# Epidemiologic Profile of HIV and AIDS - Low Country Public Health Region 2020


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South Carolina Department of
Health and Environmental Control

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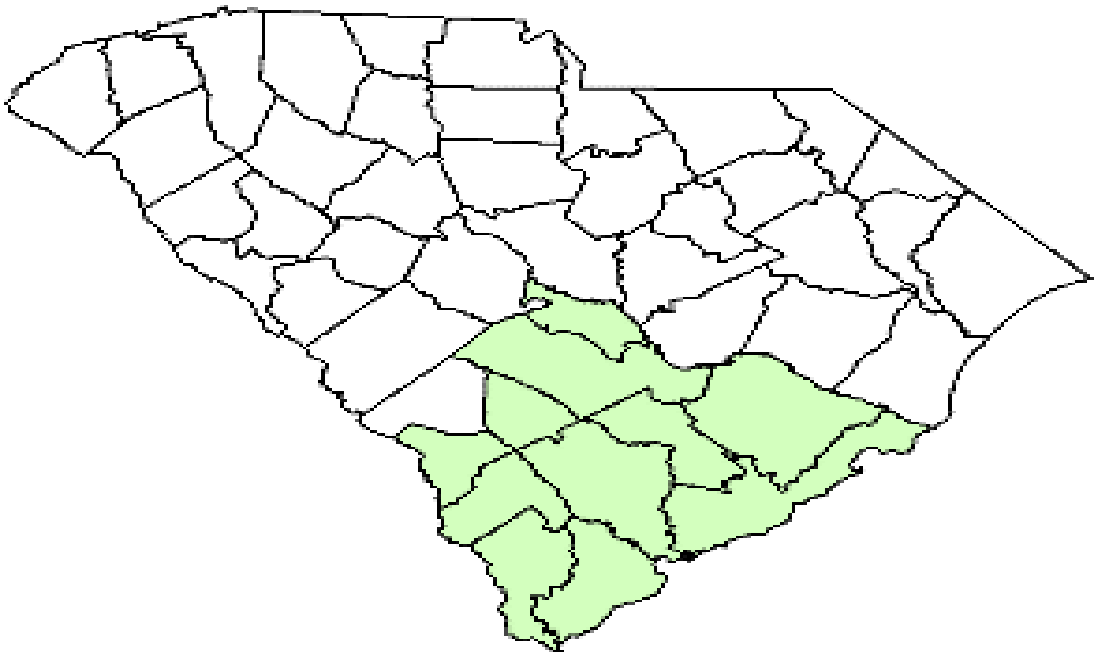
## Executive Summary

This report provides the public health data for calendar year 2019. Data in this report presents the trends and characteristics related to Human Immunodeficiency Virus (HIV), as well as other sexually transmitted infections (STI), and the impact on the residents of the Low Country PHR. Types of data points discussed include: incidence (the number of new cases of HIV diagnosed in 2019), prevalence (the number of people living with HIV/AIDS and the people newly diagnosed), and rates (a measure of risk to allow for comparison of groups). Additionally, continuum of care is displayed in this report as: received any care (measured as those who received a CD4 or viral load test result in 2019), retained in care (those who had at least two CD4 or viral load test results at least three months apart in 2019), and virally suppressed (those who had a viral load of less than or equal to 200 copies per milliliter at their most recent test in 2019).

Since the HIV/AIDS epidemic began almost 40 years ago, more than ten thousand persons have died in South Carolina due to HIV-related causes. The use of Highly active Antiretroviral Therapy (HAART) since 1995 has shifted HIV/AIDS from a terminal diagnosis to a chronic condition, such as diabetes or hypertension, and thousands are currently living with HIV/AIDS in South Carolina. Currently, there is a decline in the number of deaths among people living with HIV (PLWHA); however, the number of PLWHA continues to increase due to individuals living longer and newly identified cases.

South Carolina is divided into four Public Health Regions. The Low Country region, located from the state's center to the lower coastal areas, consists of the following counties: Allendale, Bamberg, Beaufort, Calhoun, Charleston, Colleton, Dorchester, Hampton, Jasper, Orangeburg.



Recent data for the Low Country Public Health Region (PHR) in 2019 illustrates the disparity that continues to exist between the African American community and other race/ethnicities. African American men are more likely to be diagnosed and live with HIV in the Low Country than any other race/ethnicity and sex at birth combination in the region. Sixty-two percent of newly diagnosed cases of HIV are African Americans and 80% of new cases are men, in the Low Country PHR. Sixty-seven percent of PLWHA are African American and 72% of PLWHA are men.

New cases of HIV primarily occur between the age of 20-49 (77%). Twenty-five percent of new cases of HIV occur in the Low Country PHR. Charleston County has the greatest number of new cases (152,39%), however, Orangeburg has the highest rate in the region (32.9 per 100,000).

In 2019, 88% of PLWHA were above 30 years of age in the Low Country PHR. Twenty-five percent of the state's PLWHA are in the Low Country PHR; and Charleston County has the greatest number (2,164, 44%) of PLWHA. However, Hampton County has the highest prevalence rate in the Low Country (790.8 per 100,000).

For PLWHA to remain healthy and to reduce the risk of transmitting HIV to others, it is important that they receive HIV medical care soon after diagnosis and remain in care to achieve viral suppression. On average, 97% of people newly diagnosed with HIV are successfully linked to care within three months or less, in the Low Country PHR. However, retention in care has been less successful, with only 52% of PLWHA remaining in care as of 2019. For PLWHA in the Low Country PHR, just 57% have achieved viral suppression.

Other Sexually Transmitted Infections (STIs) are also of concern in the Low Country PHR. In 2019, more than 8,000 cases of Chlamydia, 3,067 cases of Gonorrhea, and over 280 cases of Syphilis were reported in the Low Country PHR. Among all these Sexually Transmitted Infections (STIs) including HIV, the African American community is most impacted, with rates exceeding five times that of other race/ethnicities for some STI's.

The methodology for how these statistics were generated can be found in Appendix A.

## Ending the HIV Epidemic (EHE) National Plan and the Four Pillars

To end the HIV epidemic, the U.S. Department of Health and Human Services (HHS) has proposed a plan to reduce new HIV infections in the United States. The Ending the HIV Epidemic: A Plan for America (EHE) initiative will implement high-impact HIV prevention, care, treatment, and outbreak response strategies in 48 counties, the District of Columbia, San Juan, Puerto Rico, and 7 states with a substantial rural HIV burden, the state of South Carolina included. The goal of the initiative is to reduce new HIV infections by 75% in 5 years, and by 90% in 10 years.

