

South Carolina
Epidemiologic Profile of
HIV, AIDS, and
Sexually Transmitted Infections
2023



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Table of Contents

List of Contributors.....	4
List of Figures: Epidemiologic Profile	5
Acronyms: Epidemiologic Profile.....	8
Definitions: Epidemiologic Profile.....	10
Executive Summary.....	12
Overview of HIV/AIDS in South Carolina.....	14
Overview of Epidemiologic Profile.....	15
Types and Quality of Data	16
DHEC’s Enhanced HIV/AIDS Reporting Surveillance System (eHARS)	16
DHEC’s South Carolina Infectious Disease and Outbreak Reporting Network (SCION).....	17
DHEC Clinics’ HIV Counseling and Testing Program Data	18
Ryan White HIV/AIDS Program Services Report	19
South Carolina Community Assessment Network (SCAN)	19
U.S. Department of Health and Human Services (DHHS): National Survey on Drug Use and Health (NSDUH)	19
Behavioral Risk Factor Surveillance System (BRFSS).....	20
Youth Risk Behavior Surveillance System (YRBSS).....	20
Sociodemographic Characteristics of the Population	21
The State	21
Demographics	21
Nativity	22
Socioeconomic Status.....	22
Education & Poverty Level	22
Employment.....	22
Access to Care.....	22
Housing	23
Summary	23
Impact of HIV/AIDS on the Population	24
Gender.....	25

Race/Ethnicity	26
Age.....	28
Risk Exposure.....	29
Residence	32
Mortality.....	34
HIV Risk Factors	36
Characteristics of HIV/AIDS in People at Highest Risk.....	36
Characteristics of Men who have Sex with Men.....	37
Prevalence of Men Who Have Sex with Men Behavior.....	37
Summary	39
Characteristics of High-Risk Heterosexuals.....	40
Prevalence of High-Risk Heterosexual Behavior.....	40
Summary	43
Characteristics of Persons who Inject Drugs (PWID)	44
Infants and Children: (Children under 13 years of age)	46
Patterns of Service Utilization of People with HIV	47
People Receiving HIV Counseling and Testing at County Health Departments.....	47
Ryan White Part B	47
AIDS Drug Assistance Program (ADAP)	50
HIV Continuum of Care	53
Methodology	53
HIV Continuum of Care – Diagnosed Prevalence	53
HIV Continuum of Care – Linked to Care.....	57
Other Populations at Risk	59
Sexually Transmitted Infections (STIs).....	59
Chlamydia	59
Gonorrhea.....	61
Syphilis	62
Total Syphilis.....	62
Primary and Secondary Syphilis	63
Special Populations	64
Perinatally HIV exposed births	64

Teenage Pregnancy	64
Other Behavioral/Risk Factors Contributing to HIV/AIDS and STIs.....	66
Behavioral Risk Factor Surveillance System (BRFSS)	66
Youth Risk Behavior Surveillance Survey (YRBSS)	66
Individuals with Substance Use Disorder.....	67
Other Sources of Information Beyond the Profile.....	68

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List of Figures: Epidemiologic Profile

- Figure 1.01 South Carolina HIV/AIDS Incidence, Prevalence, and Deaths
- Figure 1.02 Selected Demographics Information South Carolina
- Figure 2.01 Disproportionate S.C. HIV Impact by Gender
- Figure 2.02 S.C HIV/AIDS Case Rate Per 100,000 for Males and Females
- Figure 2.03 Proportion of Persons Living with HIV/AIDS by Race/Ethnicity
- Figure 2.04 Disproportionate HIV Impact by Race/Ethnicity/Gender, S.C.
- Figure 2.05 S.C. HIV/AIDS Prevalence Rates by Race/Gender
- Figure 2.06 S.C. HIV/AIDS Case Incidence Rates by Race/Gender
- Figure 2.07 Disproportionate S.C. HIV Impact by Age
- Figure 2.08 S.C. HIV/AIDS Incidence Case by Age
- Figure 2.09 Proportion of Persons Living with HIV/AIDS by Risk Exposure
- Figure 2.10 Proportion of HIV/AIDS Cases by Risk Exposure
- Figure 2.11 New S.C. HIV/AIDS Cases Race/Ethnicity and Gender: Proportion of No Risk Identified Compared to Proportion of Reported Cases
- Figure 2.12 Proportion of Male HIV/AIDS Cases by Exposure Category
- Figure 2.13 Proportion of Female HIV/AIDS Cases by Exposure Category
- Figure 2.14 Proportional Distribution of Male HIV/AIDS Cases by Exposure Category
- Figure 2.15 Proportional Distribution of Female HIV/AIDS Cases, by Exposure Category
- Figure 2.16 S.C. HIV Prevalence Rates, African American Rate
- Figure 2.17 S.C. HIV/AIDS Incidence Rates: Three Year Average Rate African American
- Figure 2.18 S.C. HIV Prevalence Rates, White Rate
- Figure 2.19 S.C. HIV/AIDS Incidence Rates: Three Year Average Rate White
- Figure 2.20 Deaths Due to AIDS in South Carolina
- Figure 2.21 Characteristics of Persons who Died of AIDS
- Figure 3.01 Number of Persons Living with HIV/AIDS by Year and Reported Risk
- Figure 3.02 Number of new HIV/AIDS Cases by Year of Diagnosis and Reported Risk

- Figure 3.03 Proportion of Men with HIV/AIDS Who Reported a Risk of MSM by Race/Ethnicity
- Figure 3.04 Percent of MSM HIV/AIDS Cases Diagnosed by Age Group & Race/Ethnicity
- Figure 3.05 Percent of MSM Living with HIV/AIDS by Age/Race
- Figure 3.06 S.C. HIV/AIDS MSM Prevalence: MSM Risk
- Figure 3.07 Proportion of Heterosexual HIV/AIDS Cases by Race/ethnicity
- Figure 3.08 S.C. HIV/AIDS Cases attributed to Heterosexual Transmission, by Gender and Year of Diagnosis
- Figure 3.09 Percent Heterosexual S.C. HIV/AIDS Cases Diagnosed by Age/Race/Gender
- Figure 3.10 Percent of Heterosexuals Living with HIV/AIDS by Age group and Race/Ethnicity/Gender
- Figure 3.11 S.C. HIV/AIDS Prevalence: Heterosexual Risk
- Figure 3.12 S.C. HIV/AIDS Incidence Rates: Three Year Average Rate Female Rate
- Figure 3.13 Number of New HIV/AIDS Cases due to Persons who Inject Drugs by Gender, Race and Year of Diagnosis
- Figure 3.14 Number of HIV/AIDSs Cases Due to Persons who Inject Drugs by Gender and Year of Diagnosis
- Figure 3.15 Proportion of Persons who Inject Drugs Diagnosed with HIV/AIDS by Race/Gender
- Figure 3.16 Percent of Persons who Inject Drugs Diagnosed with HIV/AIDS Age Group, Race, and Gender
- Figure 3.17 Percent of Persons who Inject Drugs Living with HIV/AIDS by Race/Gender and Age Group
- Figure 3.18 S.C. HIV/AIDS Prevalence of Persons who Inject Drugs Risk
- Figure 3.19 Number of Children <15 years Old Diagnosed with HIV/AIDS in South Carolina
- Figure 4.01 Characteristics of Ryan White Part B Clients Compared to S.C. Persons Living with HIV/AIDS
- Figure 4.02 South Carolina Ryan White Part B Service Utilization by Service Type
- Figure 4.03 Characteristics of ADAP Clients Compared to S.C. Persons Living with HIV/AIDS
- Figure 4.04 ADAP Patient Profile Compared to Persons Living with HIV/AIDS
- Figure 4.05 South Carolina ADAP Service Type
- Figure 5.01 Number and Percentage of Persons Engaged in Each Step of the HIV Continuum of Care

- Figure 5.02 Number and Percentage of Persons Engaged in Each Step of the HIV Continuum of Care, by Diagnosis
- Figure 5.03 Number and Percentage of Persons Engaged in Each Step of the HIV Continuum of Care, by Gender
- Figure 5.04 Number and Percentage of Persons Engaged in Each Step of the HIV Continuum of Care, by Race/ethnicity
- Figure 5.05 Number and Percentage of Persons Engaged in Each Step of the HIV Continuum of Care, by Age group
- Figure 5.06 Number and Percentage of Persons Engaged in Each Step of the HIV Continuum of Care, by Reported Risk
- Figure 5.07 Percentage of Persons linked to care within 3, 6, and 12 Months after HIV Diagnosis Among Total Number of Persons Diagnosed with HIV Infection
- Figure 5.08 Of Persons Linked to Care Within 3 Months of Diagnosis: Timing of Test Date Relative to Diagnosis Date
- Figure 6.01 South Carolina Count of Reported Chlamydia Cases by Year of Diagnosis
- Figure 6.02 Proportion of 2022 Chlamydia Cases by Age Group
- Figure 6.03 South Carolina Count of Reported Gonorrhea Cases by Year of Diagnosis
- Figure 6.04 Proportion of 2022 Gonorrhea Cases by Age group
- Figure 6.05 South Carolina Count of Reported Total Syphilis Cases by Year of Diagnosis
- Figure 6.06 Proportion of 2022 Total Syphilis Cases by Age group
- Figure 6.07 South Carolina Count of Reported Primary and Secondary Syphilis Cases by Year of Diagnosis
- Figure 6.08 Proportion of 2022 Primary and Secondary Syphilis Cases by Age group
- Figure 6.09 Perinatally HIV Exposed Births by Year of Birth and Rate by Race and Year of Birth
- Figure 6.10 South Carolina Teens Age 15 – 17 Live Birth Rate
- Figure 6.11 South Carolina Teens Age 18 – 19 Live Birth Rate
- Figure 6.12 Proportion of High School Students Indicating Sexual Risks

Acronyms: Epidemiologic Profile

ADAP – AIDS Drug Assistance Program

AIDS – Acquired Immune Deficiency Syndrome

BRFSS – Behavior Risk Factor Surveillance System

CBHSQ – Center for Behavioral Health Statistics and Quality

CDC – Centers for Disease Control and Prevention

DAODAS – Department of Alcohol and Other Drug Abuse Services

DHEC – Department of Health and Environmental Control

DHHS – Department of Health and Human Services

EHARS – Enhanced HIV/AIDS Reporting Surveillance System

FDA – Food and Drug Administration

FLIS – Full Low-Income Subsidy

FPL – Federal Poverty Level

HIV – Human Immunodeficiency Virus

HPC – HIV Planning Council

HPSA - Health Professional Shortage Area

HRSA – Health Resources and Services Administration

IDU – Injection Drug User

MSM – Men Who Have Sex With Men

NIR – No Identified Risk

NSDUH – National Survey on Drug Use and Health

PEP – Post Exposure Prophylaxis

PLWHA – People Living With HIV/AIDS

PHS – Public Health Services

PrEP – Pre-Exposure Prophylaxis

PWH – People With HIV

PWID – Persons Who Inject Drugs

RSR – Ryan White HIV/AIDS Program Services Report

RW – Ryan White

SAMHSA – Substance Abuse and Mental Health Services Administration

SCAN – South Carolina Community Assessment Network

SCION – South Carolina Infectious Disease and Outbreak Reporting Network

SC – South Carolina

STI – Sexually Transmitted Infection

SUD – Substance Use Disorder

U=U – Undetectable Equals Untransmittable

YRBSS – Youth Risk Behavior Surveillance System

Definitions: Epidemiologic Profile

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

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

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

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

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

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

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

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

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

NOTE: Beginning with the 2016 Epidemiologic Profile (2015 data), Prevalence numbers are based on Last Known Residence. This is a change from previous years Prevalence numbers, which were based on Residence at Time of Diagnosis. This change makes comparisons with Epidemiologic Profiles before 2016 inaccurate and it should not be done.

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

Rates are used to:

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

They may also be used to help:

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

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

Executive Summary

In 2022, an estimated 20,016 people were living with the Human Immunodeficiency Virus (HIV) or Acquired Immune Deficiency Syndrome (AIDS) in South Carolina (S.C.), according to the S.C. Epidemiological Profile for 2023. Approximately 16% of South Carolinians are unaware of their HIV status and therefore not taking advantage of available HIV/AIDS treatment and prevention services. Seven hundred and seventy newly diagnosed HIV/AIDS cases occurred in 2022, according to Centers for Disease Control and Prevention (CDC) HIV Surveillance data; the majority of cases (55%) were among African Americans. Of the newly diagnosed HIV/AIDS cases with a reported risk factor, the majority (86%) were men who have sex with men (MSM) while persons age 20-29 comprised the largest proportion (37%) of newly diagnosed HIV/AIDS cases. From 2013 to 2022, the rate of newly diagnosed HIV/AIDS cases among women declined by nine percent, while men experienced a five percent increase during the same study period. Overall, there has been a five percent decrease in the rate of newly diagnosed HIV/AIDS cases in S.C. in the last 10 years. People living with HIV/AIDS who achieve viral suppression and stay virally undetectable cannot transmit HIV sexually to their partner(s), otherwise known as Undetectable=Untransmittable or U=U.

South Carolina has made significant strides in combatting HIV/AIDS by diversifying HIV testing options, including at-home, mobile, and retail pharmacy testing programs. This expansion provided residents with convenient access to testing and rapid connections to HIV care, treatment, or prevention services such as PrEP, and PEP. Successes also include reengaging individuals who have fallen out of care through Data-to-Care services, addressing the co-occurrence of Sexually Transmitted Infections (STIs) and substance use disorders, enhancing HIV awareness campaigns via social marketing, addressing stigma and discrimination, identifying clusters through detection and response activities, and promptly connecting cluster members to essential HIV services. Additionally, collaborations have been expanded through community engagement activities with prevention and care partners.

To ensure residents of S.C. receive the same quality of services regardless of their HIV status, the state's providers can:

- implement services in a status-neutral fashion;
- address the syndemic of HIV, STIs, and substance use disorders (SUDs); and
- address the social determinants of health and stigma.

A commitment to these overarching objectives provides a viable pathway to ending the HIV epidemic in the state.

The 2023 South Carolina Epidemiological Profile highlights the current data and trends in the HIV and STIs in the state showing the sociodemographic characteristics of the population, the impact of HIV/AIDS and STIs on different population groups, risk behaviors, and the HIV/AIDS Continuum of Care. 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, and for the allocation of resources. The goal of the plan is to provide a responsive, effective, and efficient continuum of services for people living with HIV (PLWH) and those at risk for HIV acquisition, as well as to support the prevention and control of STIs.

Health care providers and laboratories are required by law to report certain STIs (e.g., HIV, syphilis, chlamydia, gonorrhea, and chancroid) to the South Carolina Department of Health and Environmental Control (DHEC). The data are used to illustrate the populations diagnosed with HIV/AIDS and STIs as well as to characterize the nature of risk-taking behaviors associated with HIV transmissions. The data presented are compiled from multiple sources due to the inability of one data system to depict a complete picture of the state's HIV/AIDS and STI cases.

The HIV epidemic in S.C. is predominantly driven by sexual exposure, primarily among men who have sex with men and heterosexuals at risk. Additionally, African Americans are disproportionately impacted by HIV/AIDS, gonorrhea, chlamydia, and syphilis and are over-represented among all risk populations. The sociodemographic characteristics of South Carolinians include poverty, uninsured population, and low education and unemployment. A more in-depth look into the patterns of service utilization for PWH consists of the Ryan White (RW) Part B services, the AIDS Drug Assistance Program (ADAP), and the HIV Continuum of Care. Of the PWH utilizing RW Part B services, medical case management services were the most widely used.

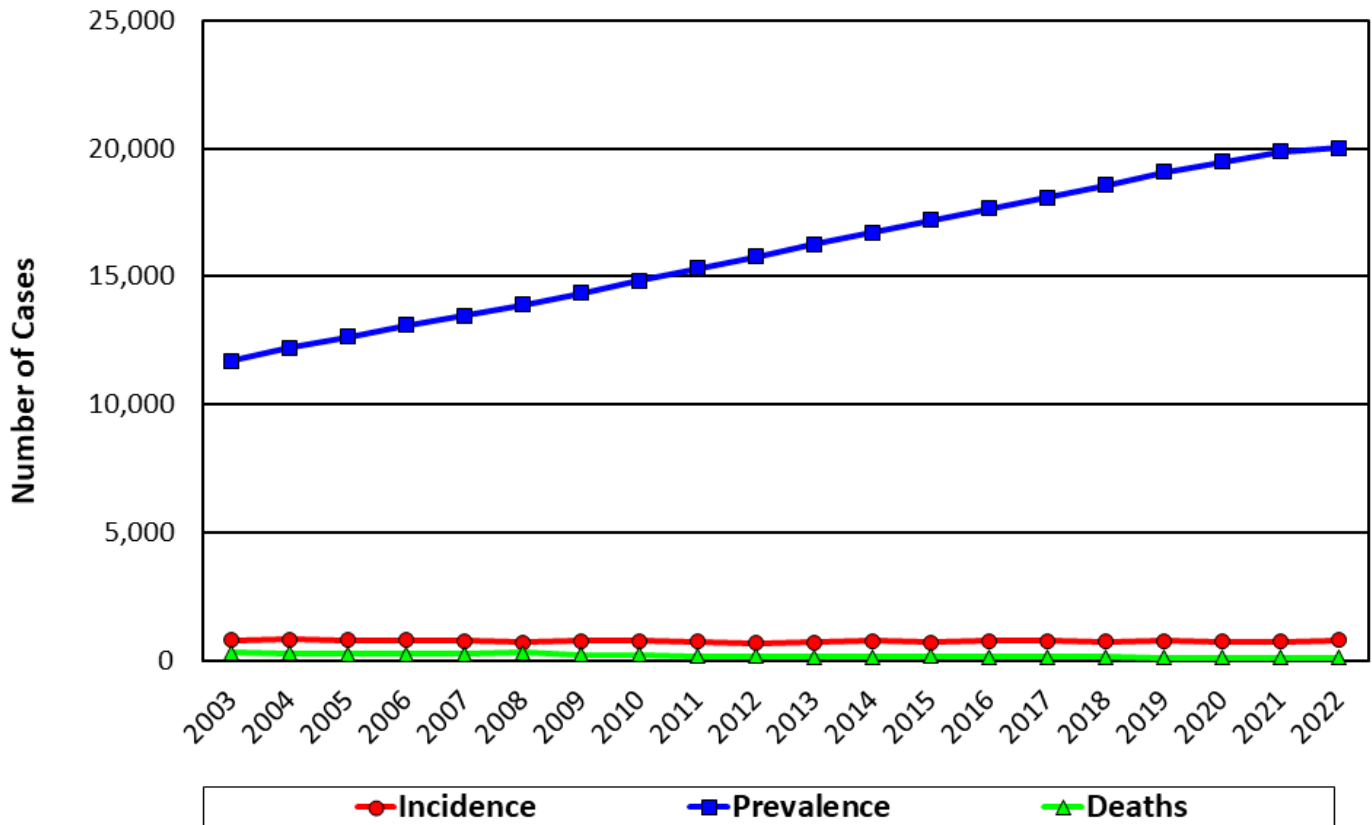
The profile will discuss the Ending the Epidemics initiative and provide information on the S.C. HIV Planning Council (HPC). Ending the Epidemics in S.C. will be accomplished by providers and communities working together to reduce the number of South Carolinians with new HIV infections. This goal will be achieved through two main strategies: 1) implementing evidence-based Implementation Science prevention strategies, and 2) increasing the number of PWH in S.C. 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).

