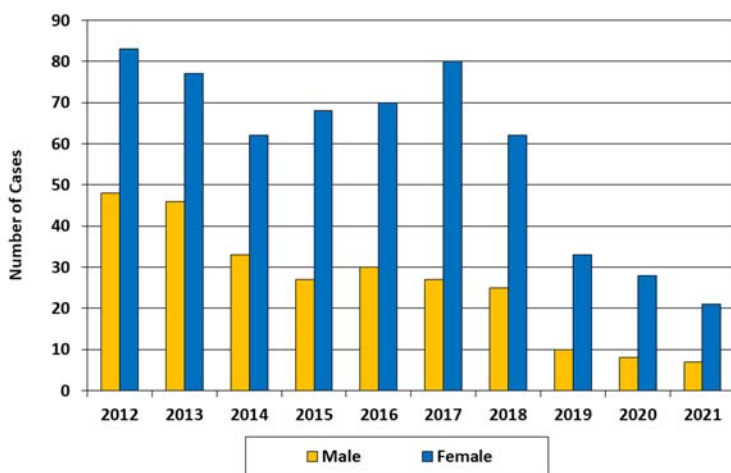
Seven percent of people diagnosed during 2020-2021 reported high-risk heterosexual contact. Figure 3.07 shows that African American men and women comprise a disproportionate 47% of recently diagnosed heterosexual HIV/AIDS cases. African American women account for 36% of recent cases and 11% are African

American men. White women account for 19% while white men account for 5%. Hispanic men and women together account for 14% of recent cases with a reported risk of heterosexual contact (5% men and 9% women).

**Figure 3.07: Proportion of Heterosexual HIV/AIDS Cases by Race/Ethnicity, Diagnosed 2020-2021 (N=54)**



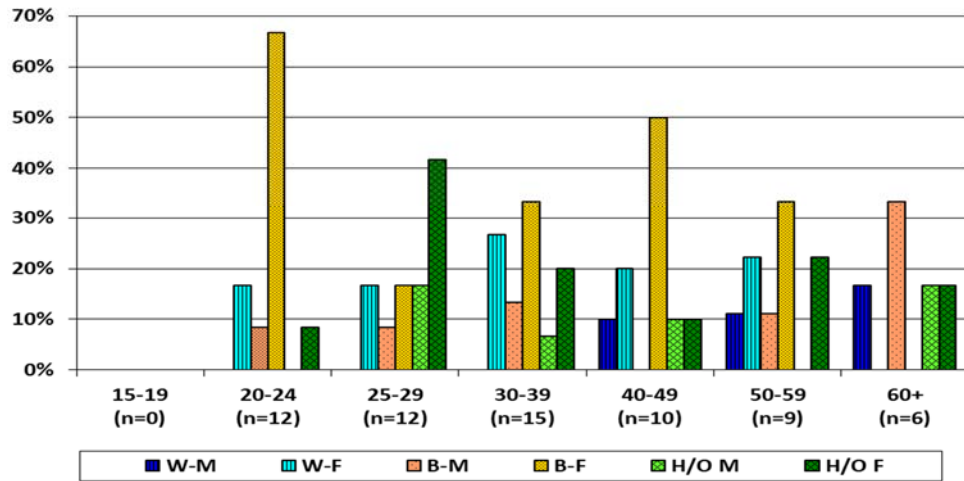
**Figure 3.08: S.C. HIV/AIDS Cases Attributed to Heterosexual Transmission, by Gender and Year of Diagnosis**



On average, the number of heterosexual cases diagnosed each year has decreased 74% from 2017 to 2021. Figure 3.08 shows the number of heterosexually acquired HIV cases in men and women in South Carolina from 2012 to 2021. During most of this period, the proportion of female cases averaged 41% higher than males.

The proportion of high-risk heterosexuals diagnosed in 2020-2021 was highest among the 20-29 age group. In addition, the other groups are evenly distributed: 20-29 (38%), 30-39 (23%), 40-49 (16%), and 50-59 (14%). African American women and men comprised the greatest proportion of cases in each age group (Figure 3.09).

**Figure 3.09: Percent Heterosexual S.C. HIV/AIDS Cases Diagnosed 2020-2021 by Age/Race/Gender**



Of PLWHA in 2021 who reported a risk of heterosexual contact, 85% were age 40 and over; 40-49 (24%), 50-59 (34%), and 60+ (27%). African American women comprised the greatest proportion (50%), followed by African American men (24%). White men and women account for 13% and Hispanic/Other men and women account for 12% of PLWHA who reported a risk of heterosexual contact (Figure 3.10).

**Figure 3.10: Percent of Heterosexuals Living with HIV/AIDS by Age Group and Race/Ethnicity/Gender, 2021**

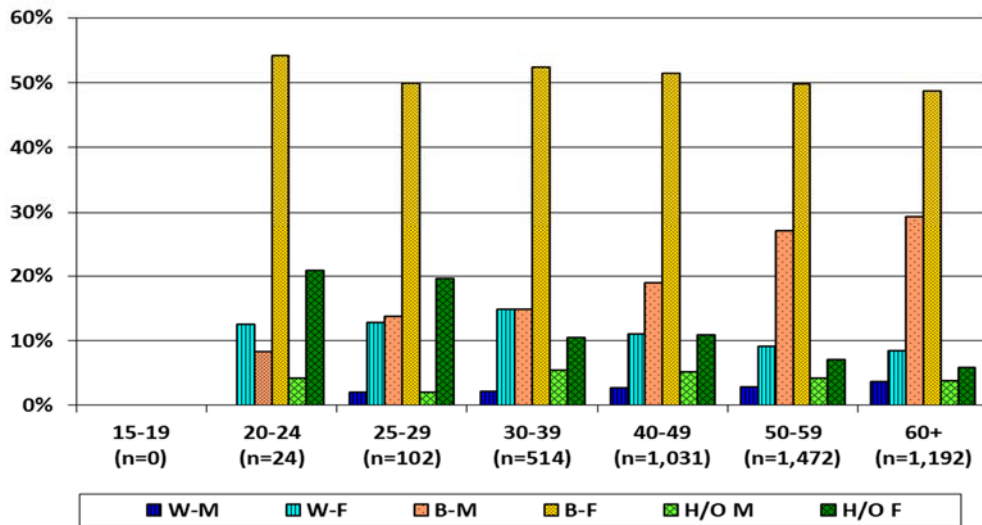


Figure 3.11: SC HIV/AIDS Prevalence  
2021 HIV/AIDS: Heterosexual Risk

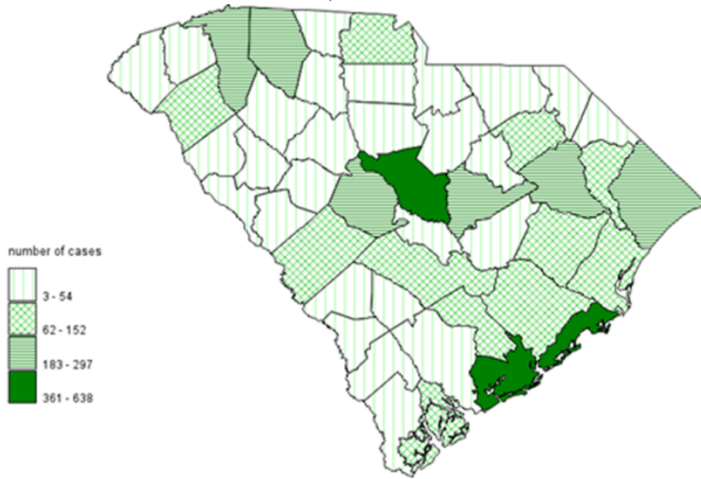
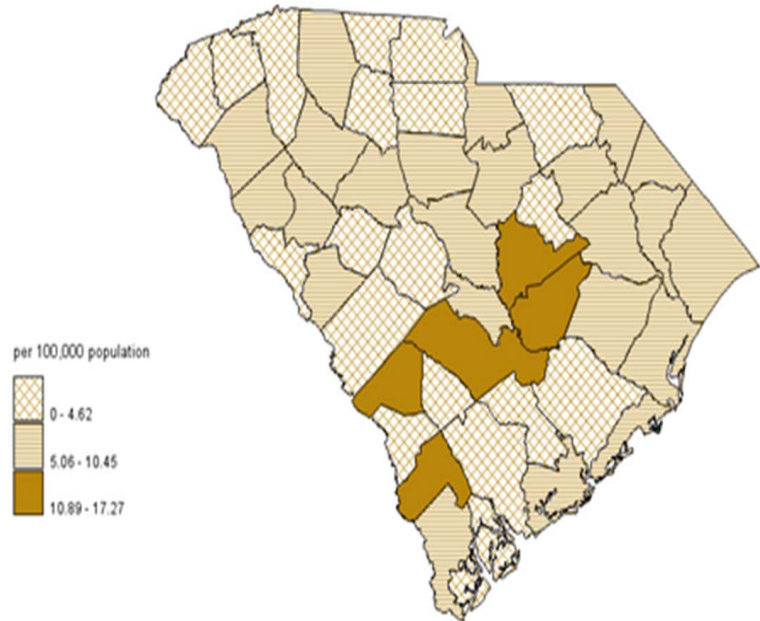


Figure 3.11 shows the counties with the highest prevalence of PLWHA due to heterosexual transmission. Richland county has the highest number of reported cases (638), followed closely by Charleston, Greenville, Florence, Horry, Sumter and Spartanburg. Eighty-seven percent of South Carolina counties each have less than 169 PLWHA who reported a risk of heterosexual contact.