Efforts will focus on four pillars to obtain the intended reductions by 2030:

- DIAGNOSE all individuals with HIV as early as possible after infection;
- TREAT HIV infection rapidly after diagnosis and effectively in all people who have HIV, to help them get and stay virally suppressed;
- PREVENT HIV infections using proven prevention interventions, including most notably PrEP; and
- RESPOND rapidly to potential HIV outbreaks to get prevention and treatment services to people who need them.

## Low Country Public Health Region Overview

Twenty-three percent (n=1,204,698) of South Carolina residents live in the Low Country PHR. As of December 31, 2019, there were 4,958 people living with HIV in the Low Country PHR, giving the region the second highest number and proportion (24%) of PLWHA in South Carolina. The Low Country PHR has the second lowest rate of PLWHA per 100,000 population (411.5). Twenty-five percent of people newly diagnosed with HIV in 2018-2019 live in the Low Country PHR.

The Low Country PHR has slightly more females than males and Caucasians are just over two times that of African Americans in the Low Country PHR. Also, Caucasians vastly outnumber the Hispanic population in the Low Country PHR. Further, demographic information can be found at the following website: https://www.census.gov/quickfacts/fact/table/SC/HEA775219.

## EHE Pillar 1: Diagnose all people with HIV as Early as Possible After Infection

### Newly Diagnosed Cases of HIV by Sex at birth

In the Low Country Public Health Region (PHR), 51% of residents are women, and 49% are men. Men in the Low Country PHR are disproportionately affected by HIV with 80% of new diagnoses in 2018-2019. Figure 1 displays the number of newly diagnosed cases of HIV by sex at birth in the Low Country PHR.

Figure 1: Newly Diagnosed Cases of HIV by Sex at birth, Low Country PHR (2019)

| | Low Country PHR Total Population, 2019 | | Low Country PHR Total Newly Reported HIV Diagnosis, 2018-2019 | |
|---|---|---|---|---|
| Sex at birth | Count | % | Count | % |
| Men | 586,495 | 49% | 309 | 80% |
| Women | 618,203 | 51% | 76 | 20% |
| Total | 1,204,698 | 100% | 385 | 100% |

### Newly Diagnosed Cases of HIV by Race/Ethnicity

African Americans in the Low Country PHR are disproportionately impacted by HIV. African Americans comprise approximately 28% of the Low Country PHR's population, yet 62% of newly diagnosed cases were African American (Figure 2).

Figure 2: Newly Diagnosed Cases of HIV by Race/Ethnicity, Low Country PHR (2019)

| | Low Country PHR Total Population, 2019 | | Low Country PHR Total Reported HIV Diagnosis, 2018-2019 | |
|---|---|---|---|---|
| Race/Ethnicity | Count | % | Count | % |
| Caucasian | 734,492 | 61% | 92 | 25% |
| AA | 341,204 | 28% | 227 | 62% |
| Hispanic | 78,038 | 6% | 32 | 9% |
| Other | 50,694 | 5% | 13 | 4% |
| Total[1] | 1,204,698 | 100% | 365[1] | 100% |

A small portion of newly diagnosed cases did not report race.

## Newly Diagnosed Cases of HIV by Age

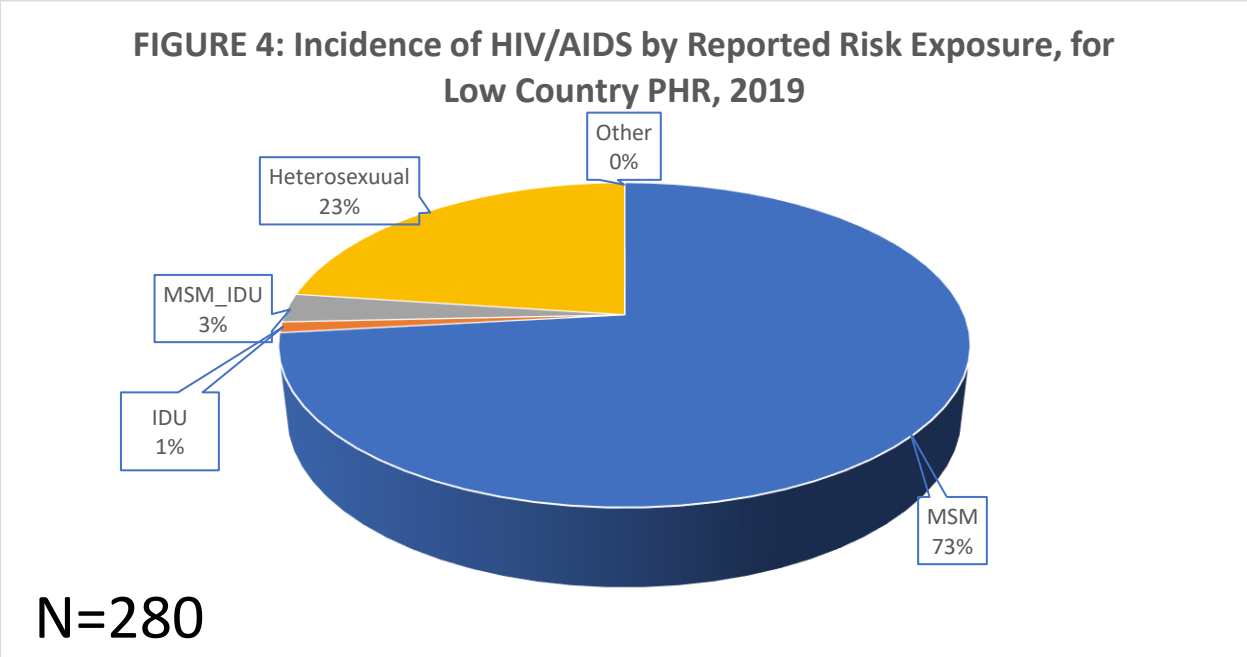
For newly diagnosed cases, there is a disproportionate impact by age between the ages of 20 and 49. This age group makes up 77% of newly diagnosed cases; with 39% in the 20 to 29 age group alone (Figure 3).