The HPC has a primary responsibility to review the Epidemiologic Profile and ensure HIV prevention services and resources are directed by DHEC to the populations and geographic areas most affected by HIV/AIDS.

Overview of HIV/AIDS in South Carolina

Figure 1.01: Total Incidence¹, deaths, and Prevalence² of HIV/AIDS cases in South Carolina since 2003.

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.

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

²Prevalence: 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 S.C. 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 United States (U.S.) among men and women, most age groups, and all income levels. Therefore, the number of cases reporting Injecting Drug Use as a risk for HIV should be closely monitored.

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

Overview of Epidemiologic Profile

The Epidemiologic Profile provides information to the S.C. HIV Planning Council (HPC) on the number and characteristics of people acquiring HIV. 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 S.C. 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 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 S.C.

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

Risk categories are assigned like the methods described 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 S.C., about 34% of adult/adolescent HIV infection/AIDS cases reported in 2022 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 STIs (including syphilis, chlamydia, gonorrhea, chancroid, hepatitis) to DHEC. In 2019, S.C. 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 S.C. includes the counseling and testing site type, number of clients tested and number positive for each risk group, number tested, number positive by type of test site, and number tested and number positive by race/ethnicity, gender, and age group. Clients receive confidential counseling and testing in each of the 46 county health department clinics.

The counseling and testing data system is standardized and has been in place for many years. Data in the "South Carolina Epidemiologic Profile of HIV, AIDS, Sexually Transmitted Infections", hereafter referred to as the Epi Profile, reflects 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 who has 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 S.C. 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 out counseling and testing services or agree to be tested after consultation with a counselor at a clinic site. However, for those clinic sites in which clients can obtain services other than counseling and testing for HIV, and in which all or nearly all clients receive HIV testing, (for example, maternity and STI clinics), data for those sites approximates the reliability of the blinded surveys.

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 S.C. RW 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 age 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 U.S. To assess and monitor the nature of drug and alcohol use and the consequences of abuse, NSDUH strives to:

- provide accurate data on the level and patterns of alcohol, tobacco and illegal substance use and abuse;
- track trends in the use of alcohol, tobacco, and various types of drugs;
- assess the consequences of substance use and abuse; and
- identify those groups at high risk for substance use and abuse.

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

Participants complete the interview in the privacy of their own home. A professional RTI interviewer personally visits each selected person to administer the interview using a laptop computer. 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 age 18 or older and it is used to track health risks in the U.S. In 1981, the CDC, in collaboration with selected states, initiated a telephone based behavioral risk factor surveillance system to monitor health risk behaviors. South Carolina began administering BRFSS in 1984. Several core questions address knowledge, attitudes, beliefs, and behaviors regarding STIs, particularly AIDS.

Youth Risk Behavior Surveillance System (YRBSS)

The Youth Risk Behavior Surveillance System (YRBSS) was developed cooperatively by the CDC, several federal agencies and state departments of education to measure the extent to which adolescents engage in health risk and health enhancing behaviors. The system consists of national, state, and local school-based surveys. In S.C., 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 usable 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 S.C. 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 U.S.

This survey is conducted by South Carolina Healthy Schools at the Department of Education and relies heavily on surveillance methods and self-reports; so, it depends on how well respondents understand the questions and how well they can accurately and honestly answer

the question. However, the questionnaire has demonstrated good test-retest validity, and the data are edited, checked, and weighted. These data are representative of only public middle school students (sixth-eighth grade) or public high school students (ninth-12th grade) in S.C.

Sociodemographic Characteristics of the Population

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

The social, economic, and cultural context of HIV and STIs must be considered when funding, designing, implementing, and evaluating prevention programs for diverse populations. This section provides background information on S.C.'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 U.S. The state is bounded on the north by North Carolina, on the southeast by the Atlantic Ocean, and on the southwest by Georgia. It ranks 40th among the 50 states in size and has a geographic area of 30,061 square miles. South Carolina has a diverse geography that stretches from the Blue Ridge Mountains in the northwest corner to the beaches along the Atlantic coast. Manufacturing is the state's leading industry, followed by tourism and forestry. The total number of South Carolinians is 5,282,634, according to 2022 S.C. population estimate.

Demographics

Gender: Of the 5,282,634 people living in S.C., 2,694,143 (51.3%) are female and 2,588,491 (48.7%) 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		5,282,634
Median Age		39.9
Sex	Male	48.7%
	Female	51.3%
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 2022

Age: Persons age 19 and under made up 24% of S.C.'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 two percent of the total population so are grouped into a category of "Other." Caucasians comprise the largest proportion of S.C.'s population, 64%; Black/African Americans comprise 27%; Hispanic origin comprise six percent; and Other comprise three percent.

Nativity

In 2022, the population of S.C. was 5,282,634, according to U.S. Census Bureau data. Of these, 5,009,259 were native born while 273,375 were foreign born. Fifty-six percent of the native born were born in S.C., 43% in another state in the U.S., while one percent were born in Puerto Rico or U.S. Island Areas or born abroad of American parents.

Socioeconomic Status

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

Education & Poverty Level

South Carolina continues to rank low in the percentage of people over 25 years of age who have bachelor's degrees or higher. In S.C., 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, S.C. 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 U.S. unemployment rate. Unemployment status is correlated to limited access to health care services, resulting in increased risk for disease.

Access to Care

In S.C., 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 South Carolina Council on Homelessness estimates there are, on average, 5,000 homeless adults and children in S.C. 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, like many Southern states, ranks high for poverty, low educational attainment and uninsured population compared to other U.S. states. These factors can affect one's ability to access prevention and health care services and adhere to regimens for the treatment and care of diseases that may lead to more severe consequences.

Impact of HIV/AIDS on the Population

In the U.S., 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 pre-exposure prophylaxis (PrEP).

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

In S.C., 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, S.C. 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 67 cases of HIV infection reported each month during 2022. The incidence rate in S.C. for 2022 is 15.3 per 100,000 population. As of December 31, 2022, there were an estimated 20,016 S.C. Carolina residents living with diagnosed HIV infection (including AIDS).

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

Gender

Figure 2.01 shows the impact of HIV on the men and women in S.C. Men are disproportionately affected by HIV/AIDS. Men make up 49% of S.C.'s total population but comprise 72% of PLWHA (prevalence). Individuals diagnosed with HIV/AIDS during the two-year period 2021-2022 give an estimate of more recent infections or potentially emerging populations.

Figure 2.01: S.C. Disproportionate HIV Impact by Sex

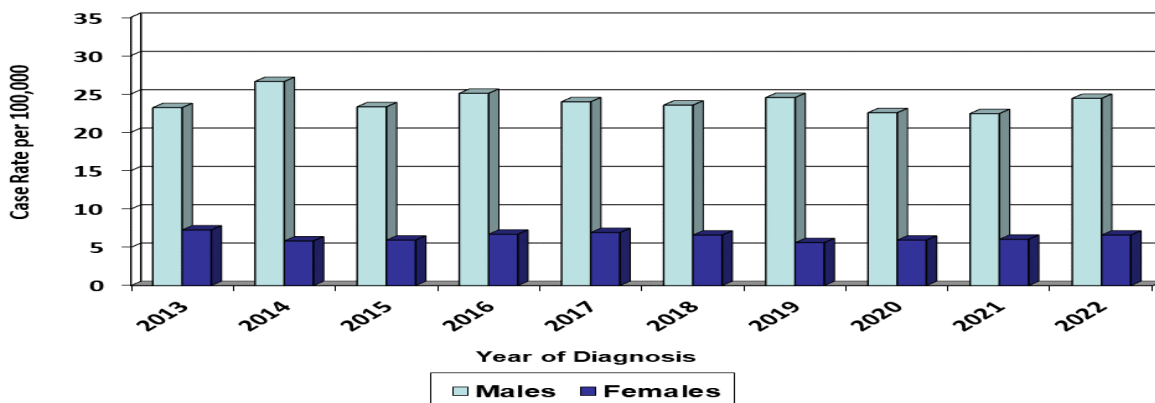
SEX	S.C. Total Population, 2022 est.		Total Estimated Living With HIV/AIDS, 2022		Total HIV/AIDS Diagnosis, 2021-2022	
	No.	%	No.	%	No.	%
Male	2,572,119	49%	14,407	72%	1,193	78%
Female	2,710,515	51%	5,609	28%	341	22%
Total	5,282,634		20,016		1,534	

Figure 2.02 shows the rate per 100,000 population for males and females diagnosed with HIV/AIDS from 2013 to 2022, 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 9% from 2013 (7.26) to 2022 (6.76), and while the rate may fluctuate from year to year, on average, women have had a 1% per year decrease in the rate for new cases.

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

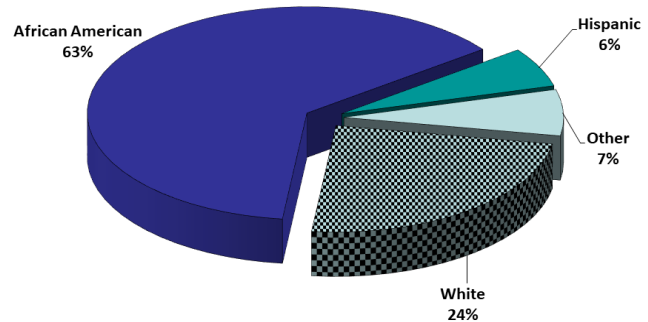
Figure 2.02: S.C. HIV/AIDS Case Rate per 100,000 Males and Females, 2013-2022



Race/Ethnicity

African Americans are disproportionately impacted by HIV/AIDS in S.C. African Americans comprise 27% of the state’s total population, yet 63% 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, 2022



African American men, who comprise only 12% of the state’s population, make up the largest proportion of both PLWHA in 2022 and new diagnosis in 2021-2022 (43% and 41%, respectively). African American women, who similarly comprise only 14% of the population, make up 20% of PLWHA in 2022 and 14% of new diagnosis in 2021-2022. Whites, who comprise the largest proportion of the population in S.C. (31% males; 32% females), make up 24% of PLWHA in 2021-2022 (19% males; 5% females) and 26% of new diagnosis in 2021-2022 (21% males; 5% females), (Figure 2.04).

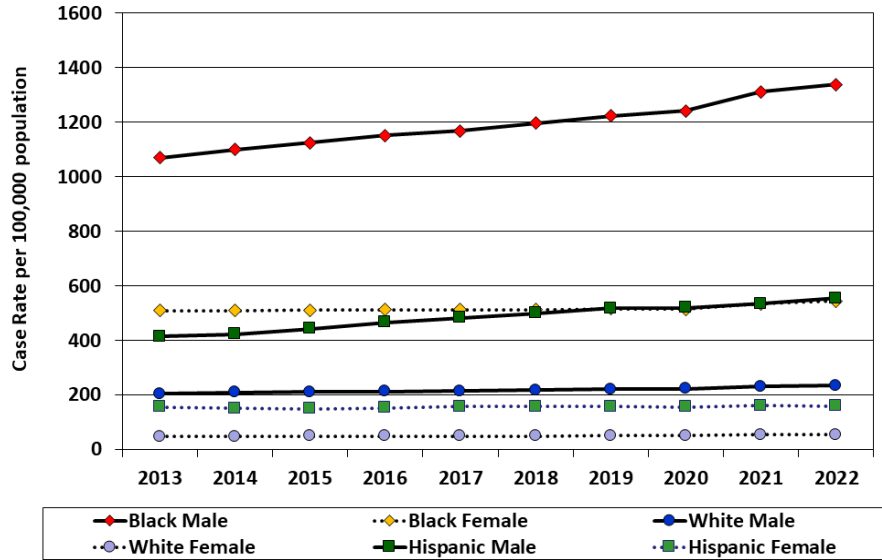
Figure 2.04: Disproportionate HIV Impact by Race/Ethnicity/Gender, S.C.

Race/Ethnicity & Gender	SC Total Population		Total Persons Living With HIV/AIDS, 2022		Total HIV/AIDS Diagnosis, 2021-2022	
	No.	%	No.	%	No.	%
Black Males	634,059	12%	8,485	43%	594	41%
Black Females	720,260	14%	3,923	20%	198	14%
White Males	1,645,269	31%	3,857	19%	310	21%
White Females	1,706,896	32%	923	5%	75	5%
Hispanic Males	182,358	3%	1,009	5%	143	10%
Hispanic Females	165,801	3%	263	1%	31	2%

Figure 2.05: S.C. HIV/AIDS Prevalence Rates by Race/Gender, 2013-2022

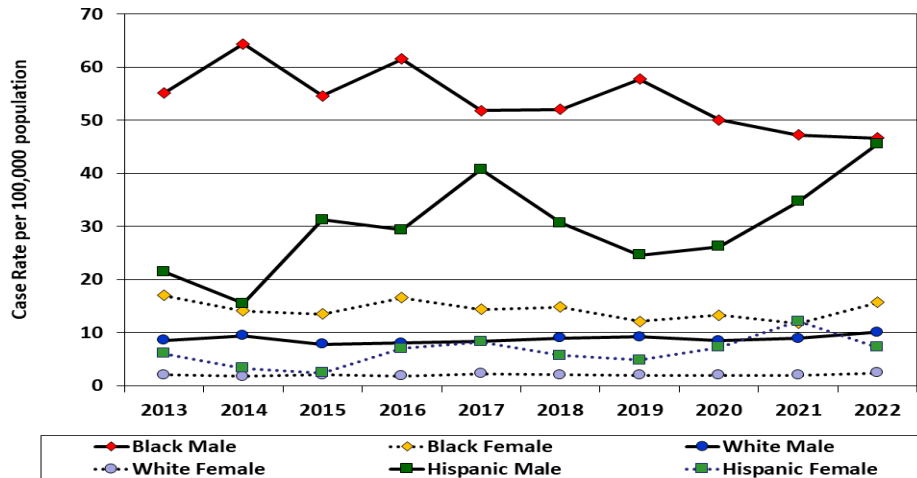
Each year the number of people living with HIV/AIDS continues to grow. Case rates per 100,000 by race and gender show the disparate burden of HIV among African Americans.

As Figure 2.05 shows, the rate per 100,000 population in 2022 is six times higher for black males than for white males, and 10 times higher for black females compared to white females.



In S.C., the trend in the number and rate of people newly diagnosed with HIV/AIDS each year has changed, with a one percent increase in the rate per 100,000 population between 2013 (15.1) and 2022 (15.3).

Figure 2.06: S.C. HIV/AIDS Incidence Rates by Race/Gender, 2013-2022



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 an 8% decrease between 2013 (17.1) and 2022 (15.7) and on average, had a 1% per year decrease in the rate for new cases. While white women have seen an increase over the same time period: 16% increase from 2013 (2.1) to 2022 (2.4), white women averaged a 2.6% per year increase in the rate for new cases. African American men had a 15% decrease in the rate between 2013 (55.1) and 2022 (46.6) and have averaged 1% per year decrease in the rate for new cases. The rate for

white men increased 18% over the same period (8.6 to 10.1) and have also averaged 2% per year increase in the rate for new cases.

Age

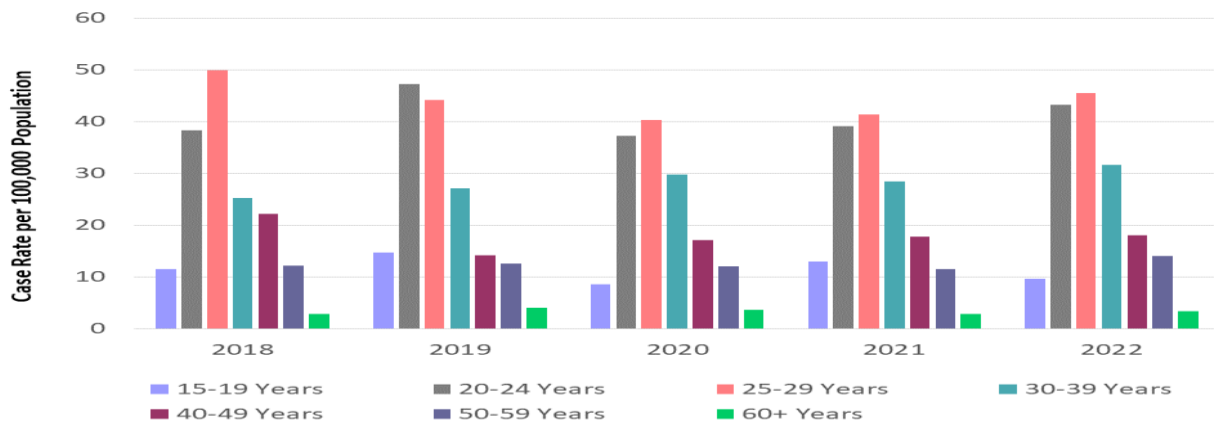
When analyzing HIV/AIDS data by age, the differences between the two measures (incidence and prevalence) become pronounced. With incidence, 68.3% of new cases diagnosed in 2021-2022 are under the age of 40, and with 2022 prevalence, 69% are over the age of 40. For incidence, people age 20-29 comprise the largest proportion, 37% of newly diagnosed cases (20-24, 18%) and (25-29, 19%), and people 30-39 comprise 26%. People under the age of 20 comprise just over 5% of new diagnoses. For prevalence, 18% are age 40-49, 26% are age 50-59, and 25% 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, 2022		Total HIV/ AIDS Diagnosis, 2021-2022	
	No.	%	No.	%	No.	%
<15 Years	916,475	17%	99	0.5%	5	0.3%
15-19 Years	342,071	6%	85	0.4%	76	5%
20-24 Years	353,606	7%	535	3%	282	18%
25-29 Years	327,556	6%	1,293	6%	285	19%
30-39 Years	682,080	13%	4,034	20%	406	26%
40-49 Years	625,484	12%	3,693	18%	223	15%
50-59 Years	675,094	13%	5,241	26%	172	11%
60+ Years	1,360,268	26%	5,036	25%	85	6%

Figure 2.08 shows the HIV/AIDS incidence rates by age groups. From 2018 to 2022, the average change in rate for the 15-19 age group increased by 6.5% and for the 20-24 age group rate increased by 1.5%. The 25-29 age group increased by 3.2%, the 30-39 age group increased by 3%, while the 40-49 age group decreased by 1.2% and the 50-59 age group decreased by 1%. The 60+ age group saw a 2.9% increase.