Figure 3.12 shows the 2020-2021 case rate among women: an indicator for more recent heterosexual risk. Clarendon, Hampton and Barnwell counties have the highest case rates in the state (17.3, 14.1, and 12.2 per 100,000 population respectively). Fifty-two percent of counties have case rates below 9.0 (the state rate is 5.4).

Figure 3.12: SC HIV/AIDS Incidence Rates  
2019-2021 HIV/AIDS: Three Year Average Rate Female Rate



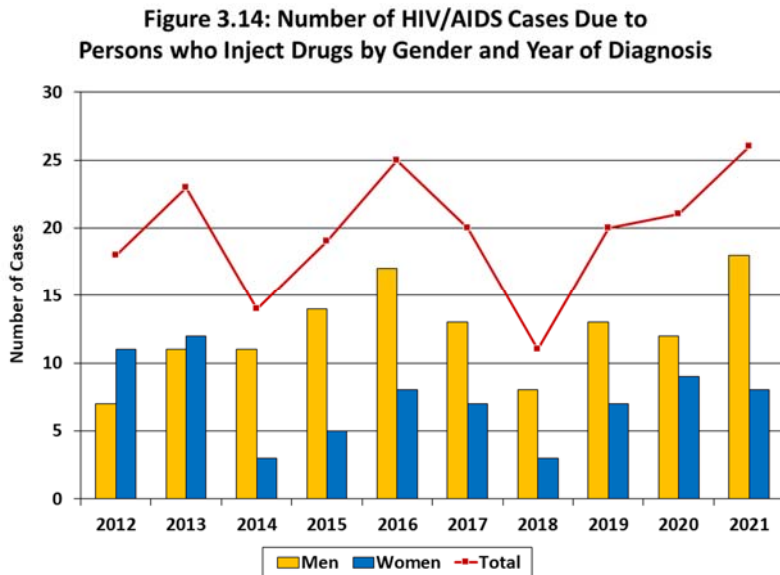
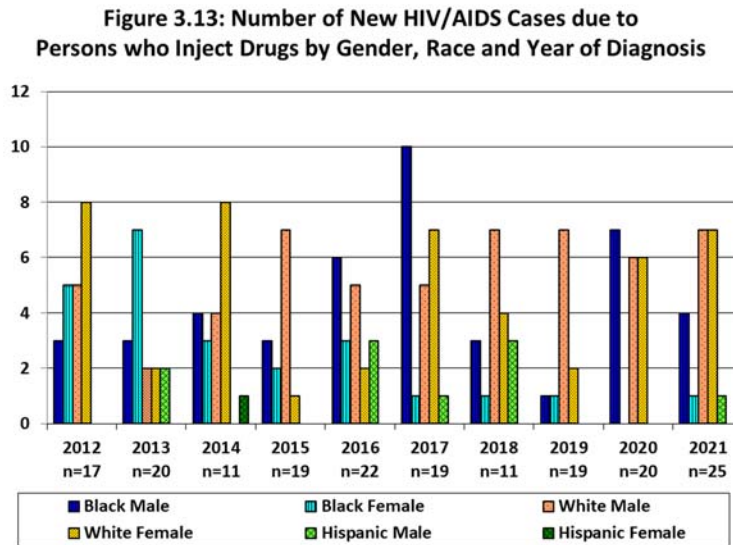
### Summary

Among heterosexually exposed cases, African American women account for 36% of newly diagnosed HIV/AIDS cases and African American men account for 11%. 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 24%. Of people with a reported risk of heterosexual contact, African American men and women age 20-59 account for four out of every 10 PLWHA and five out of every 10 people diagnosed in 2020-2021.



## Characteristics of Persons who Inject Drugs (PWID)

Injection drug users account for 8% of reported risks for people living with HIV/AIDS in 2021 and 6% of people recently diagnosed with HIV/AIDS during 2020-2021. (Figure 3.13)



Over the past ten years, the number of new HIV/AIDS diagnosis with a reported risk of injecting drug use had been declining since 2016; however, the number of PWID reported risk has been increasing since 2018. 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 3.14)

Figure 3.15 shows race and gender proportions of recently diagnosed (2020-2021) PWID cases. Men account for 63%: African American men 20%, white men 41%, and Hispanic/other 2%. African American women accounted for 7% and white women 28%.

Figure 3.15: Proportion of Persons who Inject Drugs Diagnosed with HIV/AIDS 2020-2021 by Race/Gender

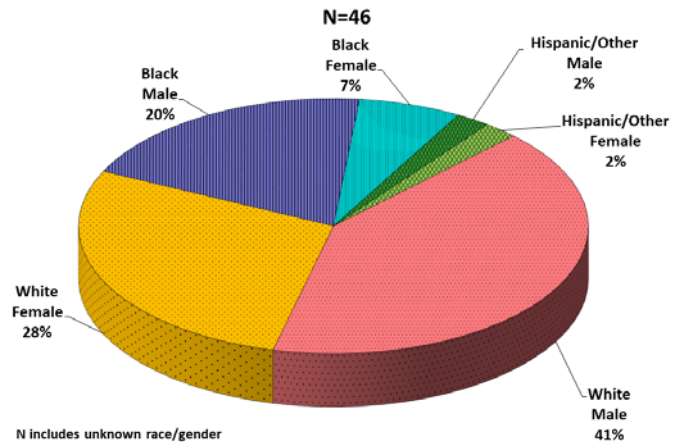


Figure 3.16: Percent of Persons who Inject Drugs Diagnosed with HIV/AIDS 2020-2021 by Age Group, Race, and Gender

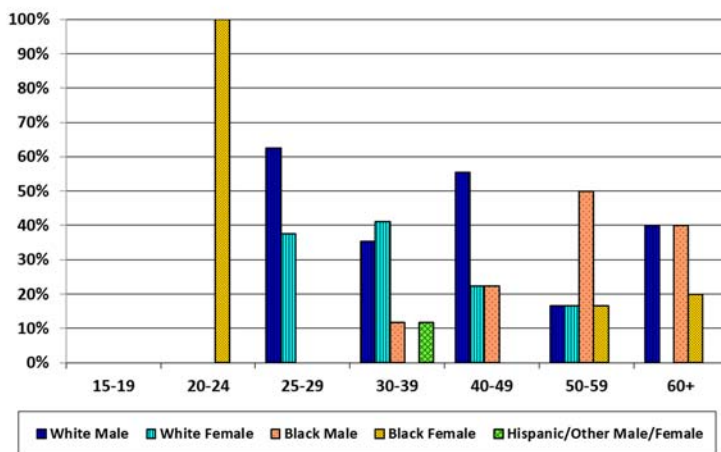


Figure 3.16 shows that 44% of PWID cases diagnosed in 2020-2021 are over the age of 40: 40-49 20%, 50-59 13%, and 60+ 11%. Of those reporting PWID as their risk, 19% were age 20-29, and 37% were age 30-39.

Of PLWHA with PWID as an identified risk factor, most (90%) 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 40% and African American women accounting for 25%. Within the 20-39 age groups, both white men and women account for the greatest proportion (33%) and white men (34%), followed by African American men 10% and African American women 10%. (Figure 3.17).

Figure 3.17: Percent of Persons who Inject Drugs Living with HIV/AIDS by Race/Gender and Age Group, 2021 (N=1,176)

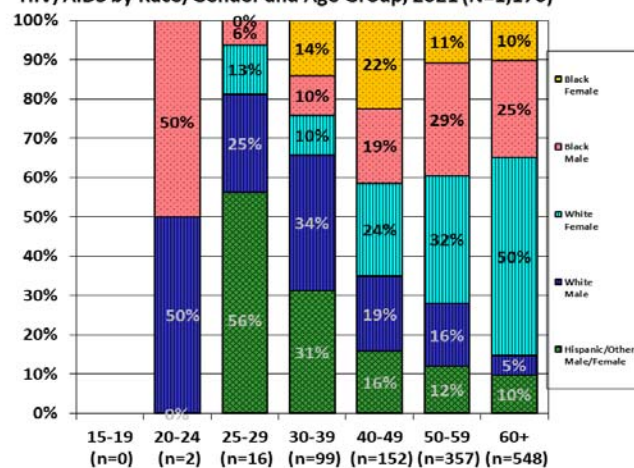
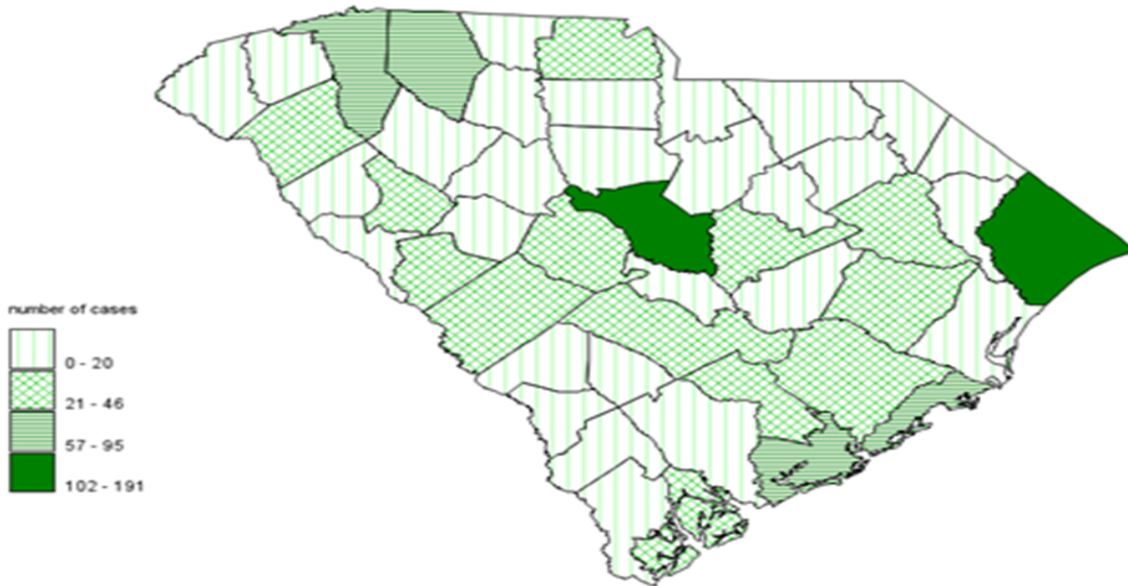


Figure 3.18 shows Richland County has the highest number of PLWHA with PWID as an identified risk factor. As with other risks, the more urban counties have the greatest numbers.