Figure 3: Newly Diagnosed Cases of HIV by Age, Low Country PHR (2019)

| County | Count | % |
|---|---|---|
| <19 | 22 | 5% |
| 20-29 | 150 | 39% |
| 30-49 | 145 | 38% |
| 50+ | 68 | 18% |
| Total | 385 | 100% |

## Newly Diagnosed Cases of HIV by Risk Exposure

Figure 4 shows the risk exposure for new cases of HIV in the Low Country PHR. Twenty-seven percent of new cases of HIV in the Low Country PHR have an unreported risk exposure (n=105). Of all cases in the Low Country with a reported risk (n=280), men who have sex with men (MSM) represents the highest proportion (73%) followed by heterosexual contact (23%). Injection drug use and MSM_IDU exposures are less likely to be risks for transmission.



## Newly Diagnosed Cases of HIV by County

Charleston County had the highest number of newly diagnosed cases in 2018-2019 (152). Orangeburg County has the highest rate of new infections with 32.9 per 100,000 (Figure 5). Of 11 Low Country Counties, three counties are above the average incidence rate (17.2 per 100,000): Charleston, Hampton and Orangeburg (Figure 5).

Figure 5: Newly Diagnosed Cases of HIV by County, Low Country PHR (2019)

| County | Count | % | Rate (per 100,000) |
|---|---|---|---|
| Allendale | 6 | 2% | 34.0 |
| Bamberg | <5 | <1% | 7.1 |
| Beaufort | 37 | 10% | 9.7 |
| Berkeley | 58 | 15% | 13.0 |
| Calhoun | <5 | <1% | 10.4 |
| Charleston | 152 | 39% | 18.6 |
| Colleton | 12 | 3% | 16.0 |
| Dorchester | 42 | 11% | 13.0 |
| Hampton | 8 | 2% | 20.8 |
| Jasper | 8 | 2% | 13.6 |
| Orangeburg | 57 | 15% | 32.9 |
| Total | 385 | 100% | N/A |
| Average | 35 | N/A | 17.2 |

Counties with less than 5 new cases of HIV do not have their counts displayed due to a CDC small cell suppression rule, of not reporting counts <5.

## EHE Pillar 2: Treat the Infection Rapidly and Effectively to Achieve Sustained Viral Suppression

### Persons Living with Diagnosed HIV Infection of All Stages by Sex at birth

Men in the Low Country PHR are disproportionately affected by HIV with 72% of PLWHA in 2019 being men (Figure 6).

Figure 6: People Living with HIV by Sex at birth, Low Country PHR (2019)

| | Low Country PHR Total Population, 2019 | | Low Country PHR Total Reported Living With HIV, 2019 | |
|---|---|---|---|---|
| Sex at birth | Count | % | Count | % |
| Men | 586,495 | 49% | 3,585 | 72% |
| Women | 618,203 | 51% | 1,373 | 28% |
| Total | 1,204,698 | 100% | 4,958 | 100% |

### Persons Living with Diagnosed HIV Infection of All Stages by Race/Ethnicity

African Americans in the Low Country PHR are disproportionately impacted by HIV. African Americans comprise approximately 28% of the Low Country PHR's population, yet 67% PLWHA were African American (Figure 7). The African American population has over two times the number of people living with HIV than Caucasian men and women and over 11 times the number of Hispanic men and women.

Figure 7: Newly Diagnosed Cases of HIV by Race/Ethnicity, Low Country PHR (2019)

| | Low Country PHR Total Population, 2019 | | Low Country PHR Total Reported HIV Diagnosis, 2019 | |
|---|---|---|---|---|
| Race/Ethnicity | Count | % | Count | % |
| Caucasian | 734,492 | 61% | 1,202 | 24% |
| AA | 341,204 | 28% | 3,299 | 67% |
| Hispanic | 78,038 | 6% | 291 | 6% |
| Other | 50,694 | 5% | 133 | 3% |
| Total[1] | 1,204,698 | 100% | 4,925 | 100% |

[1]A small portion of newly diagnosed cases did not report race.

## Persons Living with Diagnosed HIV Infection of All Stages by Age

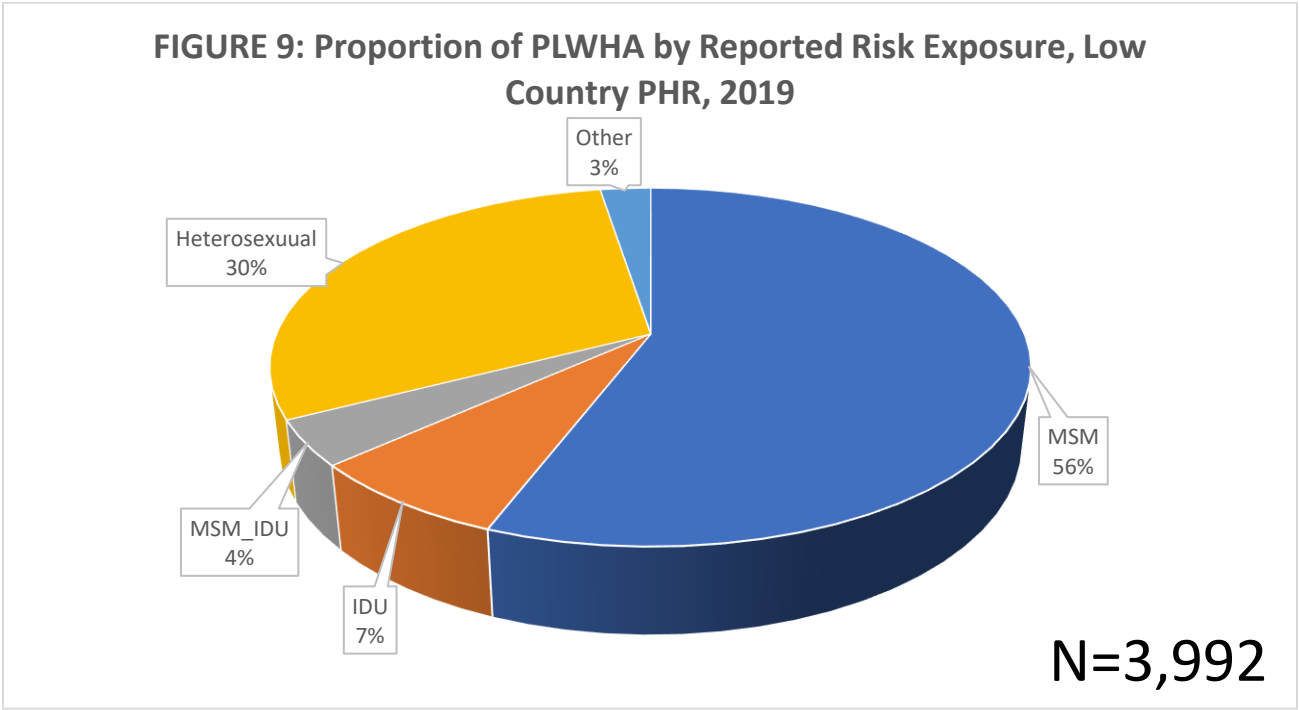
In 2019, half (51%) of PLWHA in the Low Country PHR were 50 years of age or older (Figure 8). Forty-eight percent were between the ages of 20 and 49. Individuals above the age of 30 made up the largest proportion of PLWHA in the Low Country PHR (88%).