Figure 2.08: S.C. HIV/AIDS Incidence Case Rate by Age, 2018-2022

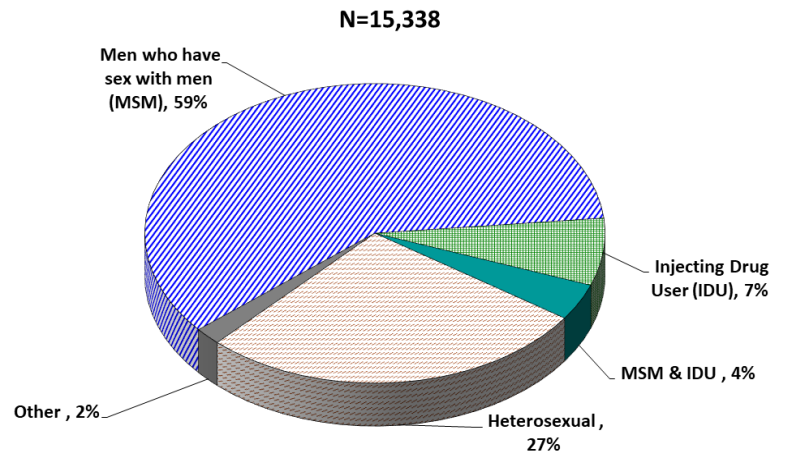


Risk Exposure

Of the cases with an identified risk factor, men who have sex with men was the highest reported risk factor in 2022 for PLWHA (59%). Heterosexual contact accounted for 27% of reported risk factors. Eight percent reported a risk of PWID.

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 2022 (23% had no risk identified).

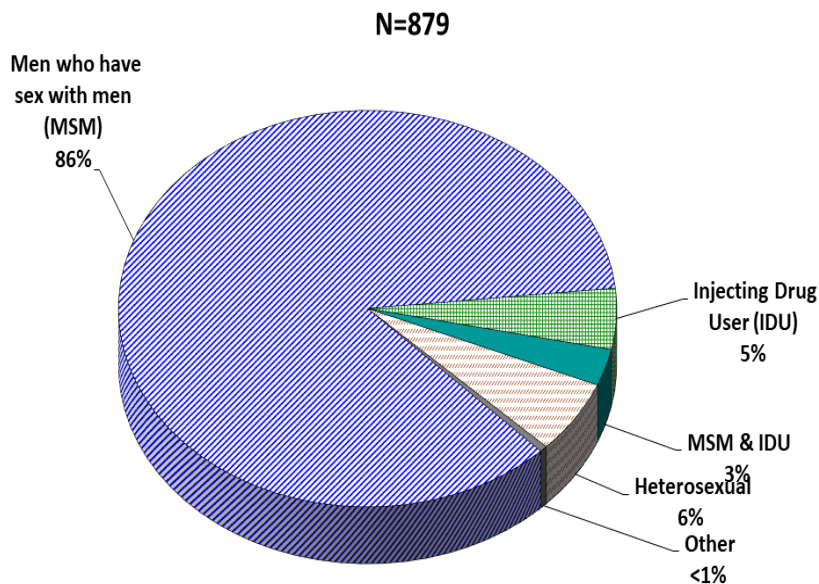
Figure 2.09: Proportion of Persons Living with HIV/AIDS by Risk Exposure, 2022



Note: Total excludes cases with no risk identified.

Figure 2.10 shows reported risk for people newly diagnosed with HIV/AIDS during 2021-2022. The proportion of new cases with a reported risk of MSM was 86% and with a reported risk of heterosexual contact was 6%; PWIDs made up 5% and the combined risk of MSM and PWID 3%. Forty-three 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 2.10: Proportion of HIV/AIDS Cases Diagnosed 2021-2022 by Risk Exposure



Note: Total excludes cases with no risk identified.

**Figure 2.11: New S.C. HIV/AIDS Cases (2021-2022)
Race/Ethnicity and Gender: Proportion of No Risk Identified
Compared to Proportion of Reported Cases**

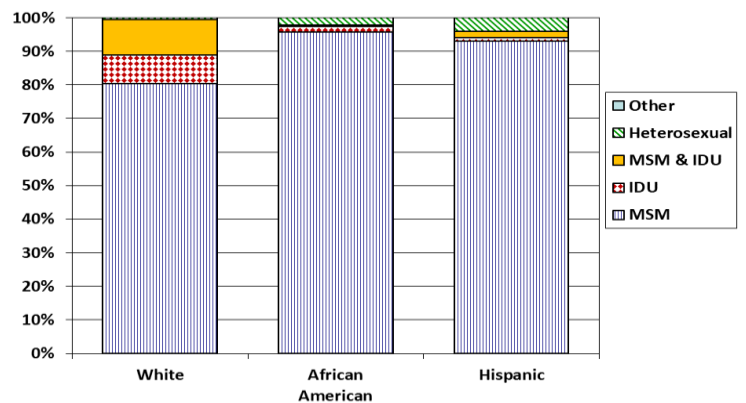
Race/Gender (Adult/Adolescent Cases)	New HIV/AIDS Cases 2021-2022	
	% with No Risk Identified (N=539)	% Cases Reported (N=1,351)
Black Male	32%	44%
Black Female	31%	15%
White Male	16%	23%
White Female	9%	6%
Hispanic Male	8%	11%
Hispanic Female	4%	2%

The race/gender profile of newly diagnosed cases in 2021-2022 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 2021-2022: 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 2021-2022 had no indicated risk.

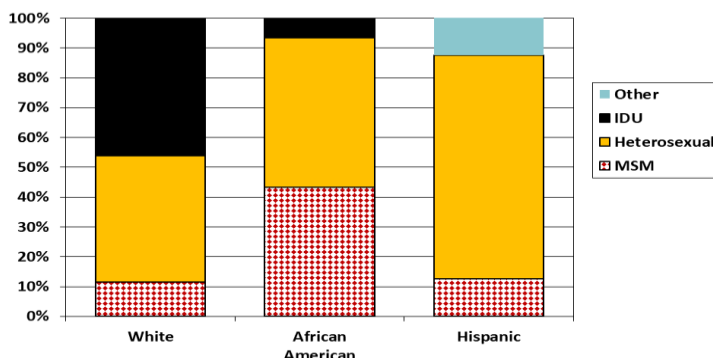
Figure 2.12: Proportion of Male HIV/AIDS Cases by Exposure Category, Diagnosed 2021-2022



Excludes persons with no risk reported.

Among women diagnosed during 2021-2022 heterosexual contact is the most often reported risk (50%). Fifty percent of African American women reported heterosexual

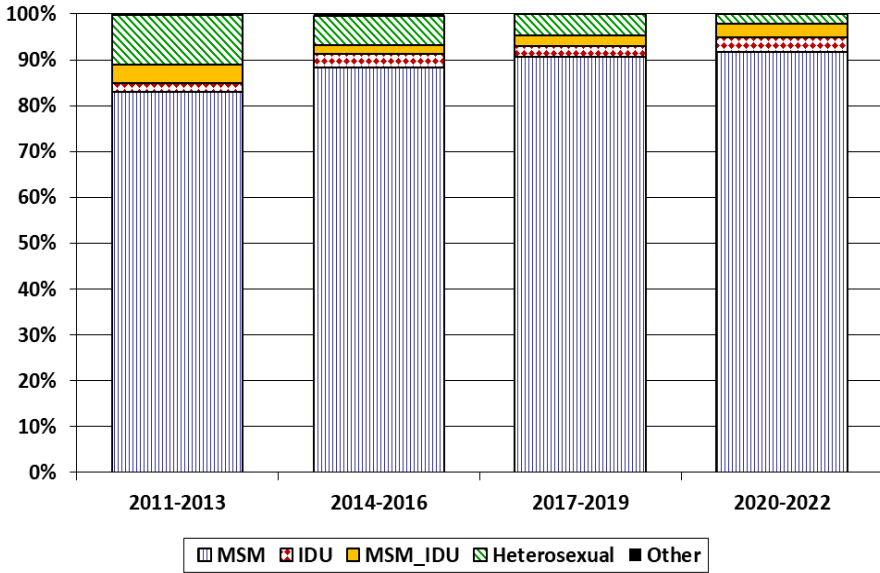
Figure 2.13: Proportion of Female HIV/AIDS Cases by Exposure Category, Diagnosed 2021-2022



Excludes persons with no risk reported.

contact as their risk, while 75% of Hispanic women and 42% of white women reported a risk of heterosexual contact. White women report Injecting Drug Use more often (46%) than Hispanic women (0%), and African American women (7%), (Figure 2.13). Seventy-nine percent of women diagnosed in 2021-2022 had no indicated risk.

Figure 2.14: Proportional Distribution of Male HIV/AIDS Cases by Exposure Category, Diagnosed 2011-2022

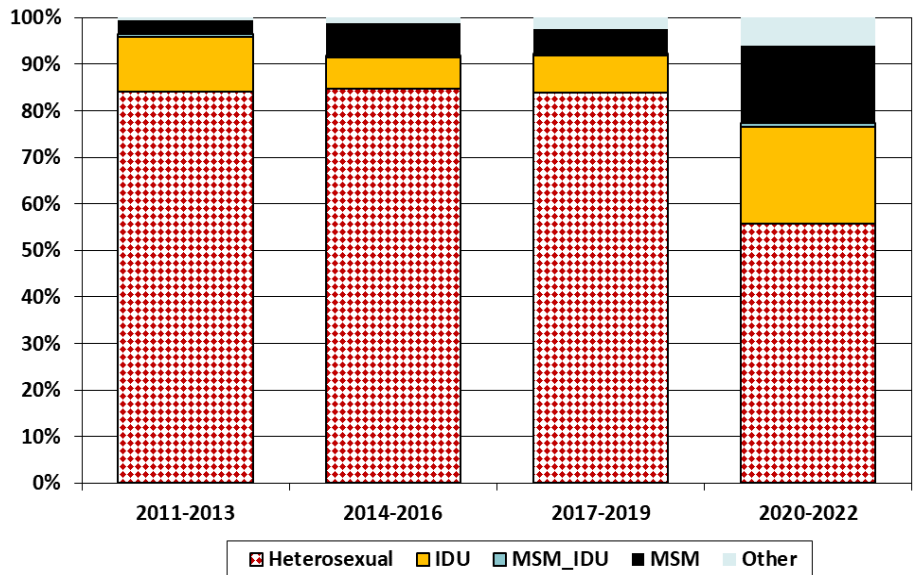


Excludes persons with no risk reported.

Figures 2.14 and 2.15 show the proportion of total HIV/AIDS cases diagnosed during four periods from 2011 to 2022 by gender and risk exposure category for males and females in S.C. Heterosexual contact has decreased 82% from 2011-2013 to 2020-2022 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 2017-2019. However, the proportion of cases due to PWID has increased 158% (11.9% to 21%) between 2011-2022. On the other hand, heterosexual contact decreased by 34% from 2011-2022.

Figure 2.15: Proportional Distribution of Female HIV/AIDS Cases by Exposure Category, Diagnosed 2011-2022



Excludes persons with no risk reported.

Residence

People living with HIV/AIDS are widespread throughout the state. Figure 2.16 shows the 2022 prevalence rate and Figure 2.17 shows the three-year average (2019-2022) incidence rate for African Americans. Thirty percent of S.C. counties have a prevalence rate greater than the state prevalence rate for African Americans (916.2). Thirty-three percent of S.C. counties have a three-year average (2019-2022) incidence rate for African American greater than the state three-year average incidence rate for African Americans (29.7).

FIG 2.16: SC HIV/AIDS Prevalence Rates
2022 HIV/AIDS
African American Rate

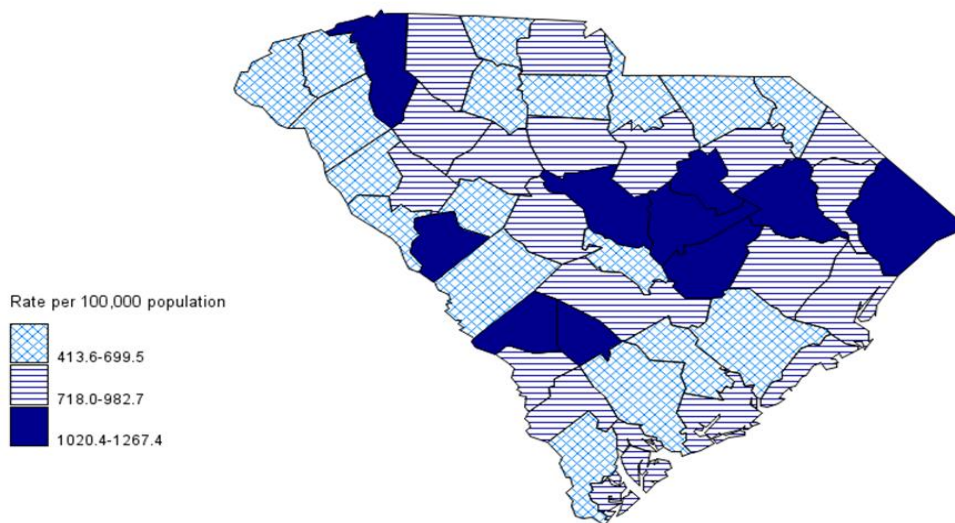
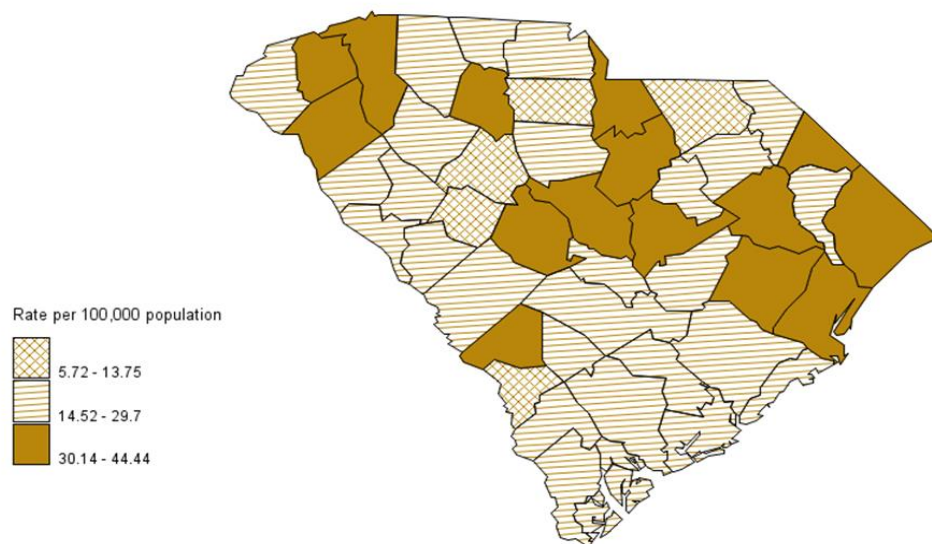


Figure 2.17: SC HIV/AIDS Incidence Rates
2019-2022 HIV/AIDS: Three Year Average Rate
African American Rate



While the HIV/AIDS rate for whites in S.C. is significantly lower than for African Americans, the distribution throughout the state is not dissimilar. Figure 2.18 shows the 2022 prevalence rate and Figure 2.19 shows the three-year average (2019-2022) incidence rate for whites. Fifty percent of S.C. counties have a prevalence rate greater than the state prevalence rate for whites (142.6). Fifty-two percent of S.C. counties have a three-year average (2019-2022) incidence rate for whites greater than the state three-year average incidence rate (5.6).