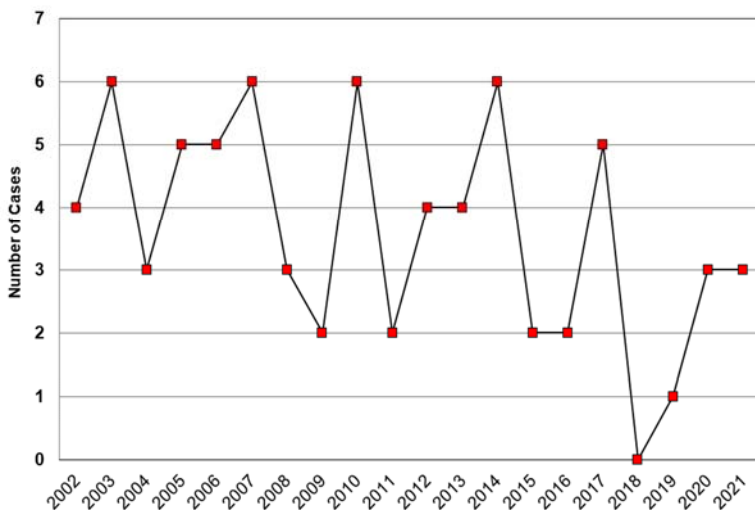
Figure 3.18: SC HIV/AIDS Prevalence of Persons who Inject Drugs



### Infants and Children: (Children under 13 years of age)

Cumulatively, through December 2017, there have been 291 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 3.19: Number of Children <15 years Old Diagnosed with HIV/AIDS in South Carolina, 2002-2021



Most infants and children infected with HIV acquired it perinatally from their mother. There has been significant progress over the past twenty years in reducing the number of infants with perinatal acquired HIV infection (see Perinatally HIV exposed births below). When reporting small numbers of cases, trend graphs, such as the one in Figure 3.19, tend to display a lot of fluctuation 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.

## **Patterns of Service Utilization of HIV-infected People**

### **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 HIV infected, risk category, and county of residence. As stated in the Introduction, the data reflects only those people tested voluntarily in local health departments. This data reflects the number of individuals tested, not the number of tests. In 2021, African Americans comprised 64% of the total people tested, and 73% of the total positive. Men accounted for 35% of people tested and 85% of total positive. People 20-39 years of age represented the highest proportion tested (76%) and the highest proportion total positive people (74%). People over the age of 40 comprised 18% of the total people tested, and 17% of the total positive.

Public Health Regions (PHR) that accounted for the greatest proportion of people tested who were positive include those with the same urban counties of highest prevalence:

Lowcountry PHR (includes Charleston County) – 27% of total positives; Midlands PHR

(includes Richland County) – 28% of total positives tested;

Pee Dee PHR (includes Sumter and Florence counties) – 23% of total positives; Upstate

PHR (includes Greenville and Spartanburg counties) – 22% of total positives;

### **Ryan White Part B**

In 1990, Congress enacted the Ryan White CARE Act to provide funding for states, territories and Eligible Metropolitan Areas to offer medical care and support services for people living with HIV disease who lack health insurance and financial resources for their care. Congress reauthorized the Ryan White 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 Ryan White HIV/AIDS Treatment Modernization Act and finally in 2009 with the Ryan White HIV/AIDS Treatment Extension Act.

Ryan White 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 4.01: Characteristics of Ryan White Part B Clients Compared to S.C. Persons Living with HIV/AIDS in 2021**

	<b>Ryan White Part B Clients, N=12,025</b>	<b>Persons Living with HIV/AIDS, N=19,761</b>
<b>Race/Ethnicity</b>		
White, not-Hispanic	23%	24%
Black, not-Hispanic	71%	63%
Hispanic	5%	6%
Other	1%	7%
<b>Sex</b>		
Male	70%	73%
Female	29%	27%
Transgender	<1%	---
<b>Age Group</b>		
< 24	4%	---
25-44	39%	---
45+	57%	---

During 2021, 12,025 clients received services through the Ryan White Part B funds. Figure 4.01 presents the distribution of Part B clients by race/ethnicity, gender, and age as well as for PLWHA in South Carolina through December 2021. 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:

- 1) Primary Medical Care consistent with Public Health Service (PHS) Treatment Guidelines;
- 2) HIV Related Medications;
- 3) Mental Health Treatment;
- 4) Substance Abuse Treatment;
- 5) Oral Health; and
- 6) Medical Case Management.

Figure 4.02 shows a breakdown of Ryan White Part B clients who received six of the core services through funding and the average number of visits per clients. Among the 12,025 clients who received services, the majority of clients obtained medical case management services (n=9,555) followed by medical care, Medication Assistance (utilization of HIV related medications is described in the ADAP section), mental health services, dental care and substance abuse services.

**Figure 4.02: South Carolina Ryan White Part B Service Utilization by Service Type, 2021**

	No. of clients receiving service	No. of visits per category	Avg. no. of visits per client
Medical Care	10,154	37,912	4
Oral/Dental Care	1,827	3,857	2
Mental Health	3,397	6,952	2
Substance Abuse	1,420	1,775	1
Medical Case Management	10,610	118,002	11

Of those services utilized most by clients (visits/clients), medical case management services were among the highest (11 visits per clients), followed by medical care (four visits per client), mental health services (two visits per client), dental care (two visits per client), and substance abuse (one visit per client).

Additional services obtained by clients in 2021 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 South Carolina AIDS Drug Assistance Program (S.C. ADAP) operates under the Ryan White 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 individuals. The S.C. ADAP provides medication assistance via the following service tiers: 1) DirectDispensing to provide medications via mail-order through a contracted pharmacy; 2) InsuranceAssistance 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. S.C. ADAP enrollment and services are centrally managed by the S.C. Department of Health and Environmental Control.

Currently there are 111 drugs on the approved S.C. ADAP Formulary including 51 HIV antiretroviral drugs. In the past, once an antiretroviral medication received FDA approval, it was automatically added to the S.C. 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. Fuzeon, Selzentry, and Vitekta 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 S.C. ADAP includes verified HIV-positive status, South Carolina 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 individuals who do not qualify for the Medicare Part D Full Low- income Subsidy (FLIS). Expenditures are carefully monitored, and projections are reviewed monthly.

Figure 4.03 lists the characteristics of clients enrolled in ADAP during 2021. Clients served through ADAP have a similar distribution to that of PLWHA in South Carolina. The majority of the clients are non-Hispanic African American (67%), male (77%) and female (22%); age 45 and over (50%).

**Figure 4.03: Characteristics of ADAP Clients Compared to S.C. Persons Living with HIV/AIDS in 2021**

	ADAP Clients, N=5,398	Persons Living with HIV/AIDS, N=19,872
<b>Race/Ethnicity</b>		
White, not-Hispanic	23%	24%
Black, not-Hispanic	67%	63%
Hispanic	8%	6%
<b>Sex</b>		
Male	77%	73%
Female	22%	27%
Transgender	1%	N/A
<b>Age Group</b>		
< 13	<1%	--
13-24	4%	--
25-44	45%	--
45-64	45%	--
65+	5%	--

**Figure 4.04: 2021 ADAP Patient Profile Compared to Persons Living with HIV/AIDS**

	S.C. HIV/AIDS Prevalence N= 19,872	Direct Dispensing N= 2,175	Insurance Program N= 3,069	Medicare Part D Assistance N= 345
<b>Race/Ethnicity</b>				
White, not-Hispanic	24%	16%	26%	51%
Black, not-Hispanic	63%	67%	69%	46%
Hispanic	6%	15%	3%	2%
<b>Sex</b>				
Male	72%	80%	75%	76%
Female	28%	18%	24%	24%

Figure 4.04 shows a similar list of characteristics by service type. Men comprise the largest proportion across all three service types. ADAP's Direct Dispensing served the largest number of clients and has a similar distribution to that of PLWHA in South Carolina. African Americans also comprise the largest proportion within the Insurance Program and whites comprised the largest proportion within Medicare Part D Assistance.