Figure 8: People Living with HIV by Age, Low Country PHR (2019)

| Years of Age | Count | % |
|---|---|---|
| <19 | 68 | 1% |
| 20-29 | 545 | 11% |
| 30-49 | 1,820 | 37% |
| 50+ | 2,515 | 51% |
| Total | 4,958 | 100% |

## Persons Living with Diagnosed HIV Infection of All Stages by Risk Exposure

Figure 9 shows the risk of exposure for PLWHA in the Low Country PHR. Nineteen percent of PLWHA in the Low Country Public Health Region have an unreported mode of exposure (n= 966). Of cases with a reported risk, the category of men who have sex with men (MSM) represents the highest proportion (56%) of individuals living with HIV. Heterosexual contact is the 2nd highest prevalent group of PLWHA (30%). Injection drug use (IDU), MSM & IDU, and other risk of transmission are much less likely than the more prominent modes of transmission in the Low Country PHR (14%).



## Persons Living with Diagnosed HIV Infection of All Stages by County

Of the 4,958 PLWHA in the Low Country PHR, Charleston County has the highest count (2,164) and proportion (44%) among counties, followed by Orangeburg County with 566 PLWHA (11%). Hampton County has the highest rate of PLWHA (790.8 per 100,000), followed by Bamberg County (703.8 per 100,000). The average prevalence rate in the Low Country Counties is 485.8 cases per 100,000. Of the 11 counties, six are above the average prevalence rate of the Low Country PHR: Allendale, Bamberg, Charleston, Colleton, Hampton, Orangeburg (Figure 10).

Figure 10: People Living with HIV by County, Low Country PHR (2019)

| County | Count | % | Rate |
|---|---|---|---|
| Allendale | 52 | 1% | 598.5 |
| Bamberg | 99 | 2% | 703.8 |
| Beaufort | 478 | 10% | 248.8 |
| Berkeley | 553 | 11% | 242.7 |
| Calhoun | 47 | 1% | 323.0 |
| Charleston | 2,164 | 44% | 526.0 |
| Colleton | 205 | 4% | 544.1 |
| Dorchester | 526 | 11% | 323.1 |
| Hampton | 152 | 3% | 790.8 |
| Jasper | 116 | 2% | 385.8 |
| Orangeburg | 566 | 11% | 656.8 |
| Total | 4,958 | 100% | N/A |
| Average | 451 | N/A | 485.8 |

## Treatment & Retention in Care for Persons Living with HIV of All Stages

Figure 11 displays the counts and percentages by county for persons living with HIV/AIDS related to care status: 1) received care; 2) retained in care; and 3) viral suppression achieved. 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.

### Received Care

Individuals who received care are those who received a CD4 or viral load test result in 2019. Figure 11 displays the received care status by county in the Low Country PHR. Of the 11 Low Country Counties, two (Beaufort, Jasper) had less than 60% of PLWHA receive care. Of which Beaufort County (57%) had the lowest percentage receiving care. Charleston County had the highest number of PLWHA, but only 65% received care in this county. The remaining nine counties had over 60% of PLWHA to receive care in 2019, with five of those nine having over 70% receiving care. In the Low Country PHR, 68% on average received care in 2019.

### Retention in Care

Individuals who had at least two CD4 or viral load test results at least three months apart during 2019 were identified as retained in care. Figure 11 also displays the retention in care statistics for all counties in the Low Country PHR. Of the 11 counties, almost one of every two (52%) PLWHA were retained in care in 2019. Three counties in the Low Country PHR had less than 50% of PLWHA retained in care (Beaufort, Hampton, Jasper). The highest retention in care county was Allendale with 64%. The four counties with the highest number of PLWHA (Charleston, Orangeburg, Dorchester, Beaufort, in descending order) had 52% or less PLWHA retained in care in 2019.