FIG 2.18: SC HIV/AIDS Prevalence Rates
 2022 HIV/AIDS
 White Rate

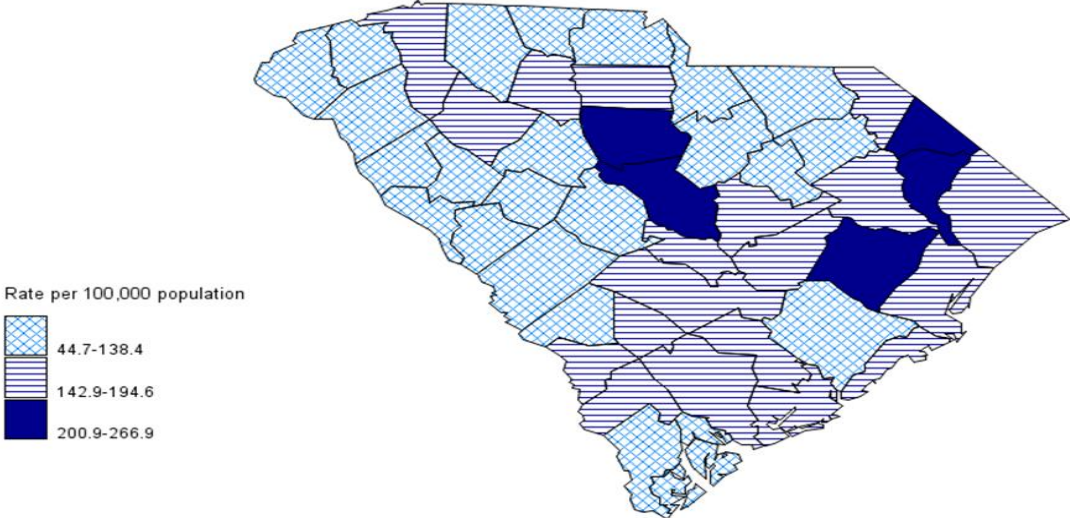
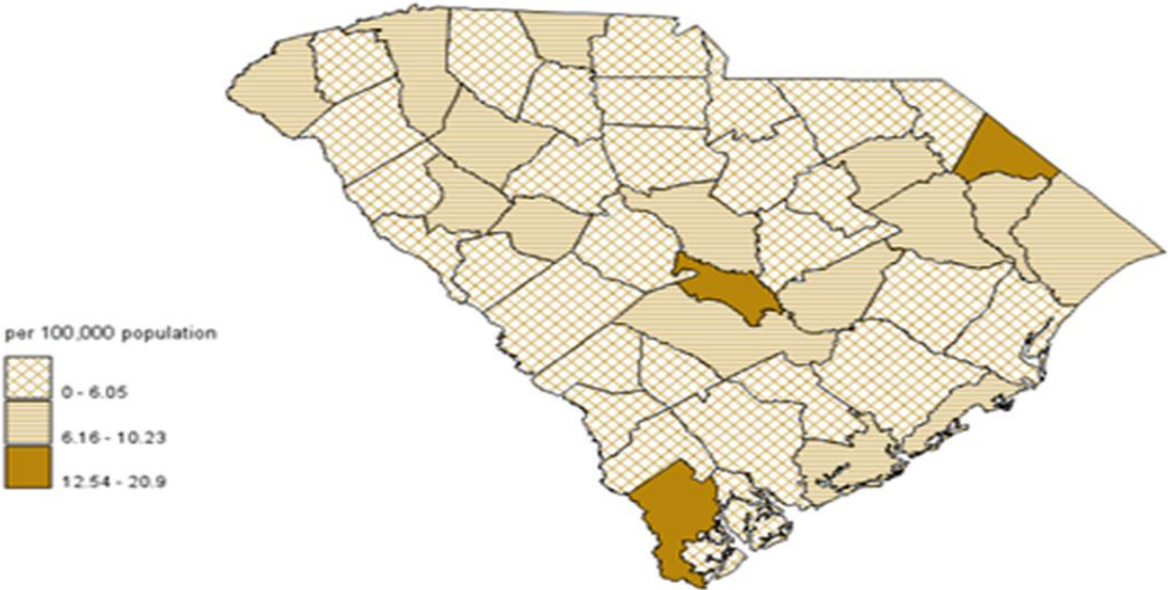


Figure 2.19: SC HIV/AIDS Incidence Rates
 2019-2021 HIV/AIDS: Three Year Average Rate African American Rate



Mortality

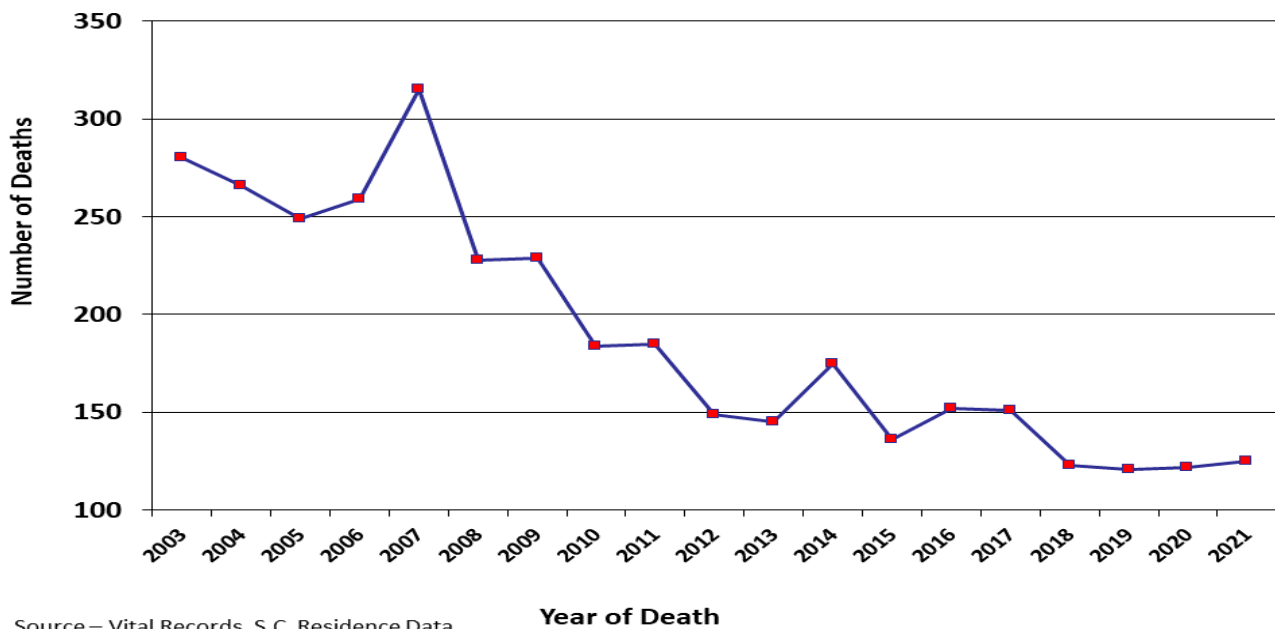
Note: 2021 was the last year of data available when this report was published.

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

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

The largest decline in deaths in S.C. 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, 2003-2021



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

In addition to representing 43% of PLWHA (2022), African American males accounted for the majority of people who died from AIDS (50%) in 2021. African American females accounted for 23% of AIDS related deaths followed by white males (21%). By age group, the majority of deaths occurred among people age 45 and older (74%), (Figure 2.21).

Figure 2.21: Characteristics of Persons who Died of AIDS, 2021

	Number	Percent
Race/Sex		
Black Male	63	50%
Black Female	29	23%
White Male	26	21%
White Female	4	3%
Hispanic/Other Male	2	2%
Hispanic/Other Female	1	1%
Age Group		
<19	0	0%
20-24	2	1%
25-34	28	11%
35-44	33	13%
45-54	54	22%
55-64	68	28%
65+	62	25%

Source – Vital Records, S.C. Residence Data. 2022 mortality data were not available at the time Epi Profile was generated.

HIV Risk Factors

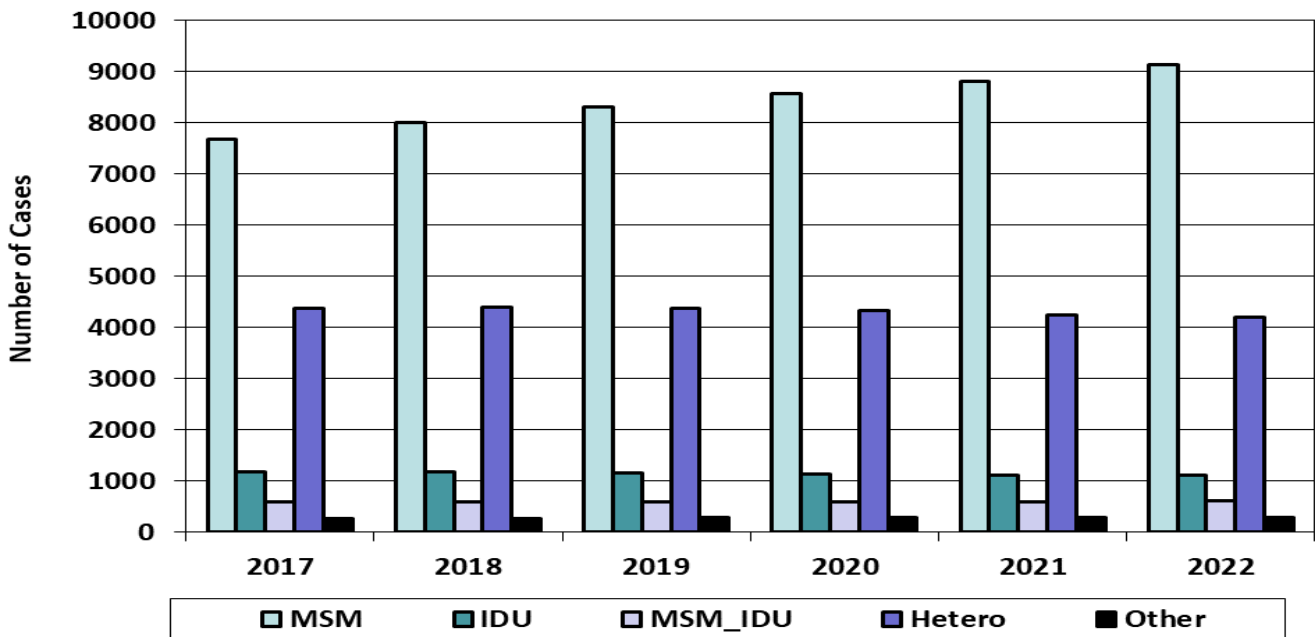
HIV can be transmitted when an individual comes in contact with an infected person’s blood, breast milk, or sexual fluids. The people most likely to become infected with HIV are those who engage in high-risk behaviors which place them at greater risk. Transmission happens most often during sexual or 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 STI and behavioral risk data.

Characteristics of HIV/AIDS in People at Highest Risk

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

Figure 3.01 shows the number of people in S.C. 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.

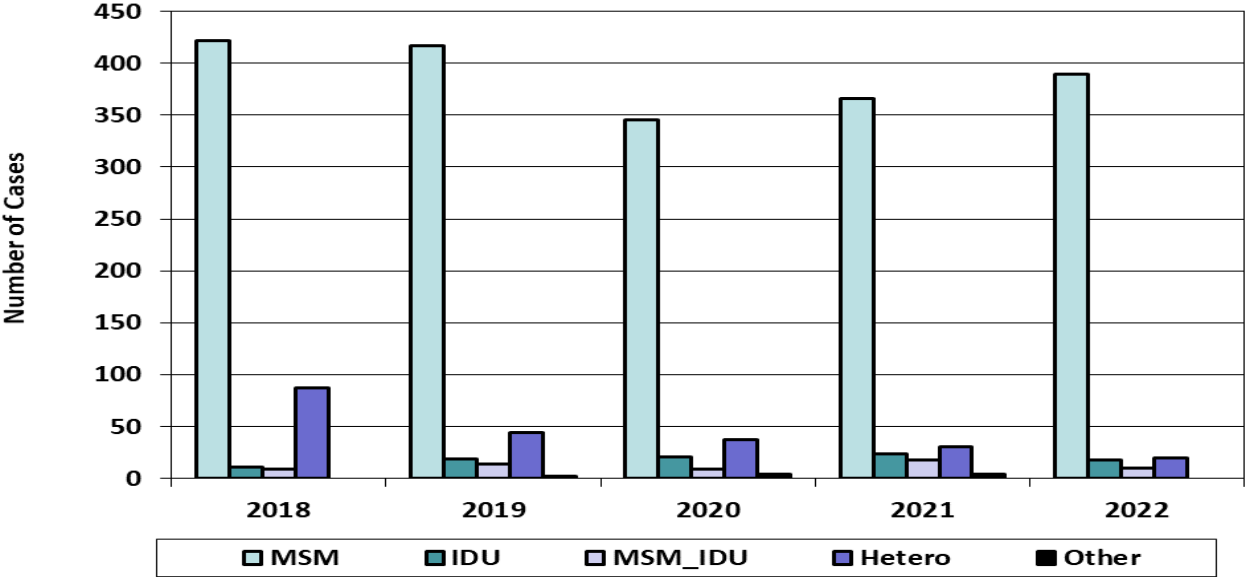
Figure 3.01: Number of People Living with HIV/AIDS by Year and Reported Risk, 2017-2022



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, 2018-2022



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 S.C. 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 S.C. could be estimated to be between 24,757 and 187,863.

Of PLWHA in S.C. with a reported risk, the largest proportion is men who have sex with men (59%). MSM also accounted for the highest proportion (86%) of recently diagnosed cases.

The majority of MSM cases diagnosed during 2021-2022 were African American (56%). White men accounted for 25% of the new cases and 19% were Hispanic or other races, (Figure 3.03).

Figure 3.03: Proportion of Men Diagnosed with HIV/AIDS in 2021-2022 who Reported a Risk of MSM by Race/Ethnicity (N=743)

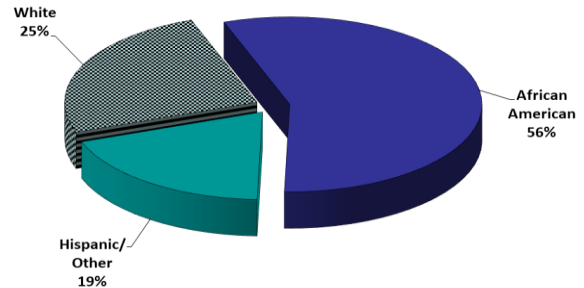
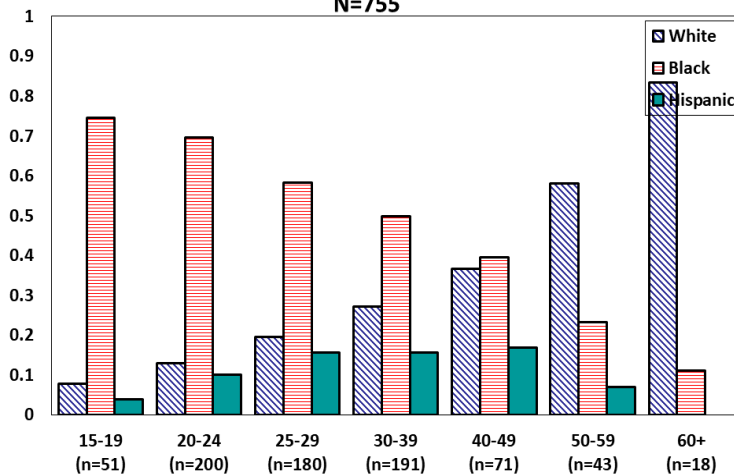


Figure 3.04: Percent of MSM HIV/AIDS Cases Diagnosed 2021-2022 by Age Group & Race/Ethnicity (N=755)

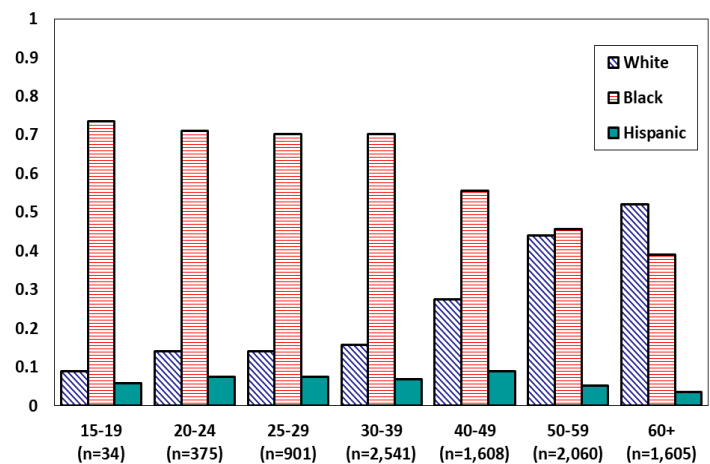


Total N includes race/ethnicity not included in graph.

The majority of MSM diagnosed during 2021-2022, were 20-29 years of age (50%); 25% were 30-39 years of age, 9% were 40-49 years of age, and 6% 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 2022, 57% were African American, 30% were white, and 6% were Hispanic. The majority of MSM living with HIV/AIDS, were over the age of 30 (78%), with the highest percentage in the 30-39 age group (28%). Twenty-three percent were 50-59 years of age, and 14% 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).

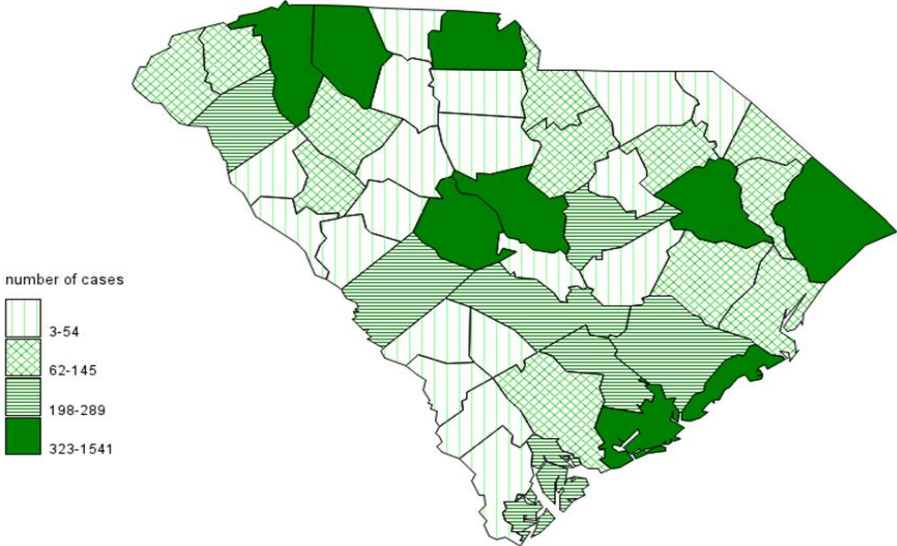
Figure 3.05: Percent of MSM Living with HIV/AIDS by Age/Race, 2022 (N=9,125)



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

Richland County has the greatest number of MSM living with HIV/AIDS in 2022 (1,541), with Greenville (977) and Charleston (948) having the next highest numbers. Most S.C. counties had fewer than 135 MSM living with HIV/AIDS, (Figure 3.06).

Figure 3.06: SC HIV/AIDS MSM Prevalence
2022 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 (57%) and newly diagnosed HIV/AIDS cases (55%). And of men who have sex with men, age 20-40, African American men comprised 70% of cases living with HIV/AIDS and 59% of newly diagnosed HIV/AIDS.

Characteristics of High-Risk Heterosexuals

Prevalence of High-Risk Heterosexual Behavior

It is difficult to assess the number of people in S.C. 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 S.C. 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 27% of the total PLWHA at the end of 2022. Of PLWHA who reported a risk of heterosexual contact, majority were African American women (50%), 24% were African American men, 10% were white women, and 3% were white men, (Not shown in a graph).