Figure 4.05 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. The majority of 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 4.05: South Carolina ADAP Service Type, 2021**

	Number of clients receiving service	Number of visits per category	Average number of Services per client
Prescription Refills: (Direct Dispensing & Insurance Copayments/Deductibles)	4,657	56,740	12
Premiums: Health Insurance Premiums (including Pre-existing Condition Plans)	2,049	19,900	10
Medicare Copayments/Deductibles*	345	6,723	19

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

## HIV Continuum of Care

### Methodology

The HIV Continuum of Care is a metrics developed by the Center for Disease Control and Prevention (CDC) as a way 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 South Carolina Epidemiologic 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 South Carolina
- 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 3 months after HIV diagnosis, among persons newly diagnosed with HIV infection in the analysis year"
- 'Received Any Care' is defined as "persons with  $\geq 1$  CD4 or viral load test result during the analysis year"
- 'Retention in Continuous Care' is defined as "persons who had  $\geq 2$  CD4 or viral load test results at least 3 months apart during the analysis year"
- Per CDC guidelines 'Viral Suppression' is defined as "persons who had a Viral Load  $\leq 200$  copies/mL at most recent test during the analysis year"

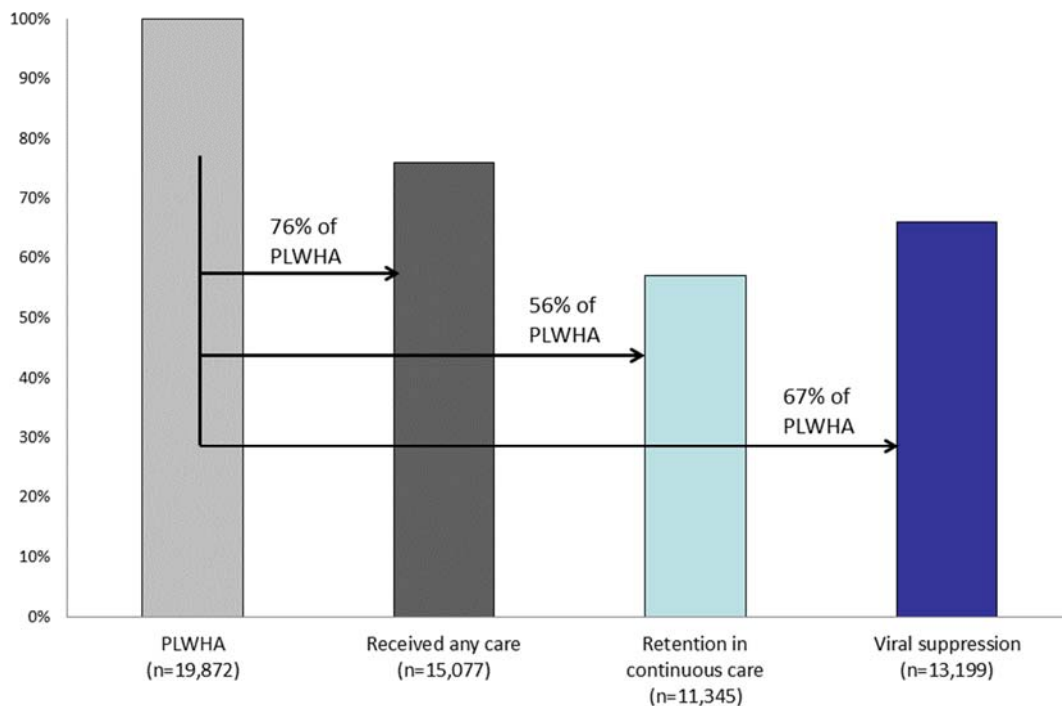
***NOTE:*** Because the HIV Continuum of Care in this Epidemiologic Profile uses a different methodology from the CDC methodology, this Continuum of Care should ***not*** be used for comparison with national or other states' Continuum of Care.

## HIV Continuum of Care – Diagnosed Prevalence

The National HIV/AIDS Strategy objectives of received any care, retained in care, and viral suppression in this epidemiologic 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 2021) and is discussed later.

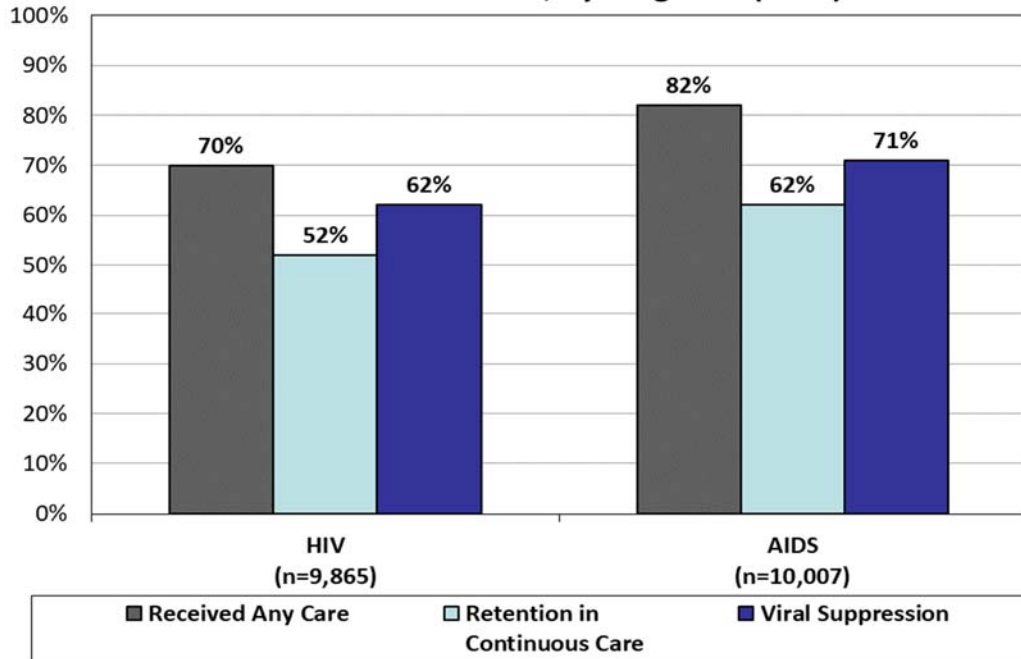
Figure 5.01 shows the number and percentage of PLWHA engaged in each step of the HIV continuum of care. Of the 19,872 PLWHA, 76% had at least one CD4 or viral load test during 2021; 56% of PLWHA had two or more CD4 or viral load tests at least three months apart during 2021; and 67% of PLWHA had a Viral Load  $\leq 200$  copies/mL at most recent test during 2021.

**Figure 5.01 Number and Percentage of Persons Engaged in Each Step of the HIV Continuum of Care, 2021**

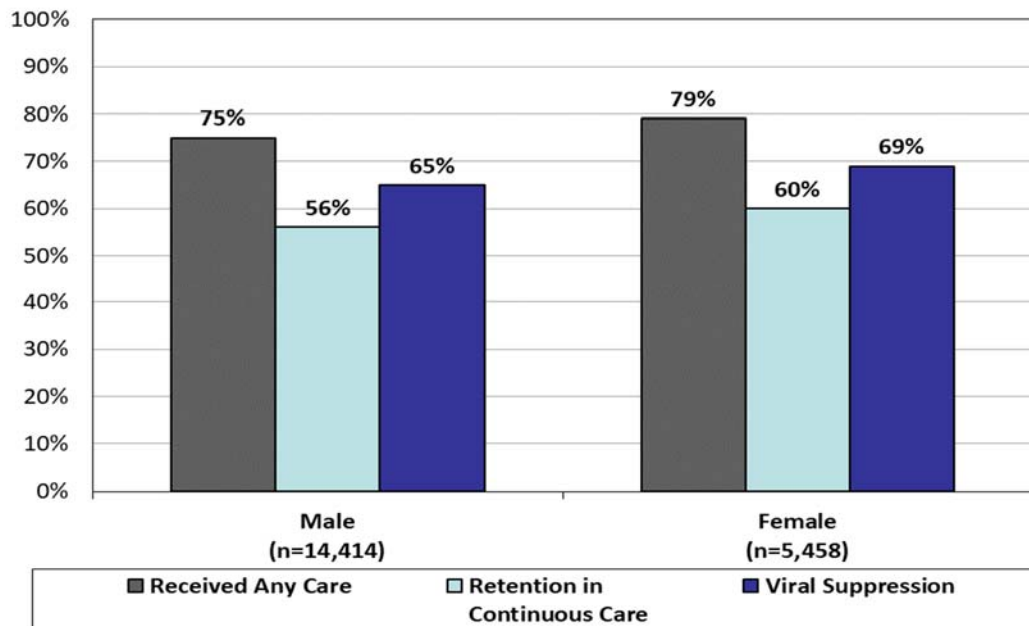


The following figures show the HIV continuum of care stratified by stage of HIV diagnosis, gender, race/ethnicity, age group and transmission category (risk).