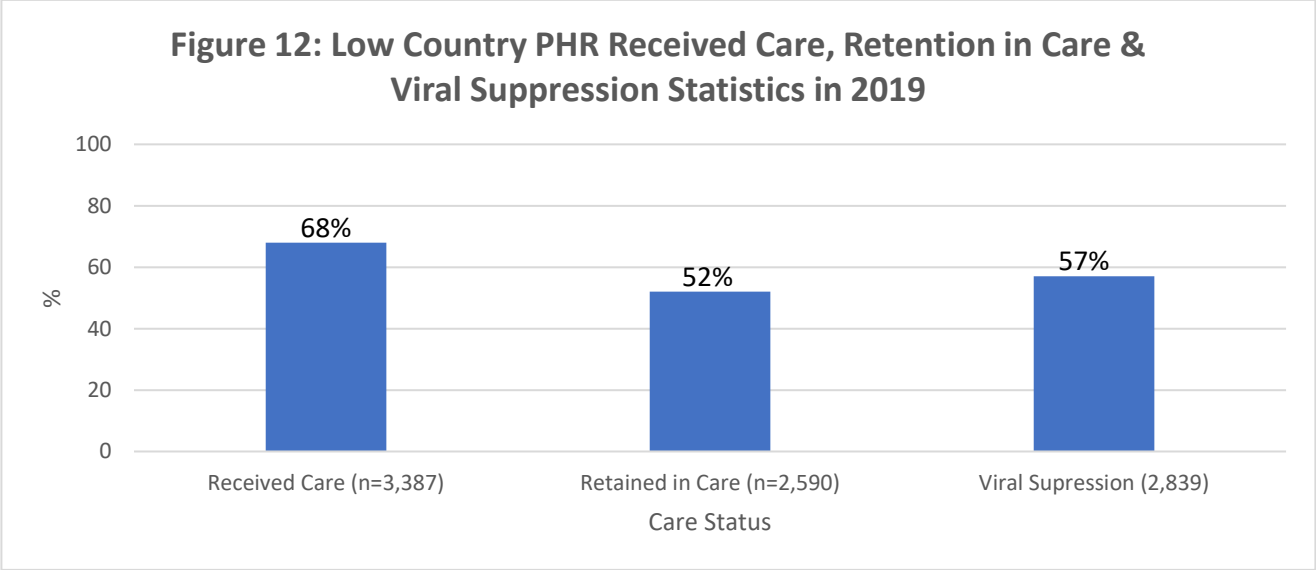
### Viral Suppression

Individuals who had a viral load of less than or equal to 200 copies per milliliter at their most recent test in 2019 were considered to be virally suppressed. To obtain viral suppression means the virus is at an undetectable level and risk of transmission is greatly reduced. Figure 11 displays the percentage of PLWHA that achieved viral suppression in 2019 for all counties in the Low Country PHR. For most counties (9 of 11) viral suppression is achieved at 50% or higher in PLWHA. Beaufort and Jasper are the only counties in the Low Country PHR to not achieve greater than 50% viral suppression in PLWHA in their county. These counties also had low retention in care percentages which could attribute to the low viral suppression percentages. In the Low Country PHR, on average, 57% of PLWHA achieved viral suppression in 2019.

Figure 11: Low Country PHR Received Care, Retention in Care & Viral Suppression Statistics (2019)

| County | Total Diagnosed PLWHA | Received Care[1] | Retention in Care[2] | Viral Suppression Achieved[3] |
|---|---|---|---|---|
| Allendale | 50 | 72% | 64% | 62% |
| Bamberg | 98 | 68% | 55% | 55% |
| Beaufort | 475 | 57% | 40% | 48% |
| Berkeley | 559 | 71% | 54% | 63% |
| Calhoun | 45 | 69% | 51% | 58% |
| Charleston | 2,177 | 65% | 50% | 55% |
| Colleton | 201 | 76% | 61% | 65% |
| Dorchester | 535 | 79% | 61% | 67% |
| Hampton | 153 | 62% | 46% | 50% |
| Jasper | 117 | 58% | 38% | 48% |
| Orangeburg | 571 | 70% | 57% | 61% |
| Total | 4,981 | N/A | N/A | N/A |
| Average | 453 | 68% | 52% | 57% |

[1]An individual with greater than or equal to 1 CD4 or viral load test within 3 months after HIV diagnosis in 2019.
[2]An Individual with at least 1 CD4 or viral load test result during 2019.
[3]An individual who had a viral load of less than or equal to 200 copies per milliliter at most recent test in 2019.



## Linkage to Care for New Diagnoses of HIV

The linkage to care for new diagnoses of HIV is critical to reducing the advancement of the disease. As a public health measure, it will serve as a vital role in reducing the risk of the virus being transmitted to others. Persons confirmed as newly diagnosed are advised to enter care and begin treatment immediately to slow the progression of this disease. In the Low Country PHR, linkage to care efforts has improved over the years, with various programs and outlets for linkage to care.

Figure 13 displays the percentage of new diagnoses that in 2019 and the amount of time to get newly diagnosed persons into care. On average in the Low County PHR, 73% of persons newly diagnosed are linked to care within one-month and 97% are linked to care within three months. Linkage to care is a methodology developed by CDC, it defines linked to care if at least one viral load test is completed since the initial diagnosis.

Figure 13: Low Country PHR, HIV Incidence Linkage to Care Within 1 and 3 Months (2019)

| County | Number of new HIV Diagnoses | Linked within 1 Month (%) | Linked within 3 Months (%) |
|---|---|---|---|
| Allendale | <5 | N/A | N/A |
| Bamberg | <5 | N/A | N/A |
| Beaufort | 21 | 71% | 95% |
| Berkeley | 20 | 70% | 100% |
| Calhoun | <5 | N/A | N/A |
| Charleston | 74 | 74% | 95% |
| Colleton | 5 | 80% | 80% |
| Dorchester | 21 | 71% | 100% |
| Hampton | 5 | 80% | 100% |
| Jasper | 5 | 80% | 100% |
| Orangeburg | 24 | 79% | 97% |
| Total | 175 | N/A | N/A |
| Average | 22 | 76% | 96% |

Counties with less than 5 new cases of HIV do not have their counts displayed due to a CDC small cell suppression rule, of not reporting counts <5.

## EHE Pillar 3: Prevent New HIV Transmissions by Using Proven Interventions

## PrEP Eligible estimates for SC

Pillar 3 includes proven interventions such as pre-exposure prophylaxis (PrEP) and syringe services programs (SSPs, where allowable by law). Pre-exposure prophylaxis (PrEP) is a pill taken daily by people who do not have HIV but who are at very high risk for getting HIV. It is highly effective in preventing HIV when taken daily. Based on the most recently available data, CDC estimated in 2018 that there were approximately 10,249 persons in South Carolina who had indications for PrEP. Of the 10,000+ persons, only 1,198 (11.7%) were prescribed PrEP medication.[1]

## EHE Pillar 4: Respond Quickly to Potential HIV Outbreaks

## SC HIV Cluster Outbreak Detection and Response Summary

Responding quickly to potential HIV outbreaks will get needed prevention and treatment services to people who need them. HIV cluster detection and response (CDR) is an approach that uses data routinely reported to health departments to identify networks of rapid HIV transmission. This information can then be used to identify gaps in prevention and care services that contribute to rapid transmission and ensure that services reach the populations that need them the most.

A cluster or outbreak indicates **gaps in our prevention and care services** that need to be addressed to remove barriers to services and stop transmission. To close this gap, health departments can work to:

| | |
|---|---|
| -- Understand barriers to care and prevention | -- Provide needed services in targeted areas |
| -- Develop approaches to overcome barriers | -- Increase testing and outreach in those areas |

## Other Sexually Transmitted Infections

Although this report has primarily focused on the HIV epidemic in South Carolina, other sexually transmitted infections (STIs) still impact South Carolina at a high level. STIs such as Chlamydia, Gonorrhea, and Syphilis have large incidence rates in South Carolina, impacting the health of many communities. The following data represents incidence rates of the Chlamydia, Gonorrhea, and Syphilis in the Low Country PHR. The need to continue to improve prevention efforts and raise attention to these STIs is still necessary to improve sexual health in South Carolina.