Characteristics of high risk heterosexuals	White Male	White Female	Black Male	Black Female	Hispanic M/F	Other M/F	Unknown M/F
Prevalence: Race/Sex							
Count	123	428	989	2105	228	329	2
	2.93%	10.18%	23.53%	50.07%	5.42%	7.83%	0.05%
	13.11%		73.60%				

Six percent of people diagnosed during 2021-2022 reported high-risk heterosexual contact. Figure 3.07 shows that African American men and women comprise a disproportionate 48% of recently diagnosed heterosexual HIV/AIDS cases. African American women account for 30% of recent cases and 18% are African American men. White women account for 22% while white men account for 2%. Hispanic men and women together account for 20% of recent cases with a reported risk of heterosexual contact (8% men and 12% women).

Figure 3.07: Proportion of Heterosexual HIV/AIDS Cases by Race/Ethnicity, Diagnosed 2021-2022 (N=46)

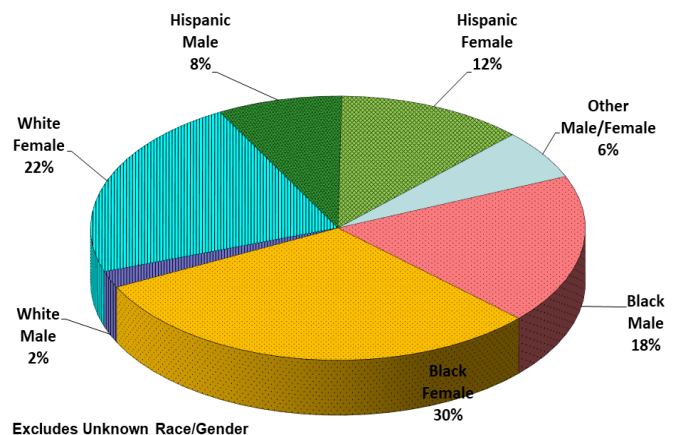
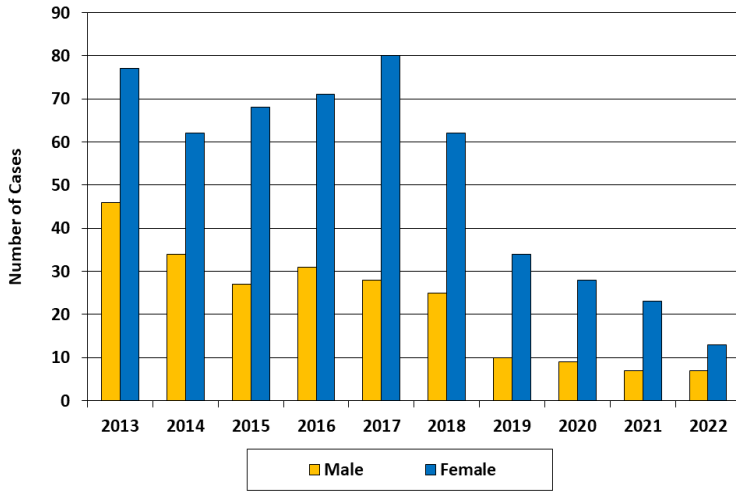


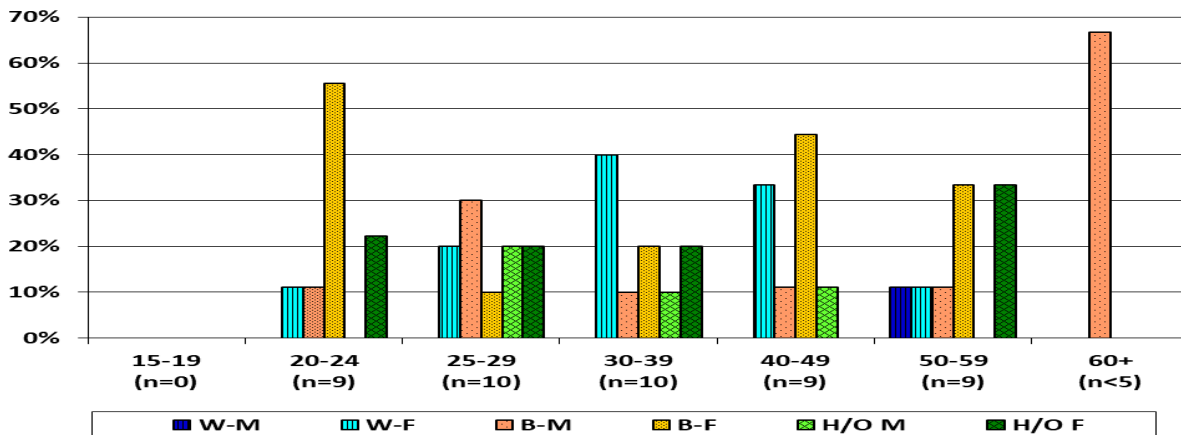
Figure 3.08: S.C. HIV/AIDS Cases Attributed to Heterosexual Transmission, by Sex and Year of Diagnosis



On average, the number of heterosexual cases diagnosed each year has decreased 77% from 2018 to 2022. Figure 3.08 shows the number of heterosexually acquired HIV cases in men and women in S.C. from 2013 to 2022. During most of this period, the proportion of female cases averaged 41% higher than males.

The proportion of high-risk heterosexuals diagnosed in 2021-2022 was highest among the 20-29 age group. In addition, the other age groups are evenly distributed: 20-29 (38%), 30-39 (20%), 40-49 (18%), and 50-59 (18%). 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 2021-2022 by Age/Race/Sex



Of PLWHA in 2022 who reported a risk of heterosexual contact, 86% were age 40 and over; 40-49 (22%), 50-59 (33%), and 60+ (31%). 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 13% 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, 2022

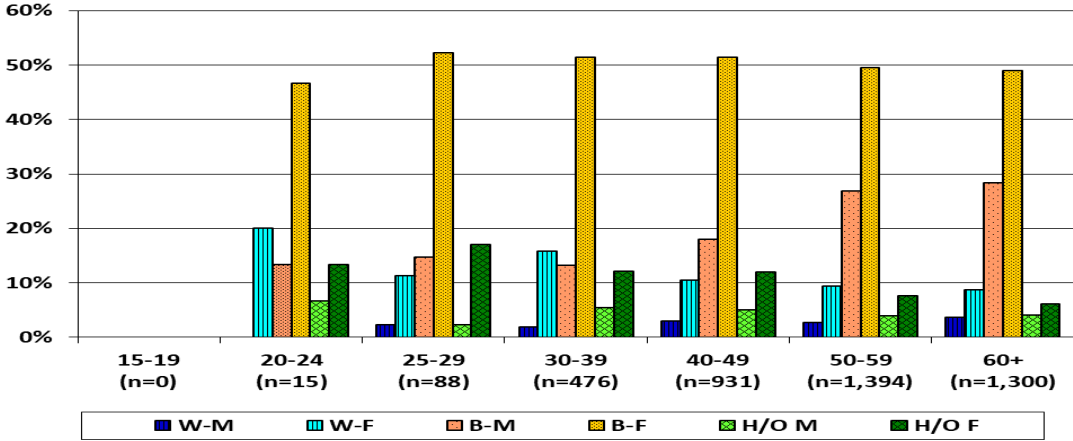


Figure 3.11: SC HIV/AIDS Prevalence
2022 HIV/AIDS: Hetrosexual Risk

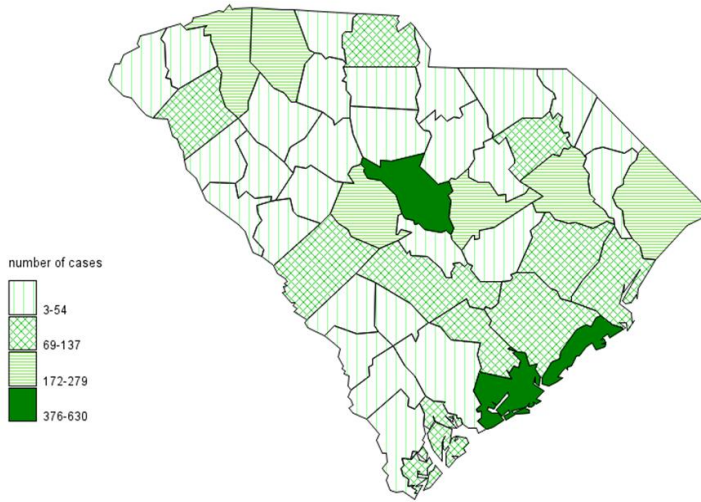
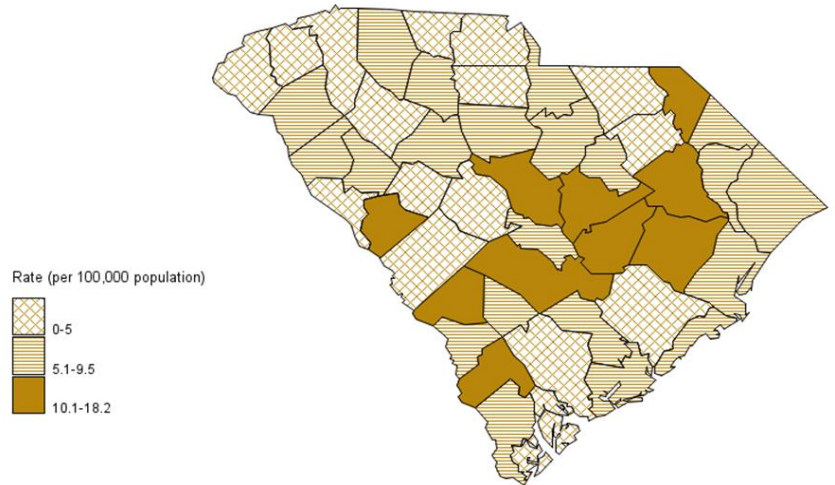


Figure 3.11 shows the counties with the highest prevalence of PLWHA due to heterosexual transmission. Richland county has the highest number of reported cases (630), followed closely by Charleston, Greenville, Florence, Horry, Sumter, and Spartanburg. Eighty-seven percent of S.C. counties each have less than 169 PLWHA who reported a risk of heterosexual contact.

Figure 3.12 shows the 2021-2022 case rate among women: an indicator for more recent heterosexual risk. Hampton, Sumter, and Barnwell counties have the highest case rates in the state (18.2, 15.9, and 15.4 per 100,000 population respectively). Forty-six percent of counties have case rates below 5.9 (the state rate is 6.2).

Figure 3.12: SC HIV/AIDS Incidence Rates
2020-2022 HIV/AIDS: Three Year Average Rate
Female Rate



Summary

Among heterosexually exposed cases, African American women account for 30% of newly diagnosed HIV/AIDS cases and African American men account for 18%. 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 2021-2022.

Characteristics of Persons who Inject Drugs (PWID)

Injection drug users account for 7% of reported risks for people living with HIV/AIDS in 2022 and 5% of people recently diagnosed with HIV/AIDS during 2021-2022, (Figure 3.13).

Figure 3.13: Number of New HIV/AIDS Cases due to Injecting Drug Use by Gender, Race and Year of Diagnosis

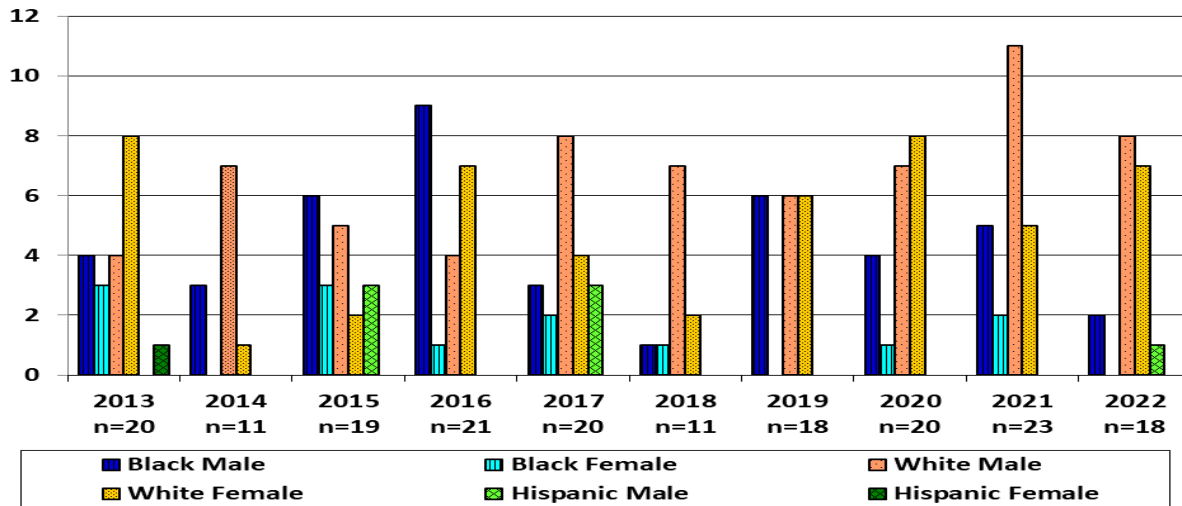
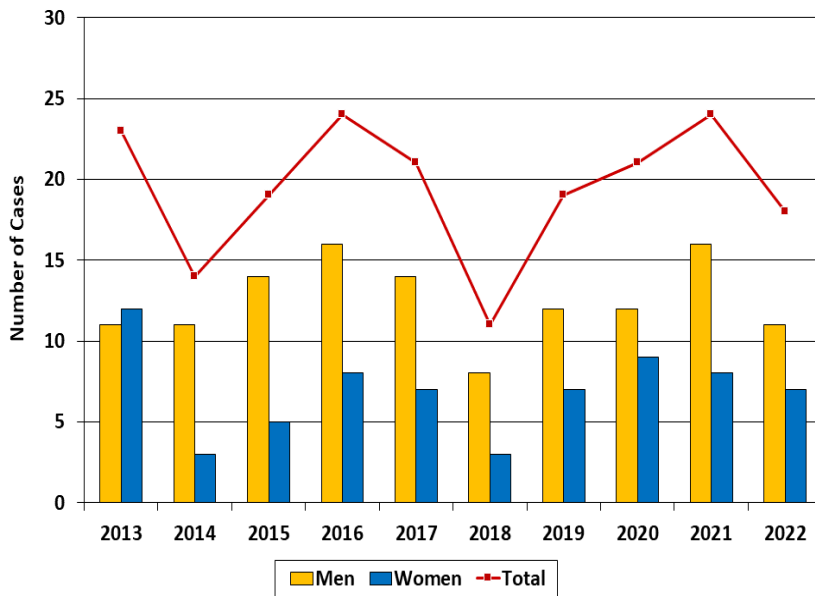


Figure 3.14: Number of HIV/AIDS Cases Due to Injecting Drug use by Gender and Year of Diagnosis



Over the past ten years, the number of new HIV/AIDS diagnoses 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 (2021-2022) PWID cases. Men account for 64%: African American men 17%, white men 45%, and Hispanic/other 2%. African American women accounted for 5% and white women 29%.

Figure 3.15: Proportion of Injecting Drug Users Diagnosed with HIV/AIDS 2021-2022 by Race/Sex

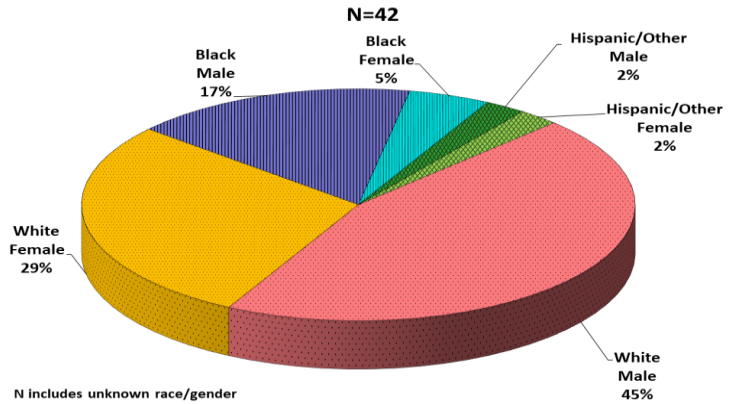


Figure 3.16: Percent of Injecting Drug Users Diagnosed with HIV/AIDS 2021-2022 by Age Group, Race, and Gender

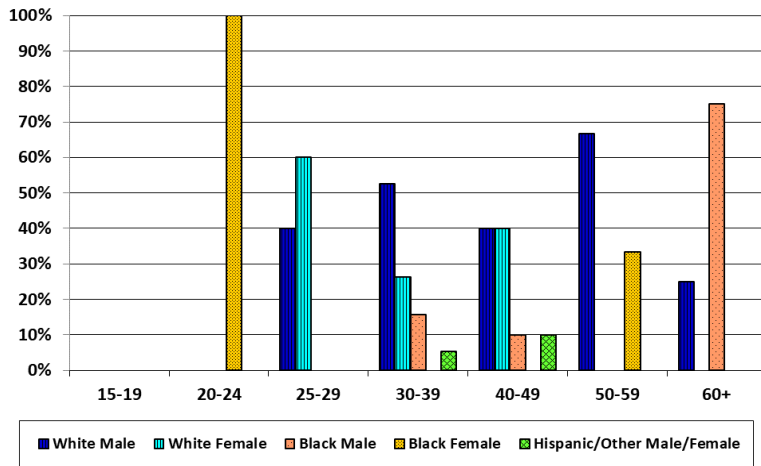


Figure 3.16 shows that 45% of PWID cases diagnosed in 2021-2022 are over the age of 30: 30-39 45%, 40-49 24%, and 60+ 10%. Of those reporting PWID as their risk, 14% were age 20-29.