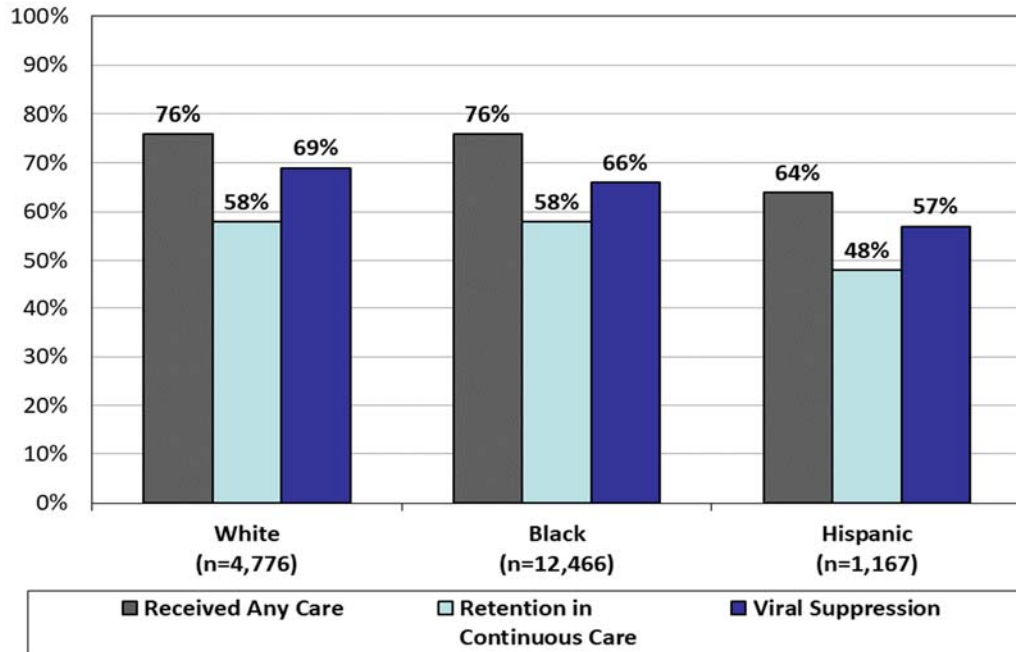
**Figure 5.02: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Diagnosis (2021)**



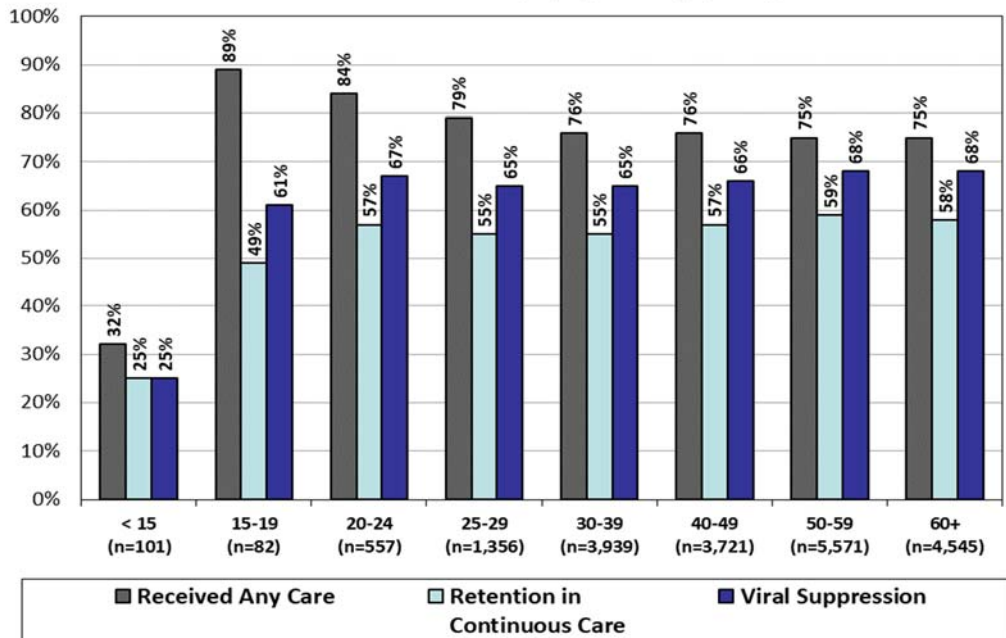
**Figure 5.03: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Gender (2021)**



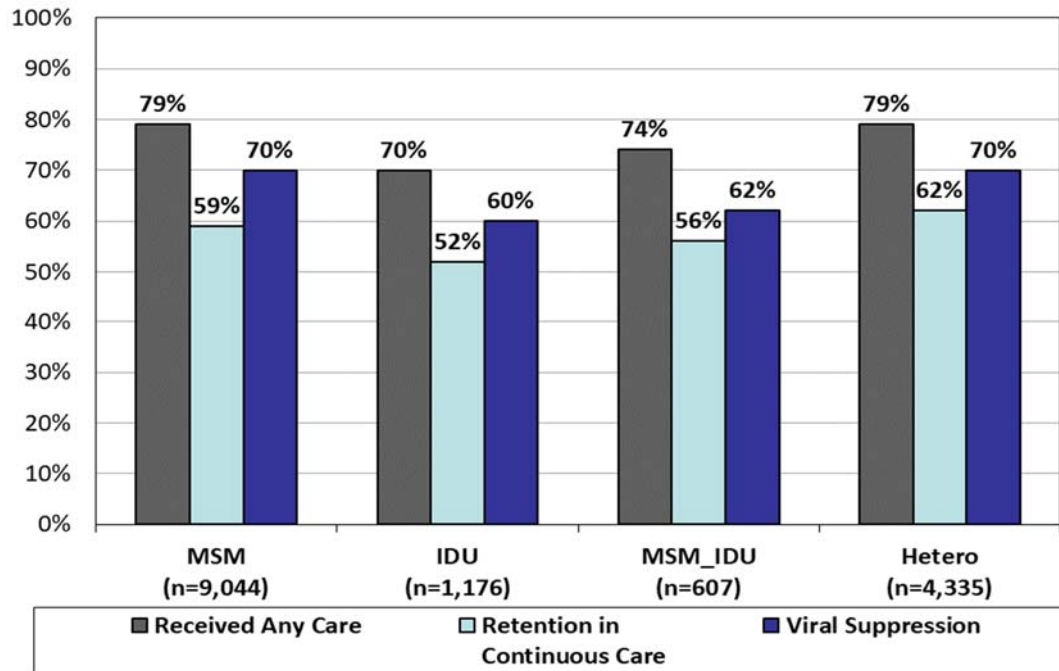
**Figure 5.04: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Race/Ethnicity (2021)**



**Figure 5.05: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Age Group (2021)**



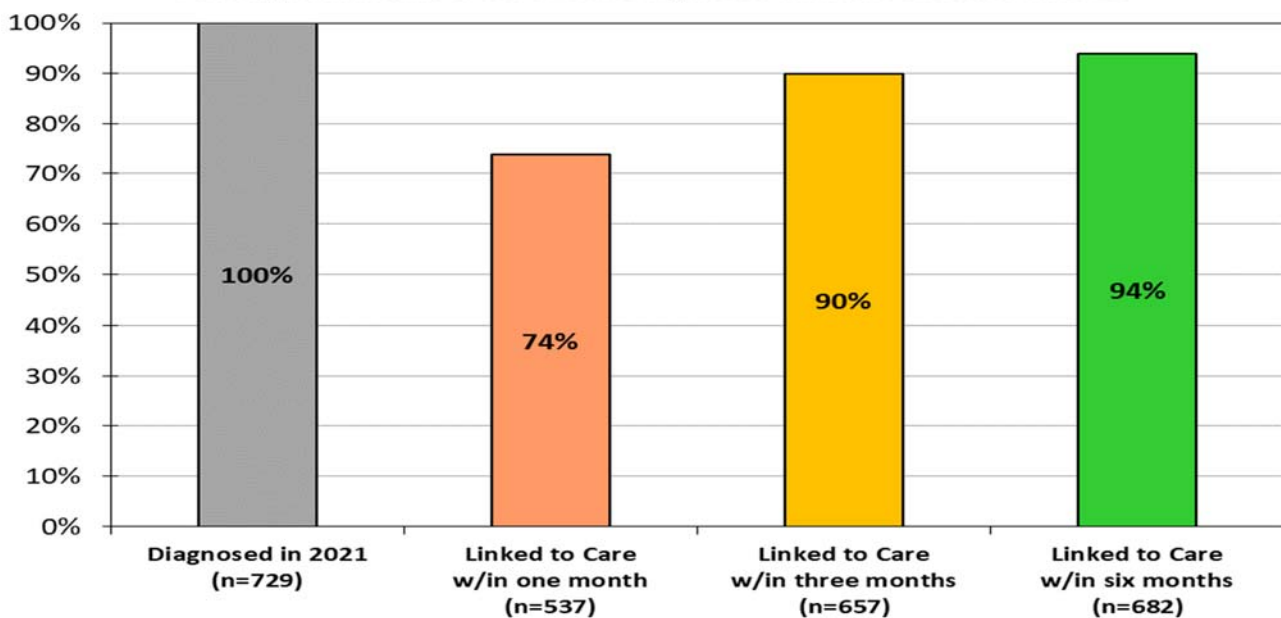
**Figure 5.06: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Reported Risk (2021)**



## 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 5.07 shows the percentage of people diagnosed in 2019 who were linked to care within 3, 6, and 12 months of diagnosis.