### Chlamydia

Figure 14 displays the total cases of Chlamydia by county as well as the rate per 100,000 based on that county's population. Among the counties in the Low Country PHR, Charleston County has the largest number of cases (3,184). However, three counties have over 1,000 cases per 100,000 (Orangeburg, Allendale, Bamberg). Four counties exceed 1,000 documented cases of Chlamydia in 2019 in the Low Country PHR (Berkeley, Charleston, Dorchester, Orangeburg).

Figure 14: Low Country PHR New Cases of Chlamydia by County (2019)

| County | Count | Rate per 100,000 |
|---|---|---|
| Allendale | 104 | 1,197.0 |
| Bamberg | 161 | 1,144.6 |
| Beaufort | 956 | 497.6 |
| Berkeley | 1,160 | 509.0 |
| Calhoun | 58 | 398.5 |
| Charleston | 3,184 | 774.0 |
| Colleton | 301 | 798.9 |
| Dorchester | 1,125 | 691.0 |
| Hampton | 152 | 790.8 |
| Jasper | 216 | 718.3 |
| Orangeburg | 1,053 | 1,221.9 |
| Total | 8,470 | N/A |
| Average | 770 | 794.7 |

## Chlamydia by Sex at birth

Figure 15 displays data on the rate of Chlamydia by county and by sex at birth. Within the Low Country PHR there is an apparent disparity of cases based on sex at birth. Women in all 11 counties in the Low Country PHR have a higher rate than men. Further, the women's' rate is above 600 per 100,000 in all counties except for Calhoun. In Figure 16, a pie chart shows throughout the Low Country PHR that more cases are occurring among women (67%) than among men. Women have two times as many cases of Chlamydia diagnoses compared with the diagnoses among men.

**Figure 15: Rate of Chlamydia per 100,000 in the Low Country PHR by Sex at birth, 2019**

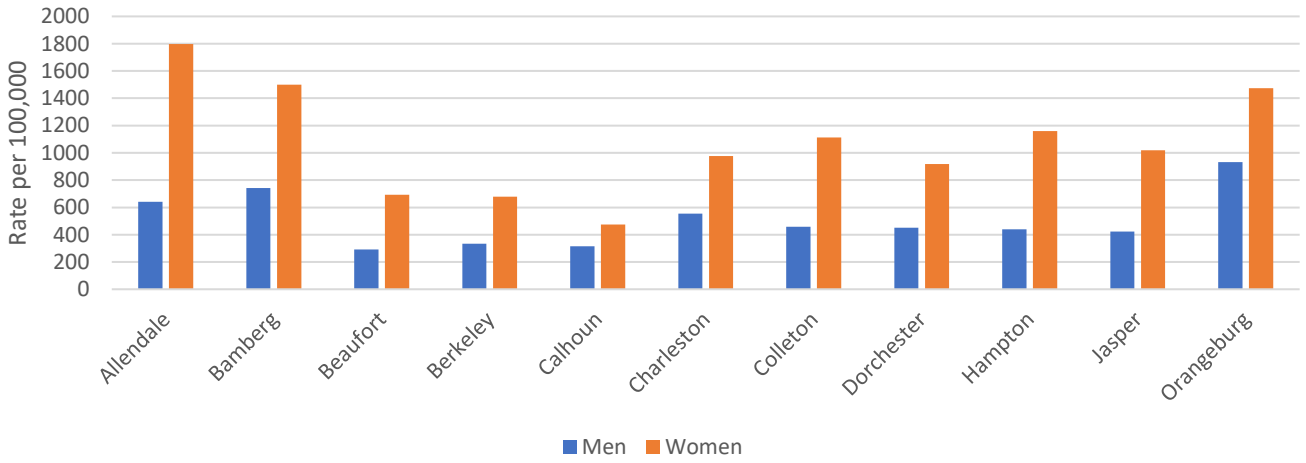
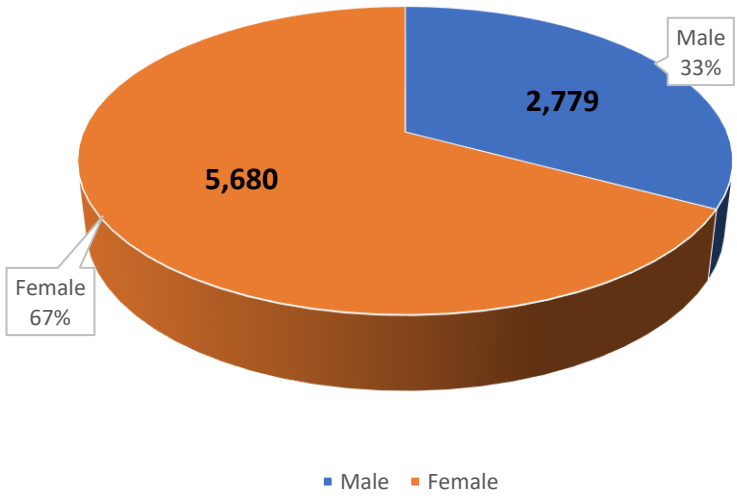



**Figure 16: Chlamydia Cases in the Low Country PHR by Sex at birth, 2019**



## Chlamydia by Race/Ethnicity

Figure 17 shows the average rate per 100,000 cases of Chlamydia by race/ethnicity in the Low Country PHR. The graph below details a large disparity relative to race/ethnicity. African Americans have almost six times the rate of Chlamydia cases than any other race/ethnicity in the Low Country. Hispanics have the lowest rate among all four documented race/ethnicities. Caucasians are slightly higher than Caucasians but still much lower than African Americans. Figure 18 displays the total number of diagnosed cases of Chlamydia in the Low Country PHR. As shown in the bar graph African Americans have a greater number of cases of Chlamydia than any other race/ethnicity. African Americans account for 70% of the total number of cases diagnosed in the Low Country PHR.