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 IDU Persons Living with HIV/AIDS by Race/Sex and Age Group, 2022 (N=1,114)

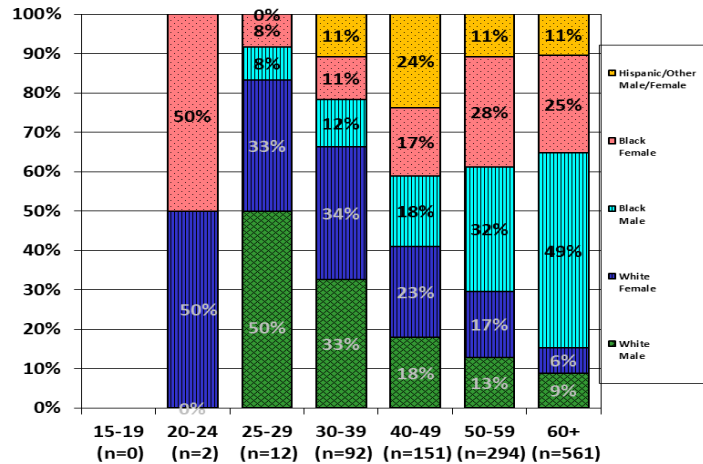
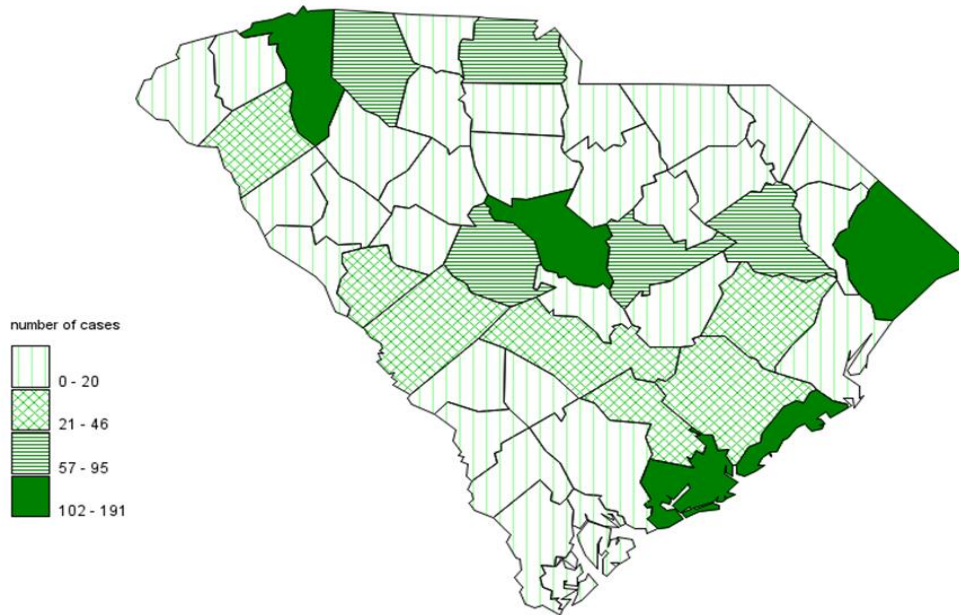


Figure 3.18 shows Richland County has the highest number of PLWHA with PWID as an identified risk factor. As with other risks, the more urban counties have the greatest numbers.

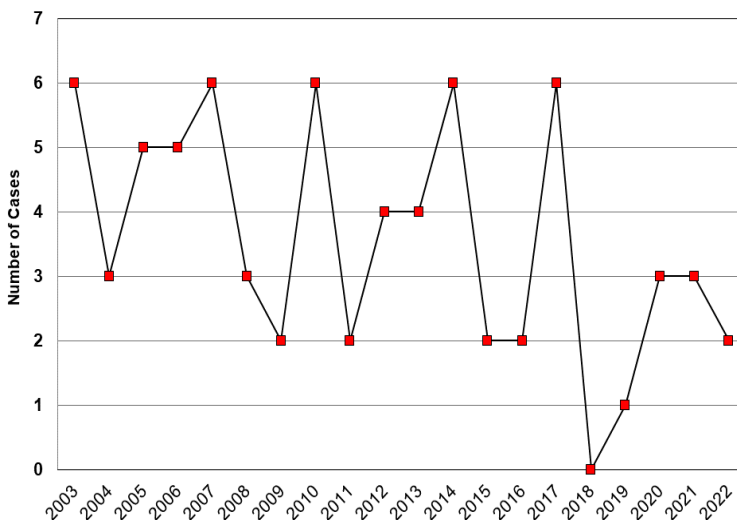
Figure 3.18: SC HIV/AIDS Prevalence IDU Risk
2022 HIV/AIDS: IDU Risk



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

Cumulatively, through December 2022, there have been 297 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, 2003-2022



Most infants and children 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 perinatally 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, tends to display fluctuations over the given time period. The highest number of cases reported was 21 in 1993 (not on graph); the lowest number is zero cases (2018). There were three cases reported in 2020 and 2021, and two cases in 2022.

Patterns of Service Utilization of People with HIV

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 reflect only those people tested voluntarily in local health departments. These data reflect the number of individuals tested, not the number of tests. In 2022, African Americans comprised 65% of the total people tested, and 45% of the total positive. Men accounted for 35% of people tested and 55% of total positive. People 20-39 years of age represented the highest proportion tested (74%) and the highest proportion total positive people (45%). People over the age of 40 comprised 20% of the total number of people tested, and 20% 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) – 18% of total positives;
- Midlands PHR (includes Richland County) – 18% of total positives tested;
- Pee Dee PHR (includes Sumter and Florence counties) – 15% of total positives;
- Upstate PHR (includes Greenville and Spartanburg counties) – 14% 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 infection 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 2022

	Ryan White Part B Clients, N=11,751	Persons Living with HIV/AIDS, N=19,860
Race/Ethnicity		
White, not-Hispanic	23%	24%
Black, not-Hispanic	71%	63%
Hispanic	5%	6%
Other	2%	7%
Sex		
Male	69%	72%
Female	29%	28%
Transgender	<1%	---
Age Group		
< 24	4%	---
25-44	39%	---
45+	57%	---

During 2022, 11,751 clients received services through the Ryan White Part B funds. Figure 4.01 presents the distribution of Part B clients by race/ethnicity, sex, and age as well as for PLWHA in S.C. through December 2022. Clients served through Part B are representative of the population affected with HIV/AIDS in all categories.

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

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

Figure 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 11,751 clients who received services, the majority of clients obtained medical case management services (n=10,018) 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, 2022

	No. of clients receiving service	No. of visits per category	Avg. no. of visits per client
Medical Care	10,257	36,562	4
Oral/Dental Care	1,674	3,610	2
Mental Health	3,280	7,539	2
Substance Abuse	1,870	2,215	1
Medical Case Management	10,018	99,216	10

Of those services utilized most by clients (visits/clients), medical case management services were among the highest (10 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 2022 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) Direct Dispensing to provide medications via mail-order through a contracted pharmacy; 2) Insurance Assistance to reimburse costs for private insurance premiums, copayments, and deductibles; and 3) Medicare Assistance to provide support for Medicare Part D copayment and deductible costs. S.C. ADAP enrollment and services are centrally managed by DHEC.

Currently there are 104 drugs on the approved S.C. ADAP Formulary including 46 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, S.C. 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 2022. Clients served through ADAP have a similar distribution to that of PLWHA in S.C. The majority of the clients are non-Hispanic African American (65%), male (76%) and female (22%); age 40 and over (63%).

Figure 4.03: Characteristics of ADAP Clients Compared to S.C. Persons Living with HIV/AIDS in 2022

	ADAP Clients, N=5,071	Persons Living with HIV/AIDS, N=20,016
Race/Ethnicity		
White, not-Hispanic	24%	24%
Black, not-Hispanic	65%	62%
Hispanic	9%	6%
Sex		
Male	76%	72%
Female	22%	28%
Transgender	2%	--
Age Group		
>15	0%	1%
15-19	0%	0%
20-24	3%	3%
25-29	8%	7%
30-39	26%	20%
40-49	21%	19%
50-59	25%	26%
60+	17%	25%

Figure 4.04: 2022 ADAP Patient Profile Compared to Persons Living with HIV/AIDS

	S.C. HIV/AIDS Prevalence N= 20,016	Direct Dispensing N= 2,195	Insurance Program N= 2,964	Medicare Part D Assistance N= 382
Race/Ethnicity				
White, not-Hispanic	24%	17%	26%	51%
Black, not-Hispanic	62%	63%	69%	45%
Hispanic	6%	17%	4%	2%
Sex				
Male	72%	79%	74%	75%
Female	28%	18%	24%	25%

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 S.C. 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 S.C. 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 S.C. ADAP enrollees received prescriptions, via mail order for uninsured clients and at retail pharmacies with insurance copayment/deductible assistance from S.C. ADAP. The S.C. 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, 2022

	Number of clients receiving service	Number of visits per category	Average number of Services per client
Prescription Refills: (Direct Dispensing & Insurance Copayments/Deductibles)	4626	58412	13
Premiums: Health Insurance Premiums (including Pre-existing Condition Plans)	1987	19865	10
Medicare Copayments/Deductibles*	382	6995	18

*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 S.C. Epi Profile, the following methodology was used.

- All persons with reported diagnoses of HIV infection (regardless of stage of disease) through the end of the analysis year, who were alive at year-end
- All ages
- Last known state of residence is S.C.
- 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 ≥ 1 CD4 or viral load test result during the analysis year"
- 'Retention in Continuous Care' is defined as "persons who had ≥ 2 CD4 or viral load test results at least 3 months apart during the analysis year"
- Per CDC guidelines 'Viral Suppression' is defined as "persons who had a Viral Load ≤ 200 copies/mL at most recent test during the analysis year"

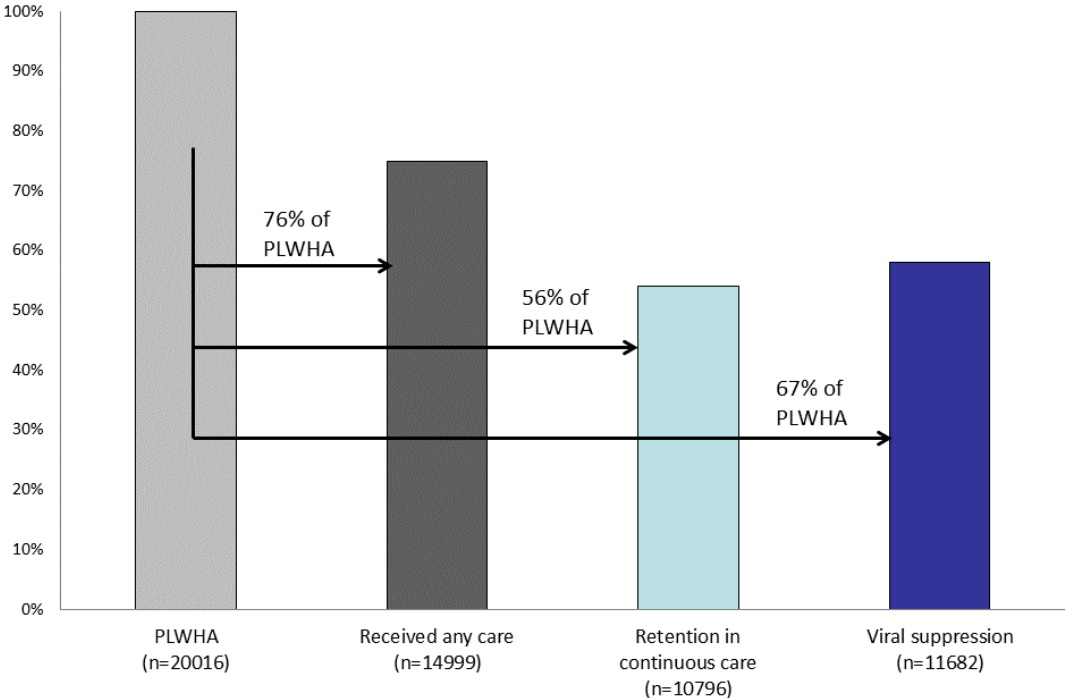
NOTE: Because the HIV Continuum of Care in this Epi Profile uses a different methodology from the CDC methodology, this Continuum of Care should **not** be used for comparison with national or other states' Continuum of Care.

HIV Continuum of Care – Diagnosed Prevalence

The National HIV/AIDS Strategy objectives of received any care, retained in care, and viral suppression in this Epi Profile use Diagnosed Prevalence (all people living with diagnosed HIV/AIDS). The objective Linked to Care uses incidence data (only people newly diagnosed with HIV/AIDS in 2022) 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 20,016 PLWHA, 76% had at least one CD4 or viral load test during 2022; 56% of PLWHA had two or more CD4 or viral load tests at least three months apart during 2022; and 67% of PLWHA had a Viral Load ≤ 200 copies/mL at most recent test during 2022.

Figure 5.01 Number and Percentage of Persons Engaged in Each Step of the HIV Continuum of Care, 2022



The following figures (5.02-5.06) 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 (2022)

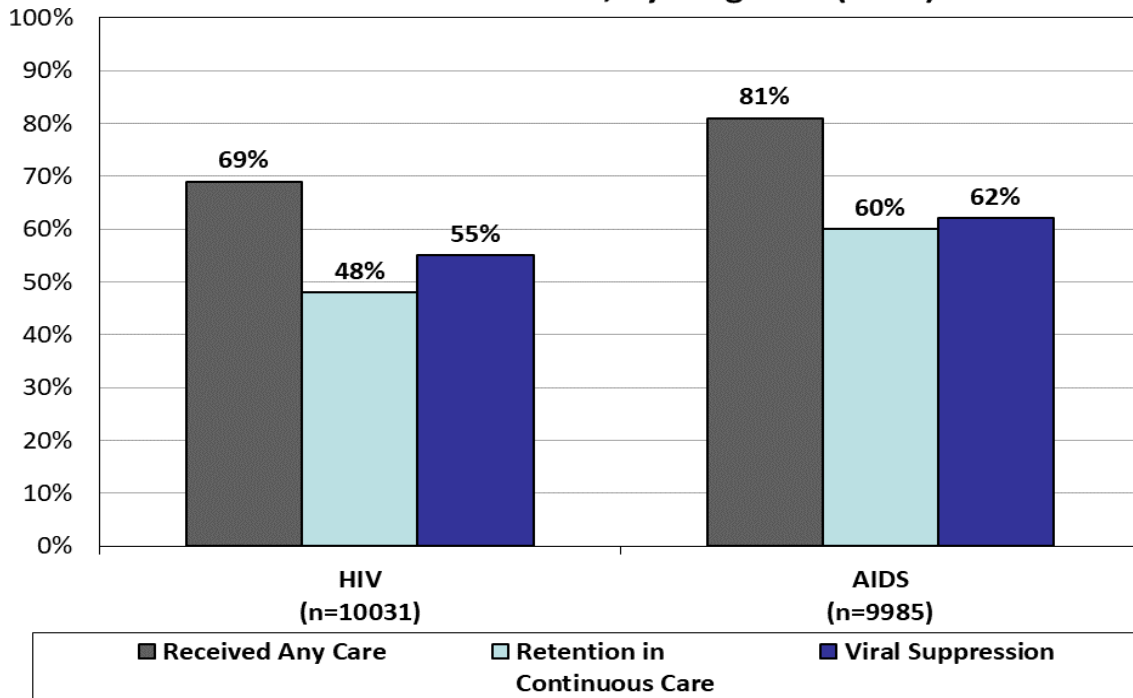


Figure 5.03: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Gender (2022)

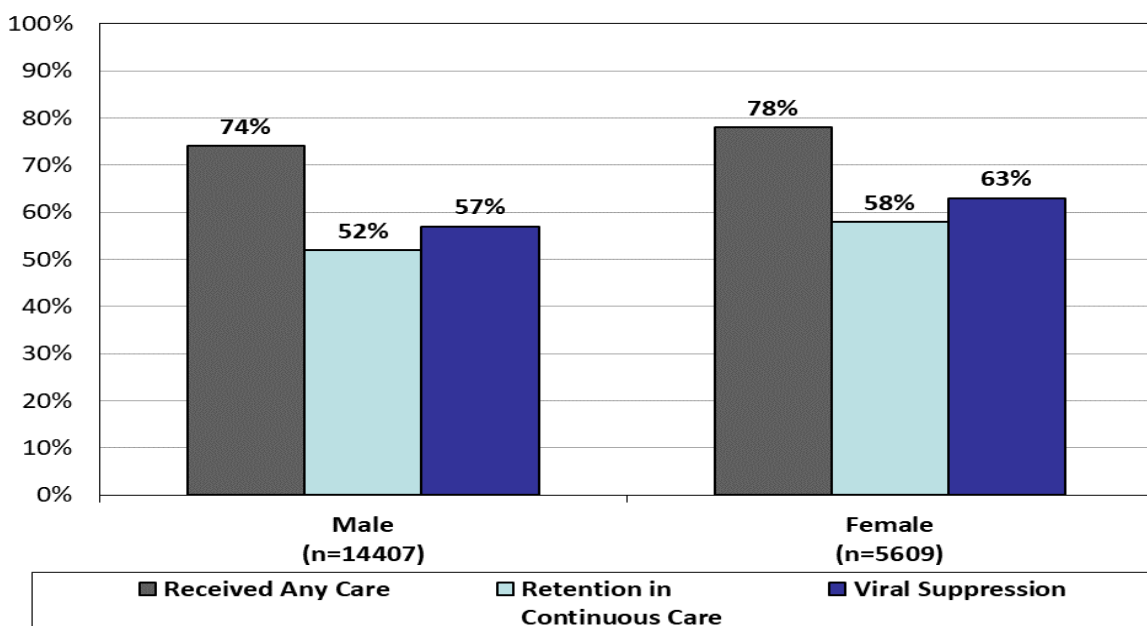


Figure 5.04: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Race/Ethnicity (2022)