**Figure 5.07: Percentage of Persons Linked to Care within 3, and 6 Months After HIV Diagnosis Among Total Number of Persons Diagnosed with HIV infection in 2021**

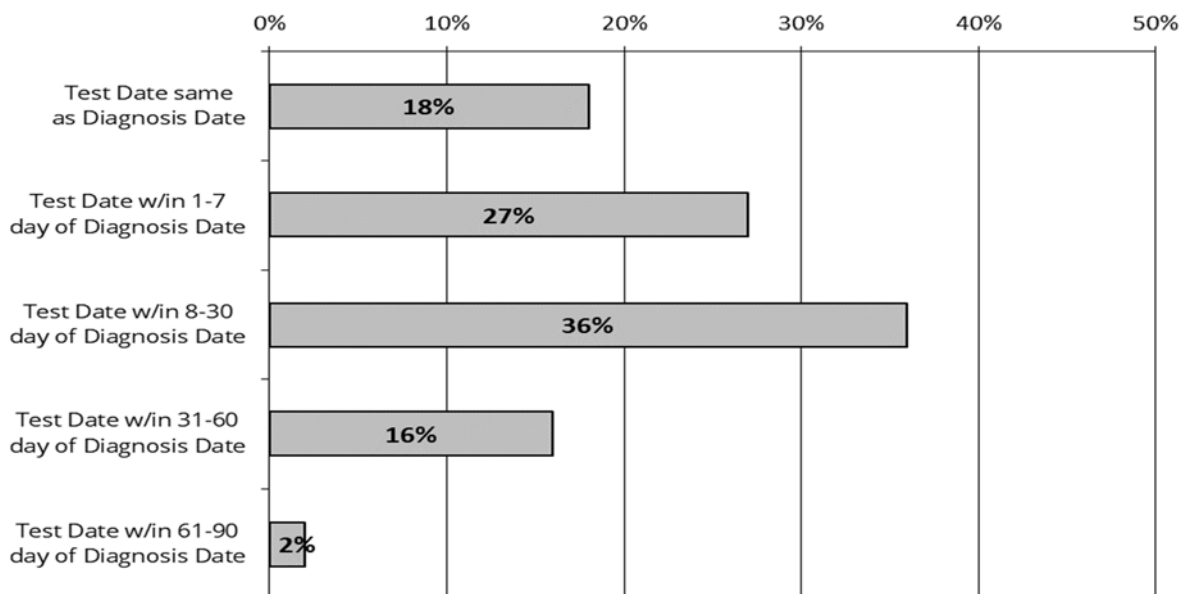


In July 2015, the new National HIV/AIDS Strategy 2020 changed the 'linked to care' objective from linkage within 90 days to linkage within 30 days. This change generated much discussion because, within the first 30 days, there is no accurate way to distinguish between a lab test done as part of the diagnosis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

Figure 5.08 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 729 people linked to care within 90 days of diagnosis, 18% had a lab date the same as the date of diagnosis; 27% had a lab date between one and seven days of diagnosis; 36% had a lab date between eight and 30 days of diagnosis; 16% had a lab date between 31 and 60 days of diagnosis; and 2% had a lab date between 61 and 90 days of diagnosis.

**Figure 5.08: Of Persons Linked to Care within 3 Months of Diagnosis:  
Timing of Test Date Relative to Diagnosis Date.**



### Other Populations at Risk

Other populations at varying risk for HIV are described below and include people with sexually transmitted diseases, and pregnant teen age women.

### Sexually Transmitted Infections (STIs)

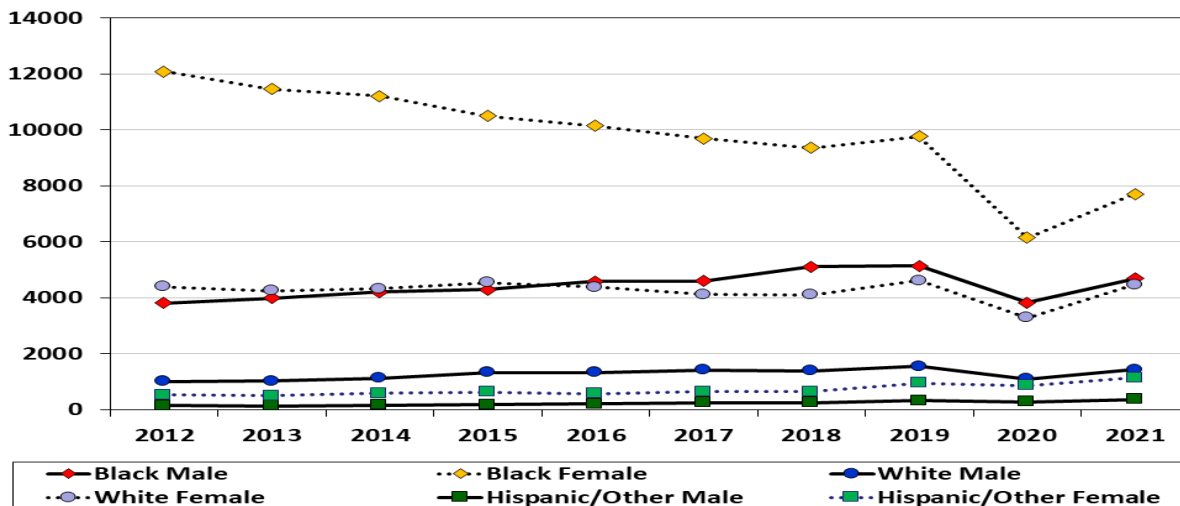
STIs are primary risk factors for HIV infection and a marker of high risk, unprotected sexual behavior. Many STIs cause lesions or other skin conditions that facilitate HIV infection. Trends in STI infection among different populations (e.g. adolescents, women, men who have sex with men) may reflect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



## Chlamydia

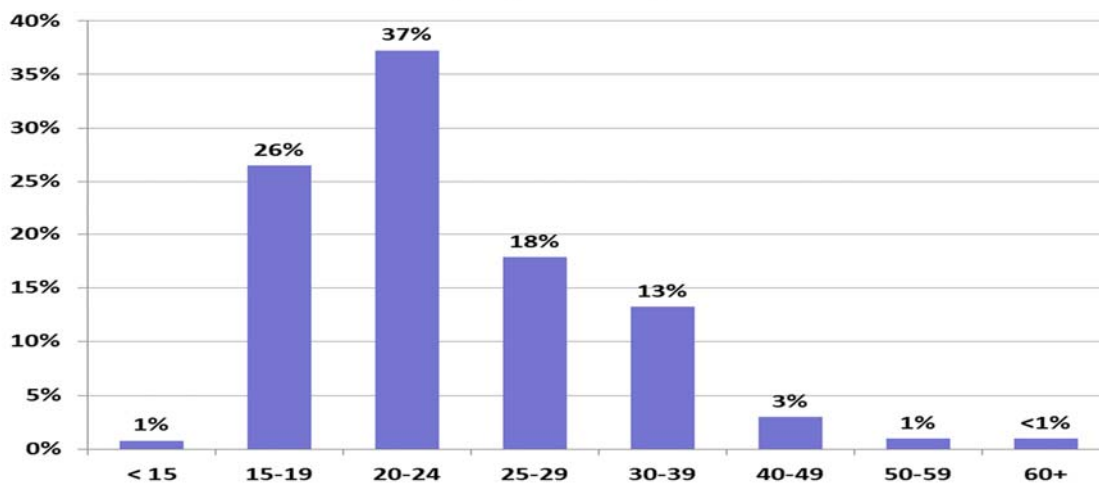
Over the past decade, reported cases of chlamydia have averaged about 29,656 per year. Some of this high number may be attributed to initiating routine screening for all young women attending family planning and STI clinics in health departments statewide. In 2021, there were 35,950 cases of chlamydia diagnosed in South Carolina. Among those cases with a reported race, 39% were African American women and 23% were white women. African American men comprised 24% of chlamydia cases, and white men accounted for 7% (Figure 6.01). Forty-five 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 6.01: South Carolina Count of Reported Chlamydia Cases by Year of Diagnosis, 2012-2021**



Of cases diagnosed in 2021, 82% were adolescents and adults under the age of 30. 15- 19, 26%; 20-24, 37%; and 25-29, 18%. Persons age 30 and over accounted for 18% of chlamydia cases. Figure 6.02

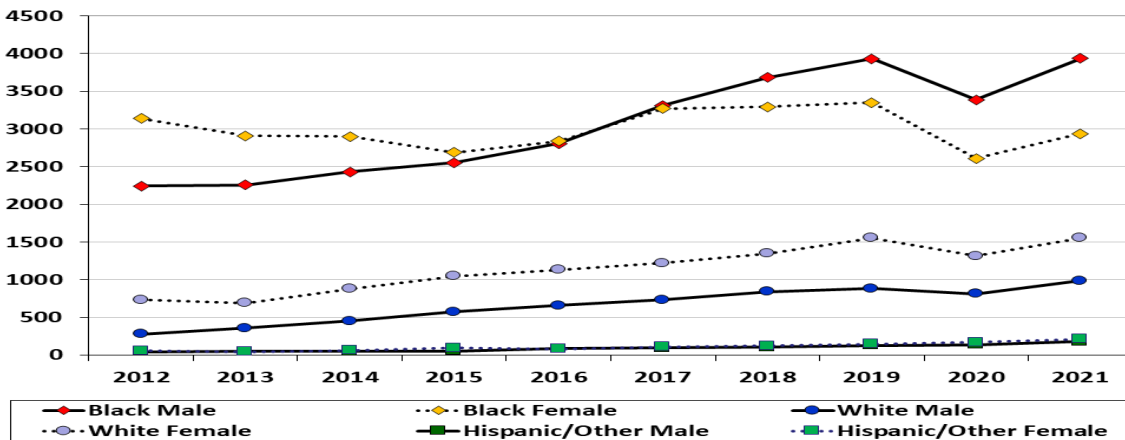
**Figure 6.02: Proportion of 2021 Chlamydia Cases by Age Group**



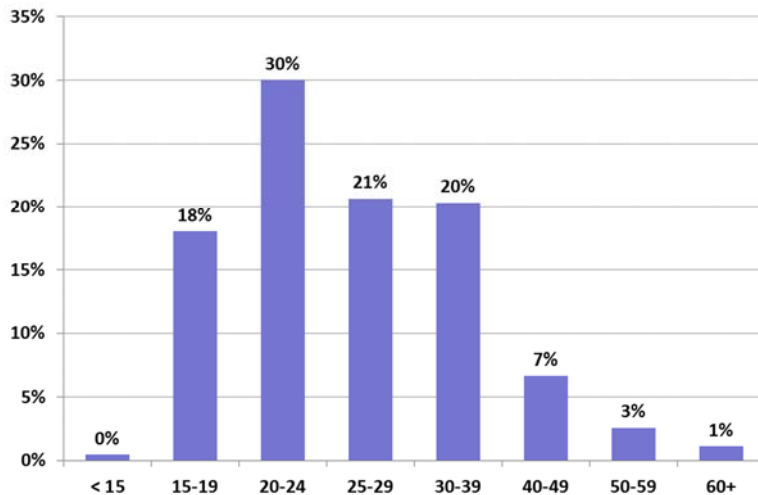
## Gonorrhea

In 2021, 15,804 gonorrhea cases were diagnosed in South Carolina. Of cases with a reported race, African American men and women account for 70% of reported cases; African American women 30% and African American men 40%. As with chlamydia, 38% of reported gonorrhea cases have an 'Unknown' race and/or gender. Figure 6.03 shows trends among reported race/gender by year.