**Figure 17: Average Rate per 100,000 of Chlamydia in the Low Country PHR by Race/Ethnicity in 2019**

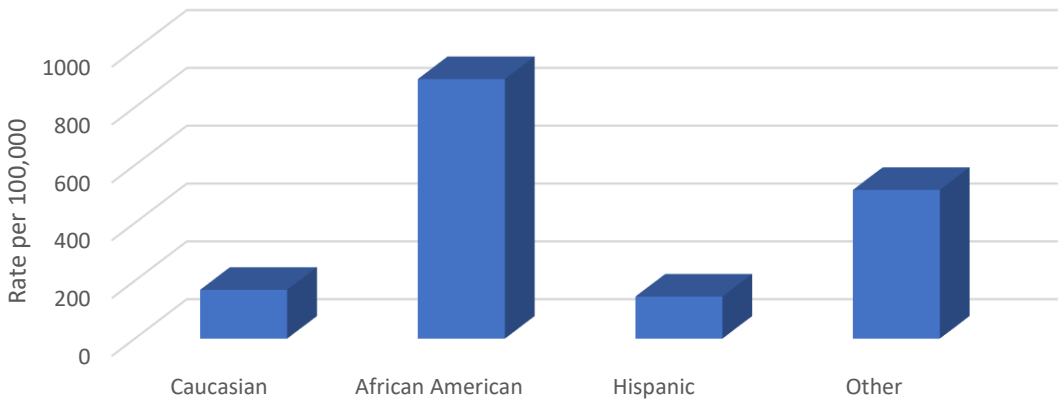
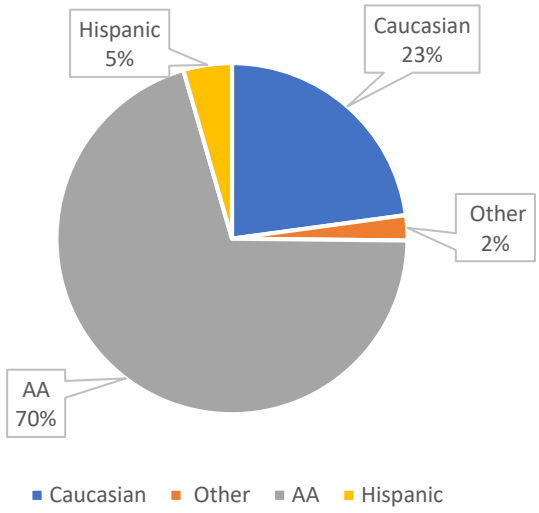



**Figure 18: Cases of Chlamydia by Race in the Low Country PHR, 2019**



## Gonorrhea

Figure 19 displays the total cases of Gonorrhea by county as well as the rate per 100,000 based on that county's population. Among the counties in the Low Country PHR, Charleston County has the largest number of cases (1,198). However, Orangeburg has the greatest rate among all counties (526.8 per 100,000) with Bamberg County having the second-highest rate (391.1 per 100,000). Three counties exceed 400 documented cases of Gonorrhea in 2019 in the Low Country PHR (Berkeley, Charleston, Orangeburg).

Figure 19: Low Country PHR New Cases of Gonorrhea by County (2019)

| County | Count | Rate per 100,000 |
|---|---|---|
| Allendale | 21 | 241.7 |
| Bamberg | 55 | 391.1 |
| Beaufort | 276 | 143.7 |
| Berkeley | 429 | 188.2 |
| Calhoun | 27 | 185.6 |
| Charleston | 1,198 | 291.2 |
| Colleton | 117 | 310.5 |
| Dorchester | 357 | 219.2 |
| Hampton | 52 | 270.5 |
| Jasper | 81 | 269.4 |
| Orangeburg | 454 | 526.8 |
| Total | 3,067 | N/A |
| Average | 279 | 276.2 |

## Gonorrhea by Sex at birth

Figure 20 displays data on the rate of Gonorrhea by county and by sex at birth. Within the Low Country PHR the rates between both sexes at birth are approximately equal. Men in seven of the 12 counties in the Low Country PHR have a higher rate than women. In Figure 21, a pie chart shows more cases are occurring among men (53%) than among women. However, the raw count is much closer to equal and does not reflect a significant sex at birth disparity as Chlamydia previously displayed.

**Figure 20: Rate of Gonorrhea per 100,000 in the Low Country PHR by Sex at birth, 2019**

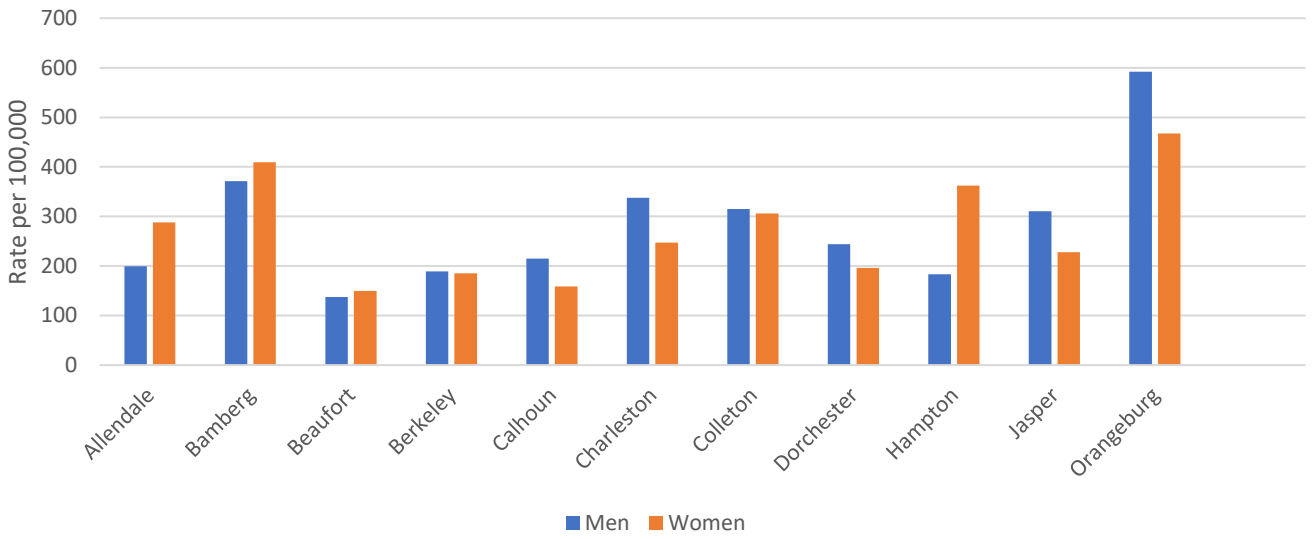
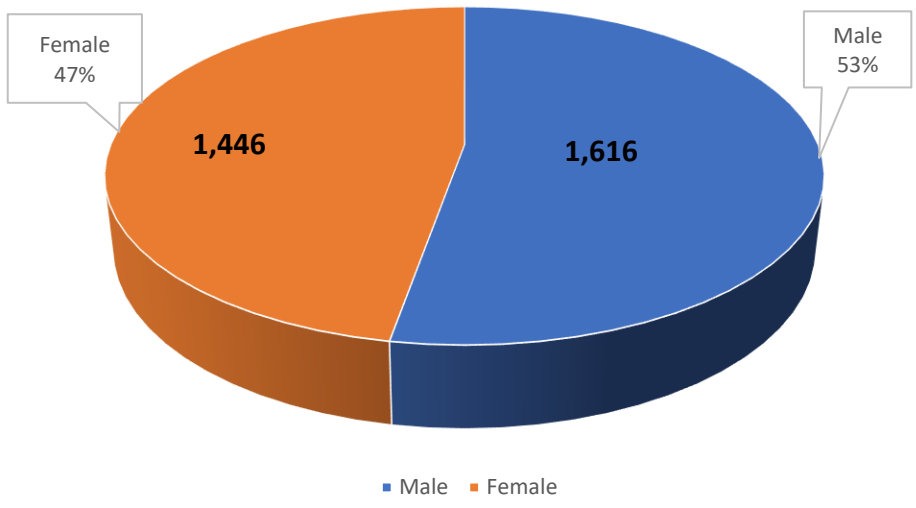