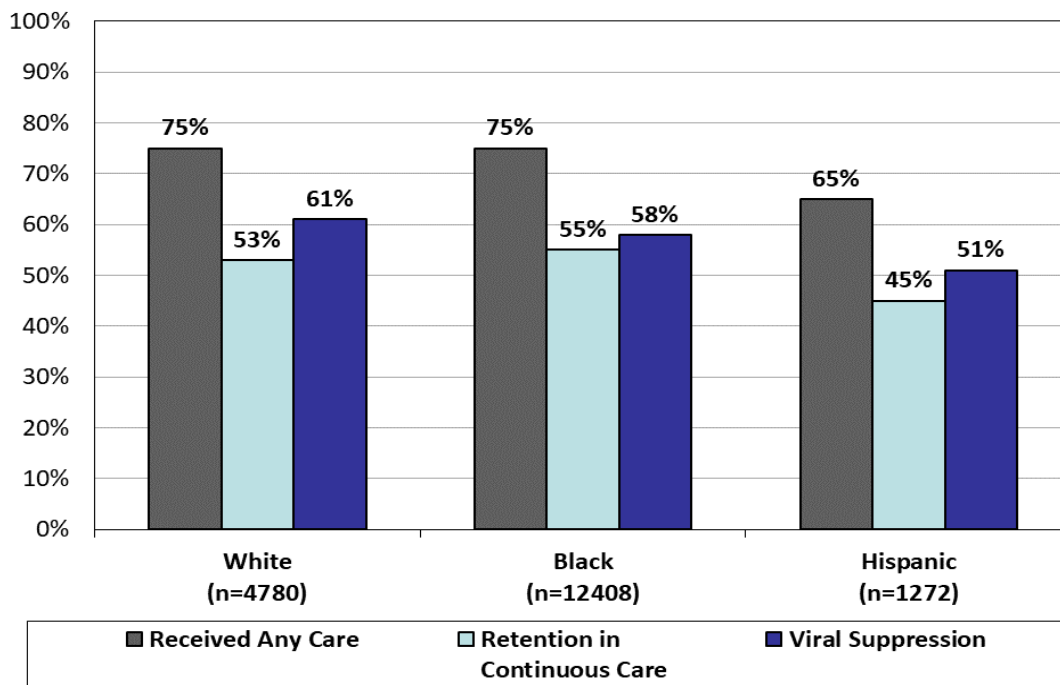


Figure 5.05: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Age Group (2022)

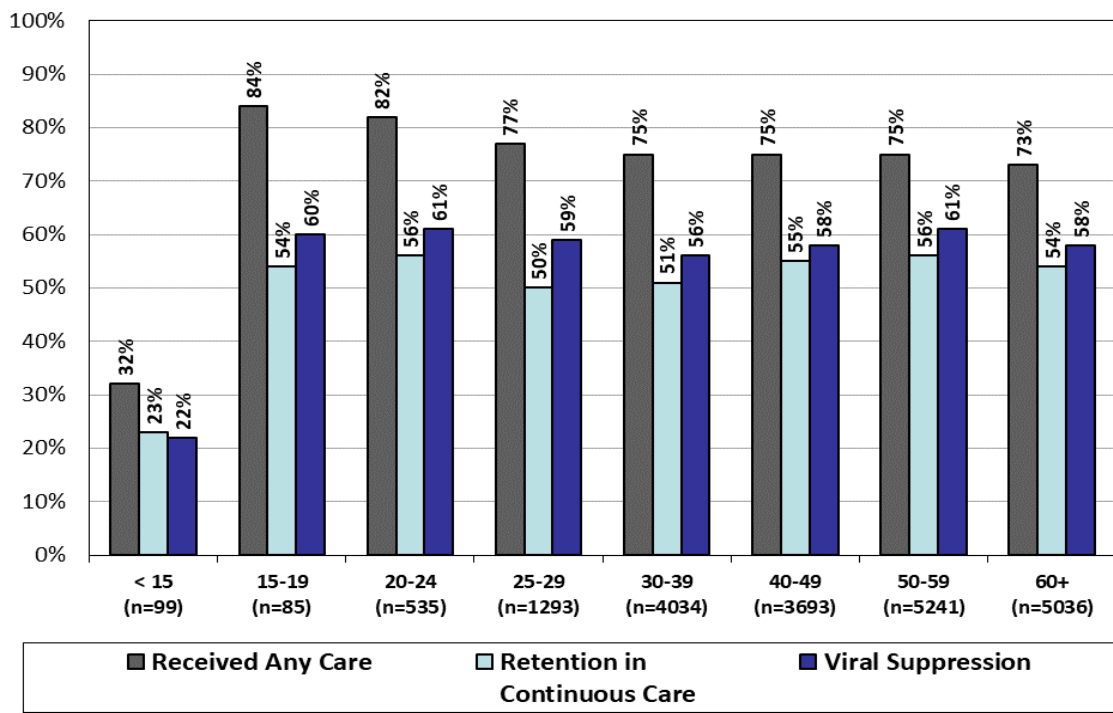
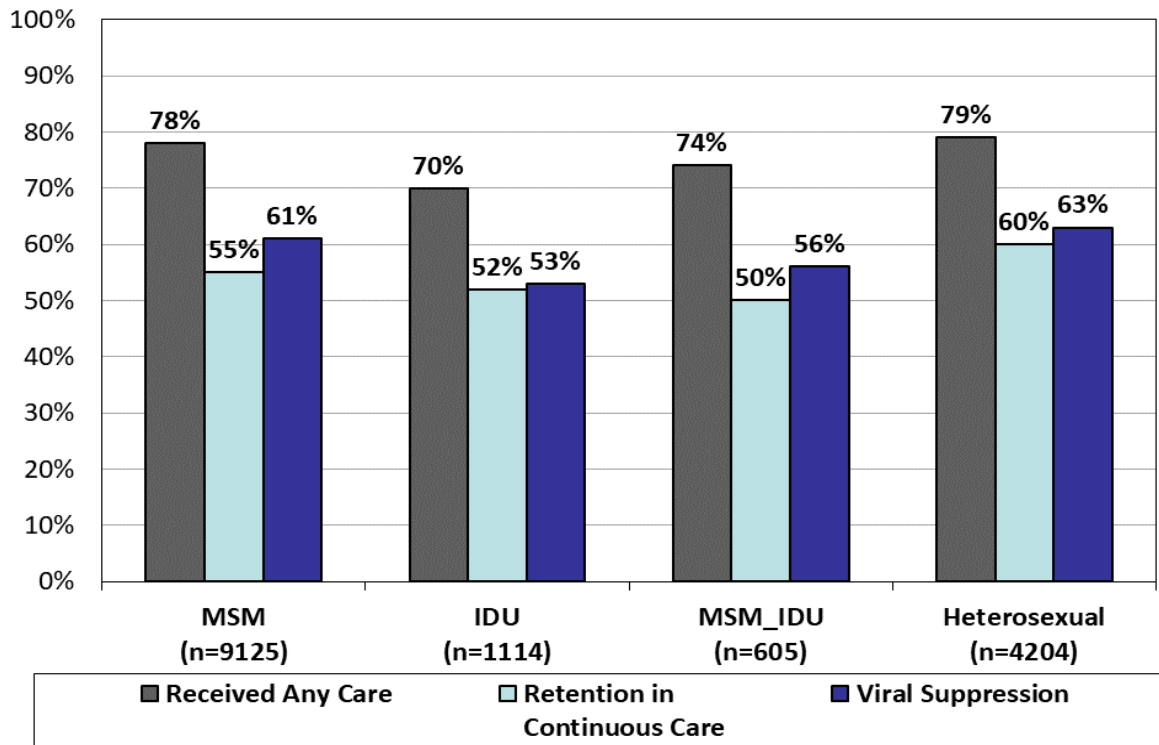


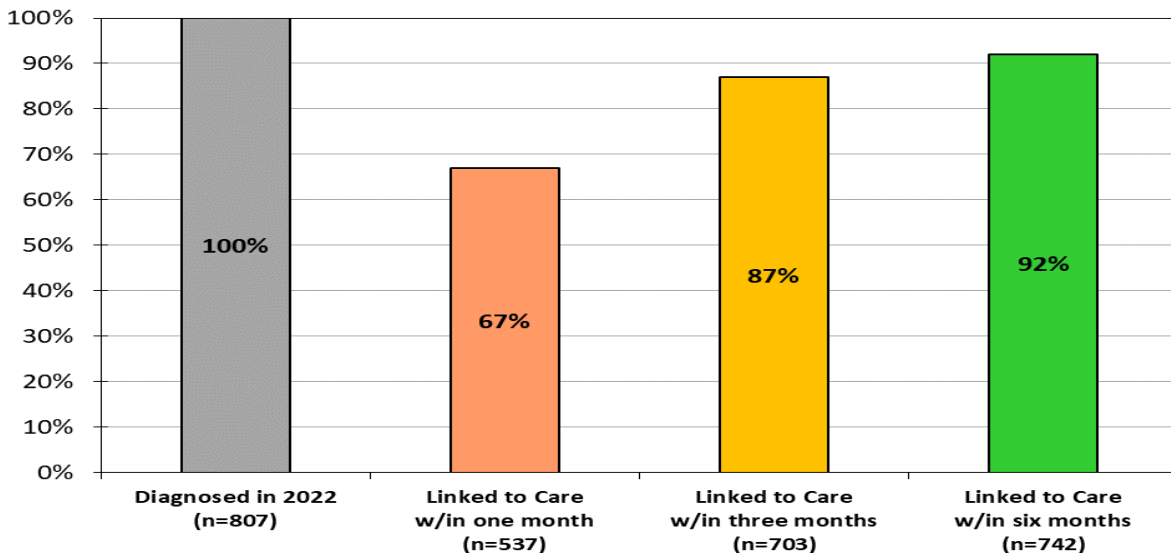
Figure 5.06: Percentage of PLWHA Engaged in Each Step of the HIV Continuum of Care, by Reported Risk (2022)



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 2022 who were linked to care within 3, 6, and 12 months of diagnosis.

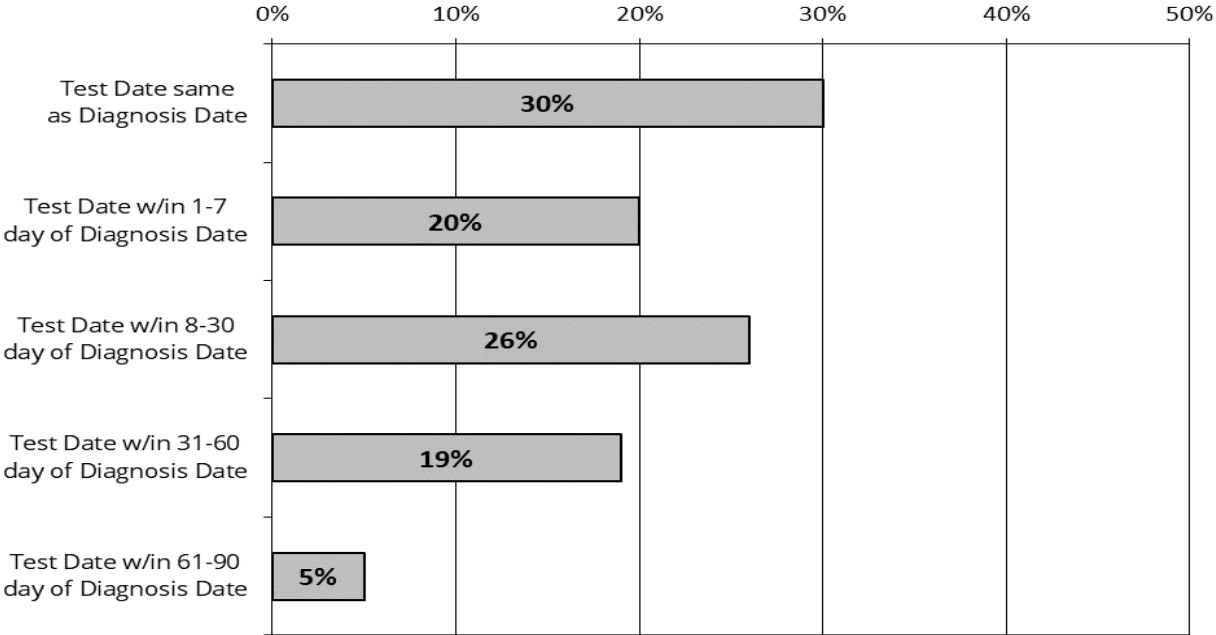
Figure 5.07: Percentage of Persons Linked to Care within 3, and 6 Months After HIV Diagnosis Among Total Number of Persons Diagnosed with HIV infection in 2022



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 537 people linked to care within 90 days of diagnosis, 30% had a lab date the same as the date of diagnosis; 20% had a lab date between one and seven days of diagnosis; 26% had a lab date between eight and 30 days of diagnosis; 19% had a lab date between 31 and 60 days of diagnosis; and 5% had a lab date between 61 and 90 days of diagnosis.

Figure 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 STIs and pregnant teenage women.

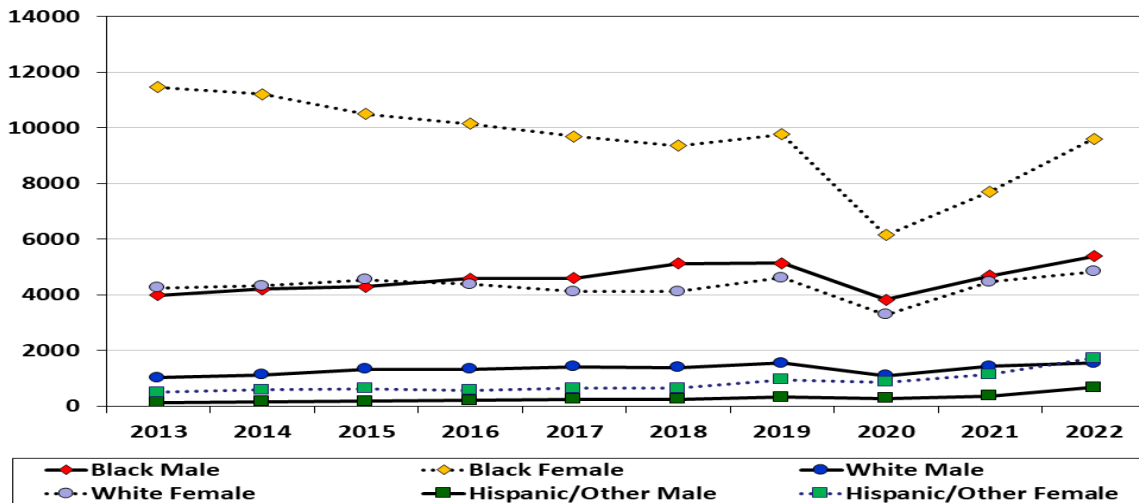
Sexually Transmitted Infections (STIs)

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

Chlamydia

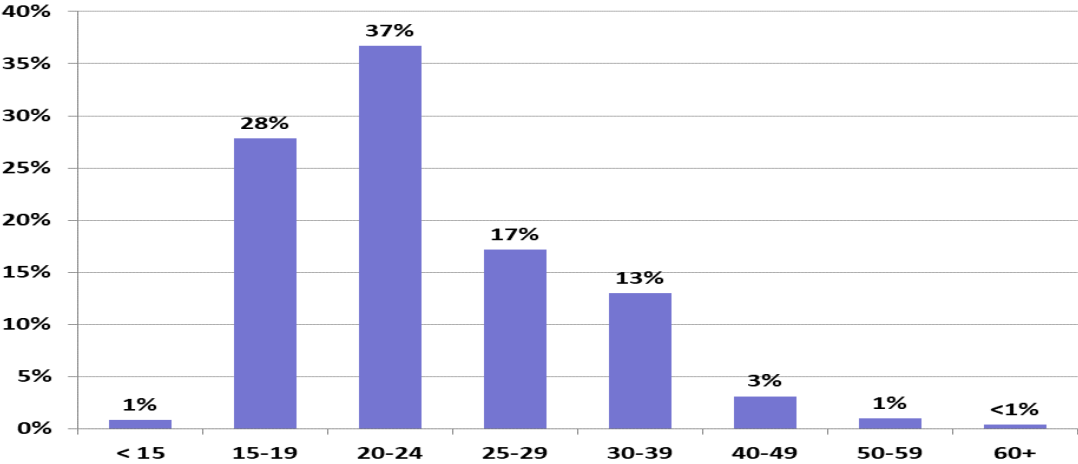
Over the past decade, reported cases of chlamydia have averaged about 29,656 per year. Some of this high number may be attributed to initiating routine screening for all young women attending family planning and STI clinics in health departments statewide. In 2022, there were 34,901 cases of chlamydia diagnosed in S.C. Among those cases with a reported race, 40% were African American women and 20% were white women. African American men comprised 23% of chlamydia cases, and white men accounted for 6%, (Figure 6.01). Thirty-two percent of chlamydia cases have 'Unknown' race and/or gender; this is largely attributed to the fact that these conditions are primarily reported by labs, which frequently do not collect data for race.

Figure 6.01: South Carolina Count of Reported Chlamydia Cases by Year of Diagnosis, 2013-2022



Of cases diagnosed in 2022, 82% were adolescents and adults under the age of 30. Those age 15-19, 28%; 20-24, 37%; and 25-29, 17%. Persons age 30 and over accounted for 18% of chlamydia cases, Figure 6.02.