**Figure 6.03: South Carolina Count of Reported Gonorrhea Cases by Year of Diagnosis, 2012-2021**



**Figure 6.04: Proportion of 2021 Gonorrhea Cases by Age Group**



Sixty-nine percent of Gonorrhea cases diagnosed in 2021 were between the ages of 15 and 29. Eighteen percent of cases were age 15-19, 30% were age 20- 24, and 21% were age 25-29. Persons age 30 and over accounted for 31% (Figure 3.22).

## 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. More information on syphilis morbidity reporting and the current case definition can be found in Appendix C of Centers for Disease Control and Prevention (CDC), [Sexually Transmitted Disease Surveillance 2018 report](#).

## Total Syphilis

**Figure 6.05: South Carolina Count of Reported Total Syphilis Cases by Year of Diagnosis, 2012-2021**

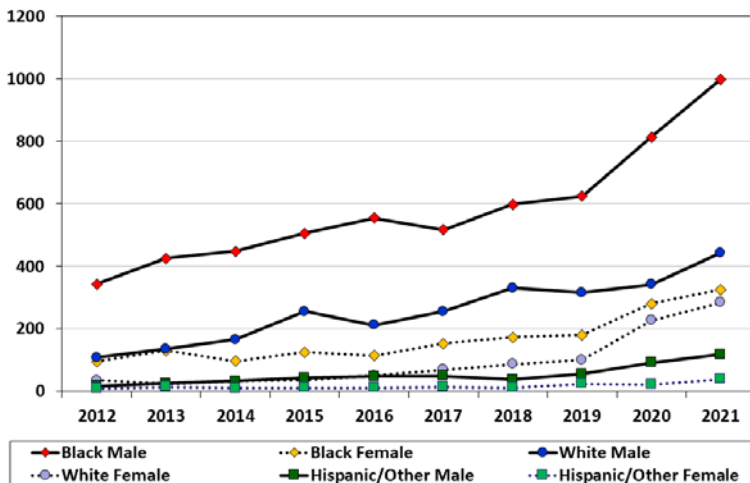
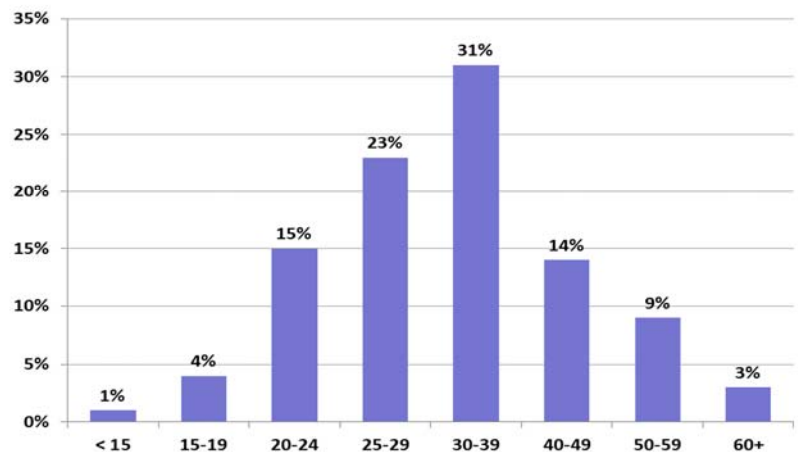


Figure 6.05 shows men continue to represent the majority of cases (73%): African American men specifically, are most impacted, accounting for 45% of total cases, white men accounting for 23%, and Hispanic/other men 5%. Women account for 27% of the total syphilis cases: African American women comprised 12%, whitewomen 14%, and Hispanic/other women 1%. Two percent of total syphilis cases have ‘unknown’ race.

Forty-three percent of total syphilis cases diagnosed in 2021 were under the age of 30. Four percent age 15-19, 15% were age 20-24, 23% were age 25-29 and 31% were age 30-39. Fifty-seven percent of total cases were over the age of 30; 31% 30-39, 14% 40-49, and 12% 50+ (Figure 6.0)

**Figure 6.06: Proportion of 2021 Total Syphilis Cases by Age Group**



## Primary and Secondary Syphilis

The number of infectious (primary and secondary) syphilis diagnosed each year in South Carolina has dramatically increased over the past 10 years. In 2021, 883 cases of primary and secondary syphilis were diagnosed; this is a 254% increase from 2010 (147 cases). On average, the number of primary and secondary syphilis cases diagnosed each year has increased 17% per year over the last decade.

**Figure 6.07: South Carolina Count of Reported Primary and Secondary Syphilis Cases by Year of Diagnosis, 2012-2021**

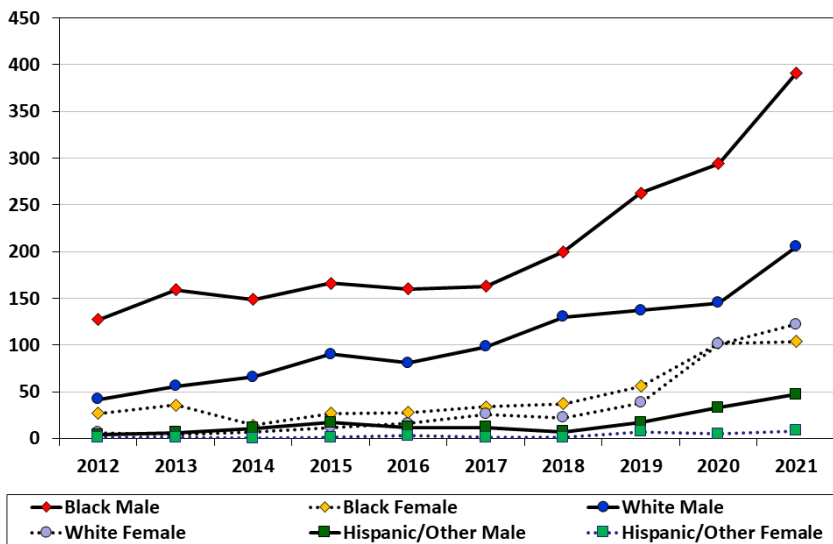
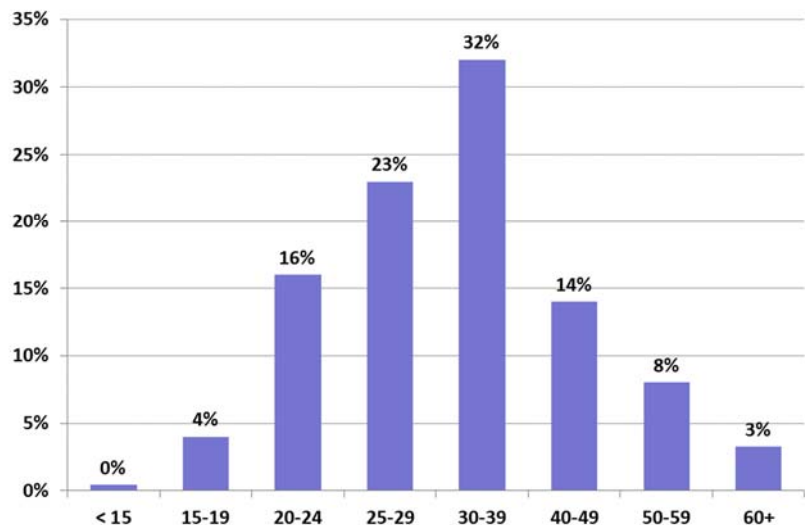


Figure 6.07 shows men continue to represent the majority of cases (72%): African American men specifically, are most impacted, accounting for 44% of total cases, white men accounting for 23%, and Hispanic/other men 5%. Women account for 28% of the total primary and secondary syphilis cases: African American women comprised 12%, white women 14%, and Hispanic/other women less than 2%. Two percent of primary and secondary syphilis cases have 'unknown' race.

Forty-three percent of primary and secondary syphilis cases diagnosed in 2021 were under the age of 30. Four percent age 15-19, 16% were age 20-24, and 23% were age 25-29. Fifty-seven percent were over the age of 30; 32% 30-39, 14% 40-49, and 11% 50+ (Figure 6.08).