Figure 6.02: Proportion of 2022 Chlamydia Cases by Age Group



Gonorrhea

In 2022, 14,074 gonorrhea cases were diagnosed in S.C. Of cases with a reported race, African American men and women account for 71% of reported cases; African American women 32% and African American men 39%. As with chlamydia, 27% 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, 2013-2022

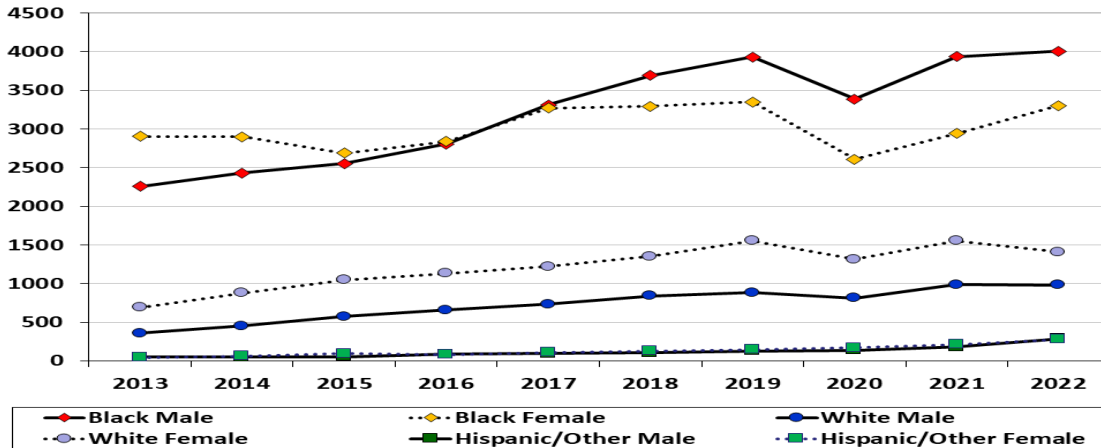
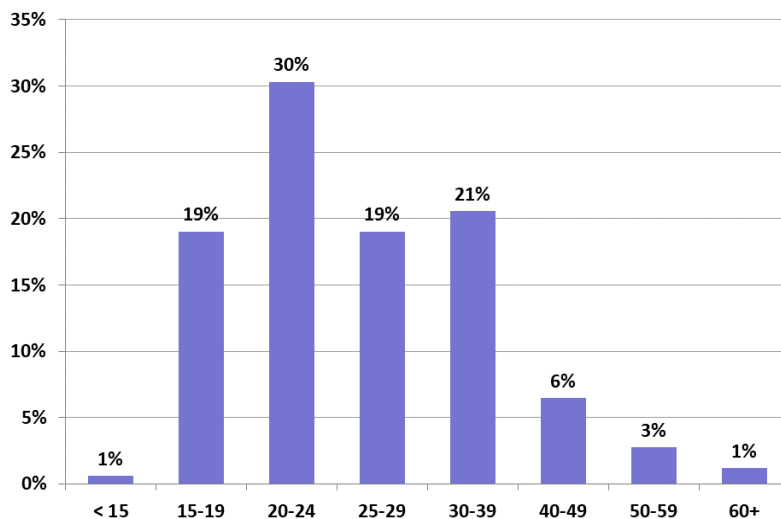


Figure 6.04: Proportion of 2022 Gonorrhea Cases by Age Group



Sixty-eight percent of gonorrhea cases diagnosed in 2022 were between the ages of 15 and 29. Nineteen percent of cases were age 15-19, 30% were age 20-24, and 19% were age 25-29. Persons age 30 and over accounted for 31%, (Figure 6.04).

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 CDC, <https://www.cdc.gov/std/stats18/STDSurveillance2018-full-report.pdf>

Total Syphilis

Figure 6.05: South Carolina Count of Reported Total Syphilis Cases by Year of Diagnosis, 2013-2022

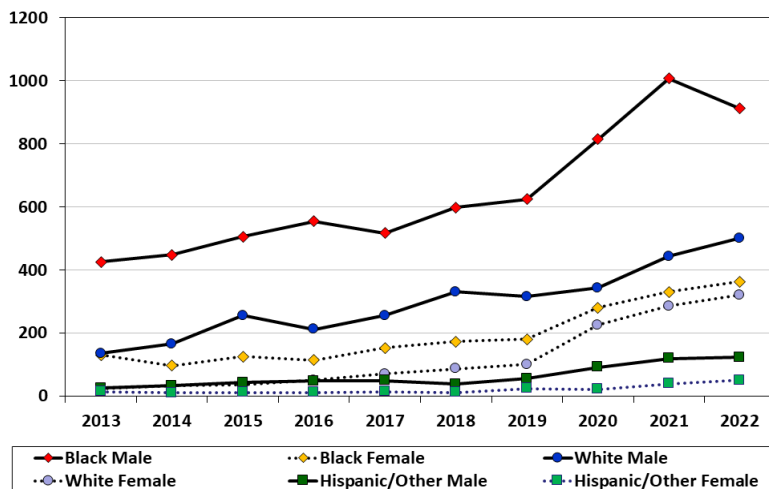
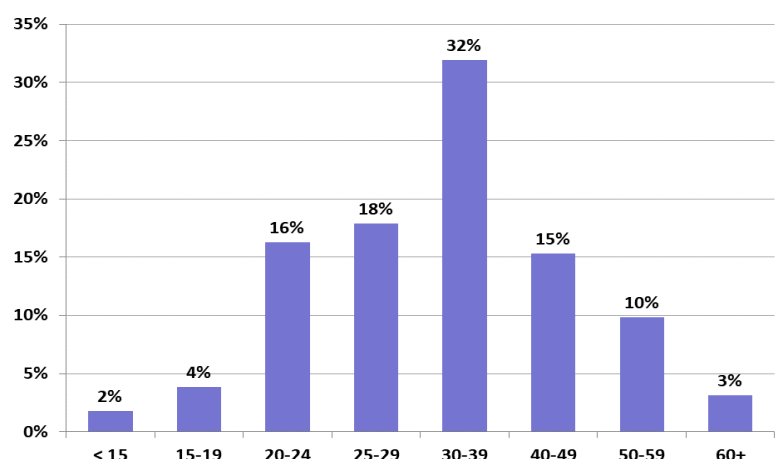


Figure 6.05 shows men continue to represent the majority of cases (67%): African American men specifically, are most impacted, accounting for 40% of total cases, white men accounting for 22%, and Hispanic/other men 5%. Women account for 32% of the total syphilis cases: African American women comprised 16%, white women 14%, and Hispanic/other women 2%. One percent of total syphilis cases have ‘unknown’ race.

Forty percent of total syphilis cases diagnosed in 2022 were under the age of 30. Four percent age 15-19, 16% were age 20-24, 18% were age 25-29 and 32% were age 30-39. Sixty percent of total cases were over the age of 30; 32% 30-39, 15% 40-49, and 13% 50+, (Figure 6.0).

Figure 6.06: Proportion of 2022 Total Syphilis Cases by Age Group



Primary and Secondary Syphilis

The number of infectious (primary and secondary) syphilis diagnosed each year in S.C. has dramatically increased over the past 10 years. In 2022, 945 cases of primary and secondary syphilis were diagnosed; this is a 261% increase from 2013 (262 cases). On average, the number of primary and secondary syphilis cases diagnosed each year has increased 16% per year over the last decade.

Figure 6.07: South Carolina Count of Reported Primary and Secondary Syphilis Cases by Year of Diagnosis, 2013-2022

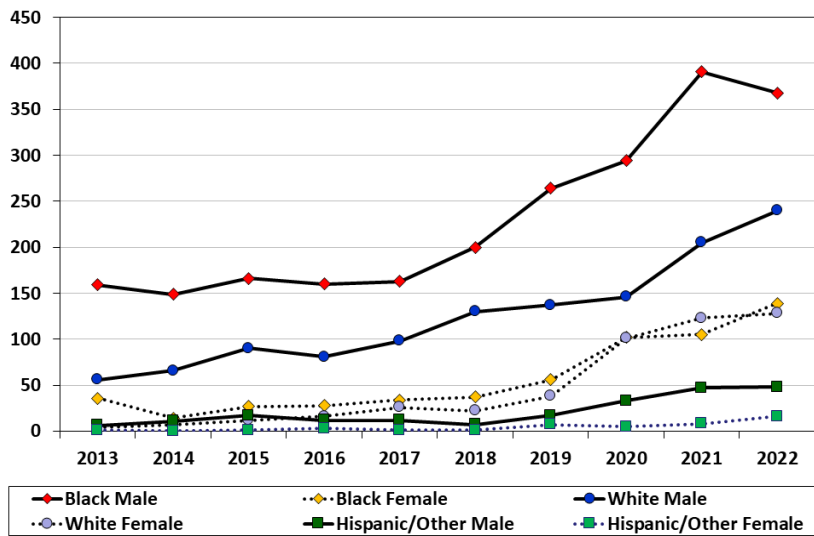
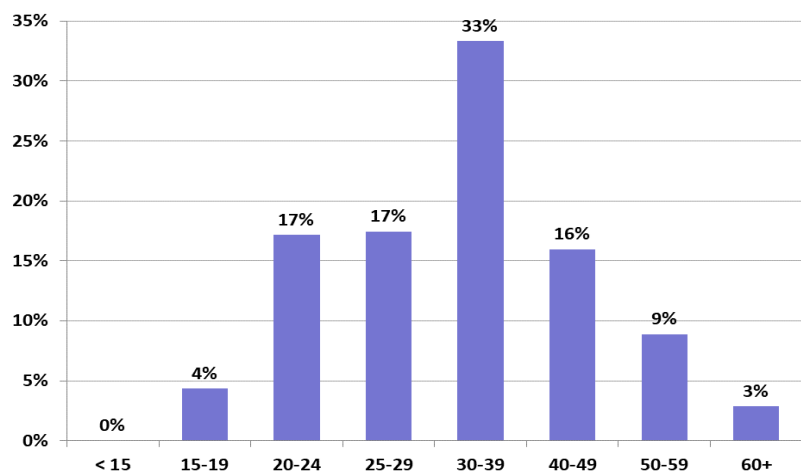


Figure 6.07 shows men continue to represent the majority of cases (70%): African American men specifically, are most impacted, accounting for 39% of total cases, white men accounting for 25%, and Hispanic/other men 5%. Women account for 30% of the total primary and secondary syphilis cases: African American women comprised 15%, white women 14%, and Hispanic/other women less than 2%. One percent of primary and secondary syphilis cases have 'unknown' race.

Thirty-eight percent of primary and secondary syphilis cases diagnosed in 2022 were under the age of 30. Four percent age 15-19, 17% were age 20-24, and 17% were age 25-29. Sixty-one percent were over the age of 30; 33% 30-39, 16% 40-49, and 9% 50+, (Figure 6.08).

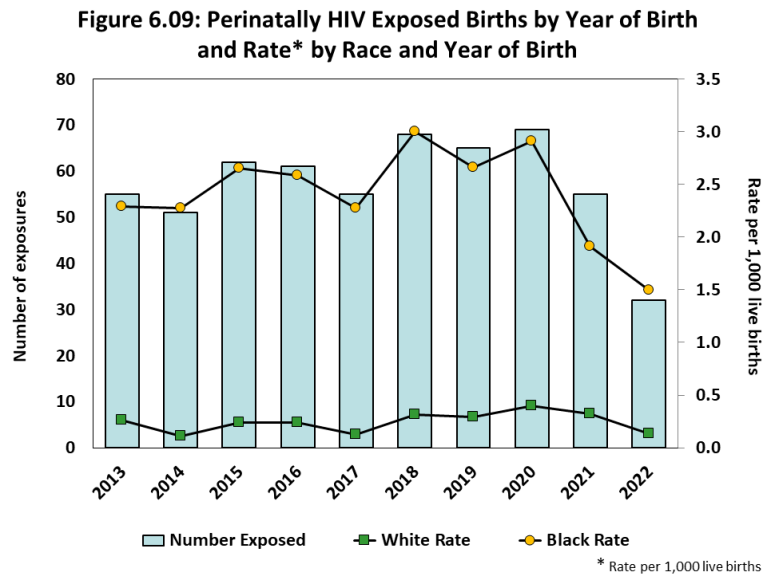
Figure 6.08: Proportion of 2022 Primary and Secondary Syphilis Cases by Age Group



Special Populations

Perinatally HIV exposed births

The number of perinatally HIV exposed births averages around 57 per year, while perinatally acquired HIV cases average one per year. This translates into 1.9% of perinatally HIV exposed births testing positive for HIV. Figure 6.09 shows the number of perinatally HIV exposed births (values on left) and the rate by race of mother (values on right). In 2022, the exposure rate for African American women is ten times higher compared to white women.

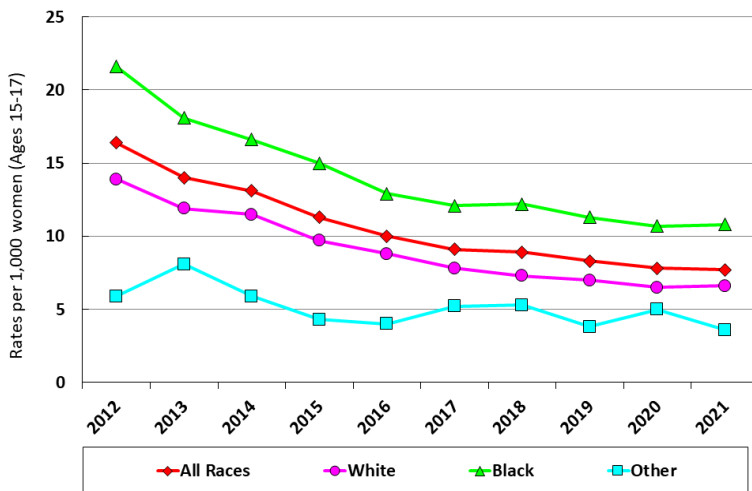


Teenage Pregnancy

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 0.9 in 2012 to 0.5 per 1,000 live births in 2021.

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

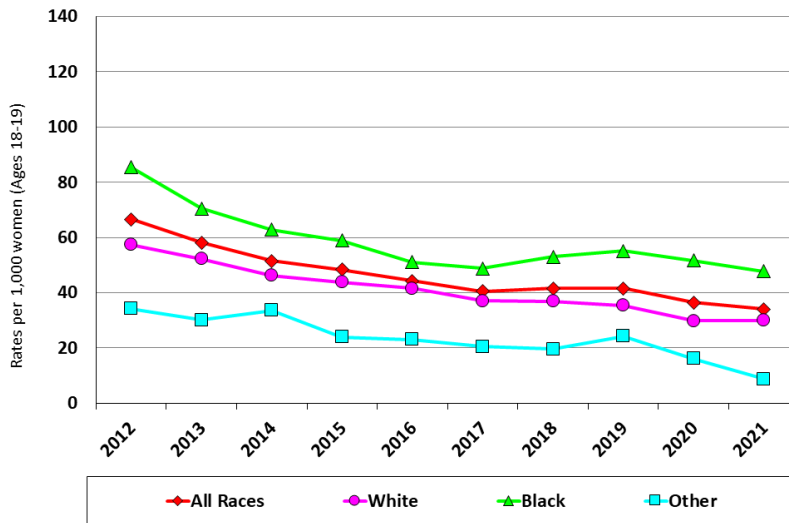


Source – SCDHEC, Vital Records, SC Residence Data

Teenage live births among 15-17 year old South Carolinians have decreased from a rate of 16.4 per 1,000 live births in 2012 to 7.7 in 2021: a 53% decline, (Figure 6.10). Similar data are also seen when viewing teen birth rates by racial/ethnic subgroups. The rate for white 15-17 year-olds was 13.9 in 2012 and 6.6 in 2021, representing a 52% decline. The rate for African American 15-17 year-olds declined 50% from 21.6 per 1,000 live births in 2012 to 10.8 in 2021.

Figure 6.11 shows the teen birth rates (per 1,000 live births) for 18-19 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 2012 (66.6 per 1,000 live births) to 2021 (34.1 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)

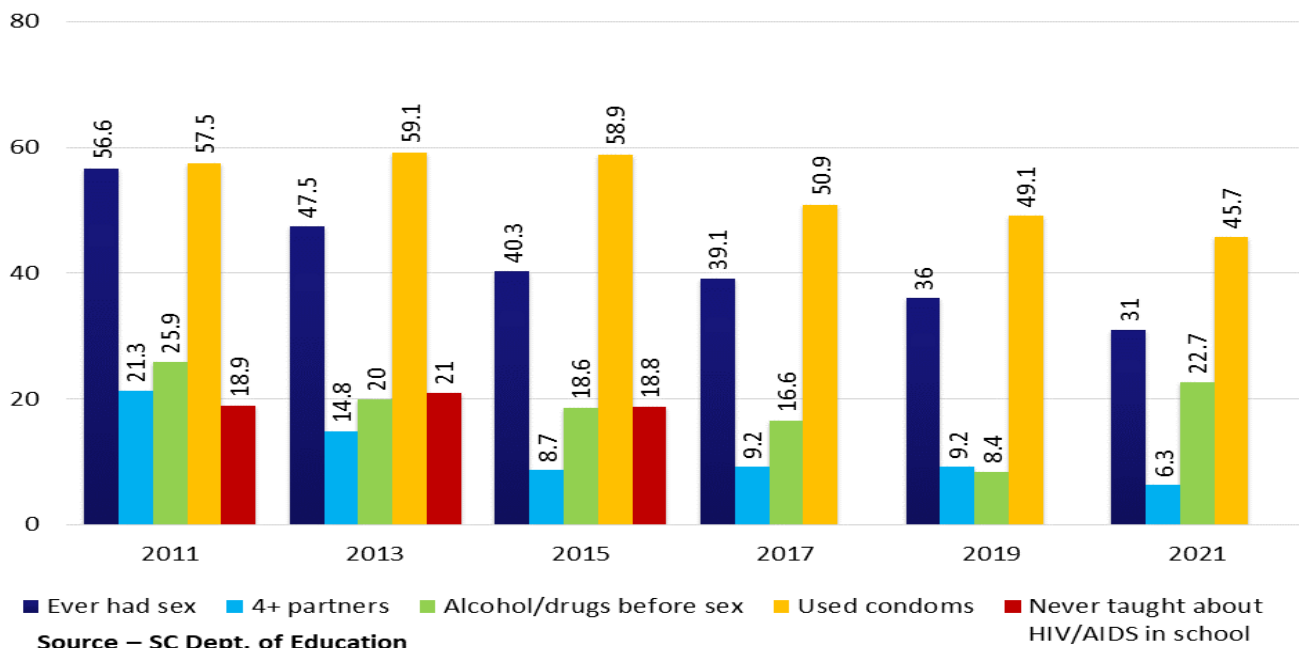
The Behavior Risk Factor Surveillance System is the world's largest random telephone survey of non-institutionalized population age 18 or older that is used to track health risks in the U.S. Several core questions address knowledge, attitudes, beliefs, and behaviors regarding STIs, particularly AIDS.

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

Youth Risk Behavior Surveillance Survey (YRBSS)

The YRBSS has been conducted in S.C. 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, 2011-2021



Individuals with Substance Use Disorder

Drug use is known to be a major factor in the spread of HIV infection. The 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 acquiring HIV or other STIs. Often, people who use substances have multiple sexual partners and do not protect themselves during sexual activity which may increase the risk of acquiring STIs including HIV.

According to the South Carolina Department of Alcohol and Other Drug Abuse Services (DAODAS), four percent of discharged episodes in federal fiscal year 2022 reported active or historical injection use. Additionally, 63% of the discharged episodes reported using an illicit drug other than marijuana (25% opiates, 18% cocaine and 20% amphetamines).

Other Sources of Information Beyond the Profile

https://scdhec.gov/sites/default/files/media/document/SC-Ending-HIV-Epidemic-Plan-2021-2025_FINAL.pdf

https://scdhec.gov/sites/default/files/media/document/SCHAS_2022-2026_FINAL.pdf



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