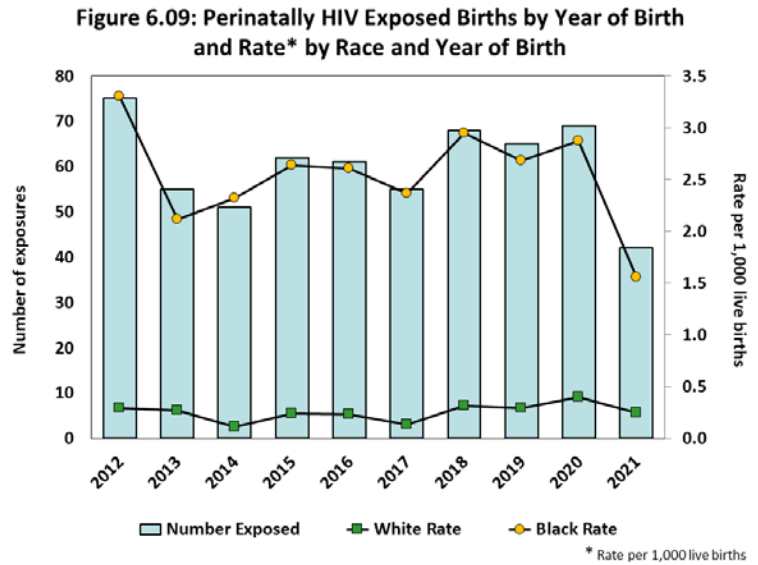
**Figure 6.08: Proportion of 2021 Primary and Secondary Syphilis Cases by Age Group**



## Special Populations

### Perinatally HIV exposed births

The number of perinatally HIV exposed births averages around 60 per year, while perinatally acquired HIV cases average one per year. This translates into 1.5% of perinatally HIV exposed births testing positive for HIV. Figure 6.09 shows the number of perinatally HIV exposed births (values on left) and the rate by race of mother (values on right). In 2021, the exposure rate for African American women is seven times higher compared to white women.

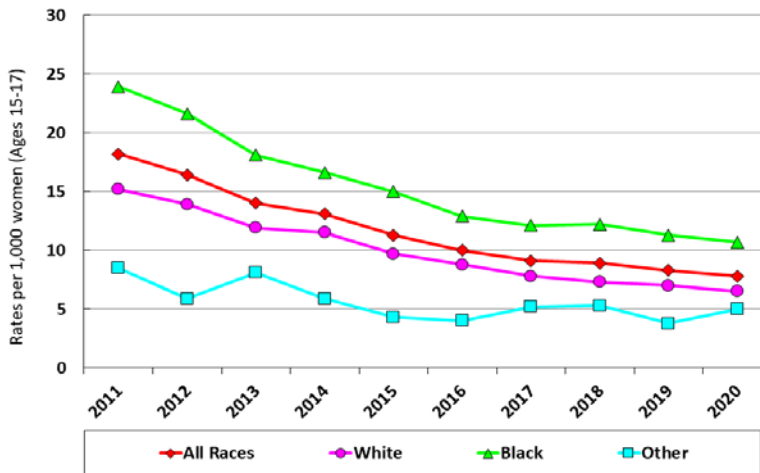


## Teenage Pregnancy

Pregnancy birth and abortion rates, like STI rates, are indications of the extent of unprotected sexual activity in a population.

African American girls between the ages of 10 and 14 have continued to have higher rates of live births than their white counterparts. However, the rate has decreased from 1.1 in 2010 to 0.4 per 1,000 live births in 2019.

**Figure 6.10: South Carolina Teens Age 15 - 17 Live Birth Rate**

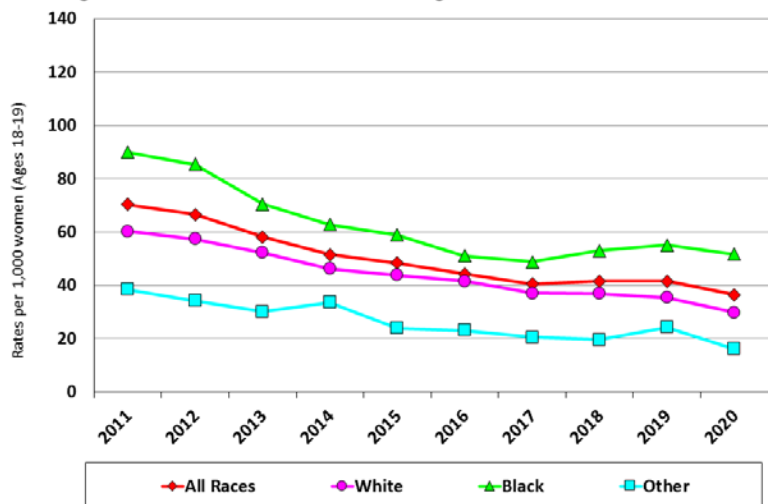


Source – SCDHEC, Vital Records, SC Residence Data

Teenage live births among 15- to 17-year-old South Carolinians have decreased from a rate of 18.2 per 1,000 live births in 2011 to 7.8 in 2020: a 57% decline (Figure 6.10). Similar data are also seen when viewing teen birth rates by racial/ethnic subgroups. The rate for white 15- to 17-year-old teens was 15.2 in 2011 and 6.5 in 2020, representing a 57% decline. The rate for African American 15- to 17-year-old teens declined 55% from 23.9 per 1,000 live births in 2011 to 10.7 in 2020.

Figure 6.11 shows the teen birth rates (per 1,000 live births) for 18- and 19-year-olds. As with the 15-17 age group, African American teenage girls continue to have higher live birth rates than other races. All races have seen an overall decrease in the live birth rates from 2011 (70.3 per 1,000 live births) to 2020 (36.4 per 1,000 live births).

**Figure 6.11: South Carolina Teens Age 18 – 19 Live Birth Rates**



Source – SCDHEC, Vital Records, SC Residence Data

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

### **Behavioral Risk Factor Surveillance System (BRFSS)**

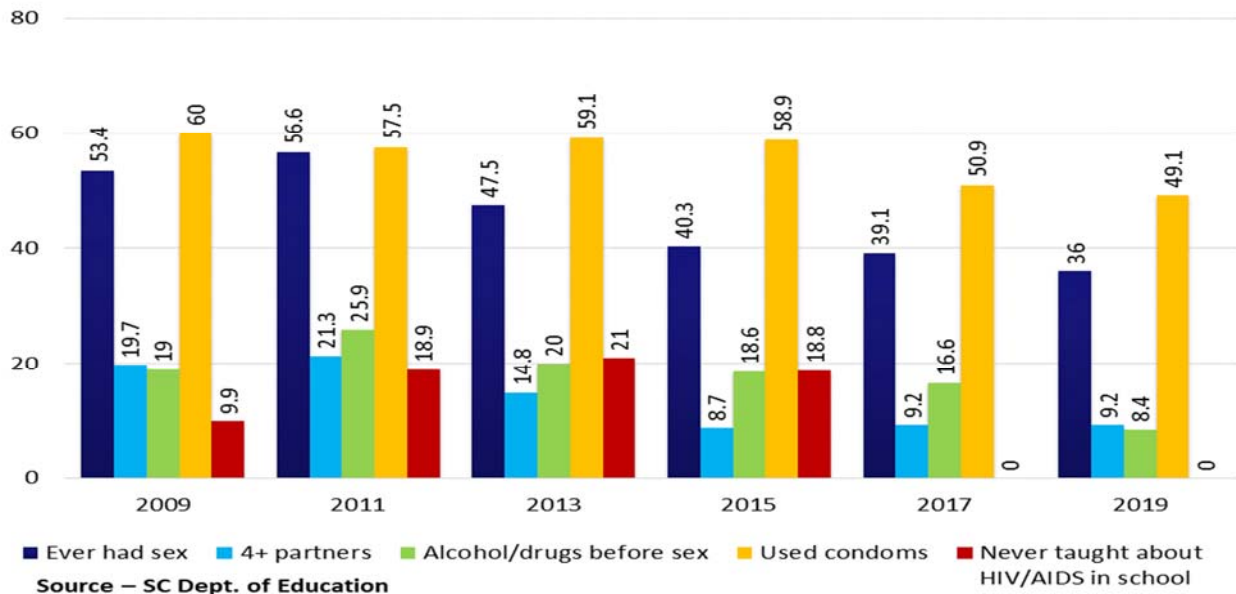
The Behavior Risk Factor Surveillance System is the world's largest random telephone survey of non-institutionalized population aged 18 or older that is used to track health risks in the United States. Several core questions address knowledge, attitudes, beliefs, and behaviors regarding sexually transmitted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

The HIV/AIDS questions for the 2020 BRFSS survey focused on respondents HIV/AIDS testing history. Results show that when asked about ever being tested for HIV themselves, 40% of respondents indicated ever being tested. African Americans were more likely (52%) to have been tested than Caucasians (35%). Men are only slightly less likely to have been tested than women (39.5% versus 40.6%).

### **Youth Risk 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 6.12: Proportion of High School Students Indicating Sexual Risks, 2009-2019**



### Individual with Substance Use Disorder

Drug use is known to be a major factor in the spread of HIV infection. The Centers for Disease Control (CDC) specifically includes PWID as a transmission category for the classification of cases that summarizes a person’s possible HIV risk factor. PWID is considered a 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 becoming infected with HIV or another sexually transmitted disease. Often, substance users have multiple sexual partners and do not protect themselves during sexual activity. Also, substance users may have an increased risk of carrying sexually transmitted diseases; this can increase the risk of becoming infected with HIV, or of transmitting HIV infection.

According to the South Carolina Department of Alcohol and Other Drug Abuse Services (DAODAS), 4% of discharged episodes in federal fiscal year 2021 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).





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