**Figure 21: Gonorrhea Cases in the Low Country PHR by Sex at birth, 2019**



## Gonorrhea by Race/Ethnicity

Figure 22 shows the average rate per 100,000 cases of Gonorrhea by race/ethnicity in the Low Country PHR. The graph below details a large disparity relative to race/ethnicity. African Americans have six times the rate of Gonorrhea cases compared to Caucasians in the Low Country PHR. Hispanics have the lowest rate of all race/ethnicity. Caucasians and Other races are higher than Hispanics, but still much lower than African Americans. Figure 23 displays the total number of diagnosed cases of Gonorrhea in the Low Country PHR. As shown in the bar graph African Americans have a greater number of cases of Gonorrhea than any other race/ethnicity. African Americans account for 79% of the total number of cases diagnosed in the Low Country PHR.

**Figure 22: Average Rate per 100,000 of Gonorrhea in the Low Country PHR by Race/Ethnicity, 2019**

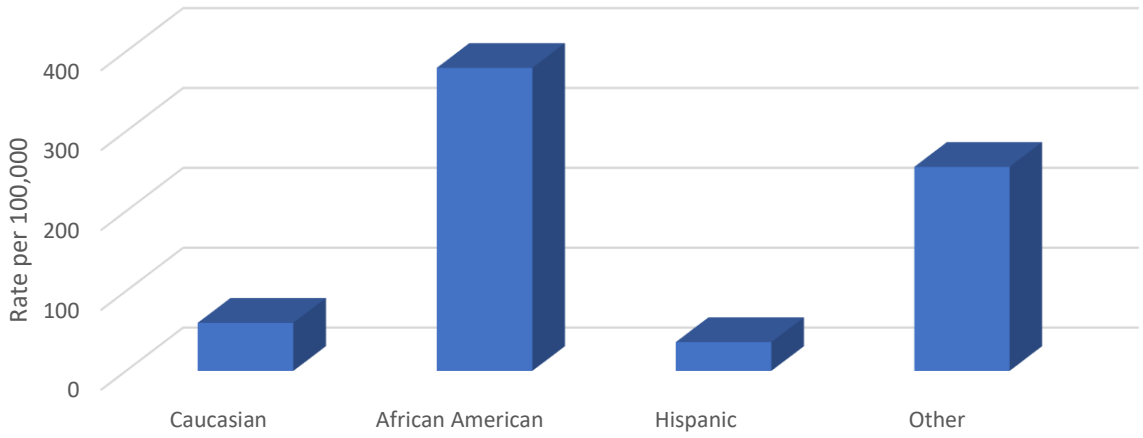
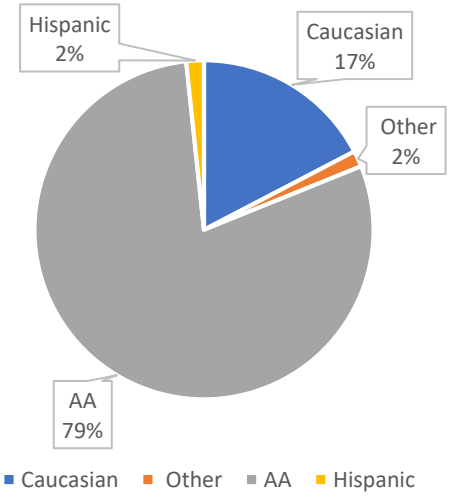



**Figure 23: Cases of Gonorrhea by Race in the Low Country PHR, 2019**



## Syphilis

Figure 24 displays the total cases of Syphilis by county as well as the rate per 100,000 based on that county's population. Among the counties in the Low Country PHR, Charleston has the largest number of cases (150). Further, Charleston has the greatest rate among all counties (36.4 per 100,000) with Orangeburg having the second-highest rate (36.0 per 100,000), but with a much smaller total case count of only 31 cases.

Figure 24: Low Country PHR New Cases of Syphilis by County (2019)

| County | Count | Rate per 100,000 |
|---|---|---|
| Allendale | <5 | 23.0 |
| Bamberg | <5 | 14.2 |
| Beaufort | 22 | 11.4 |
| Berkeley | 29 | 12.8 |
| Calhoun | <5 | 13.8 |
| Charleston | 150 | 36.4 |
| Colleton | 7 | 18.6 |
| Dorchester | 37 | 22.8 |
| Hampton | N/A | N/A |
| Jasper | <5 | 10.0 |
| Orangeburg | 31 | 36.0 |
| Total | >281 | N/A |
| Average | 26 | 19.9 |

Counties with less than 5 new cases of HIV do not have their counts displayed due to a CDC small cell suppression rule, of not reporting counts <5.

## Syphilis by Sex at birth

Figure 25 displays data on the rate of Syphilis by county and by sex at birth. Within the Low Country PHR the rates for men are higher in all the 10 counties with reported cases. In Figure 26, a pie chart displays throughout the Low Country PHR that more cases are occurring among men (78%) than among women.

**Figure 25: Rate of Syphilis per 100,000 in the Low Country PHR by Sex at birth, 2019**

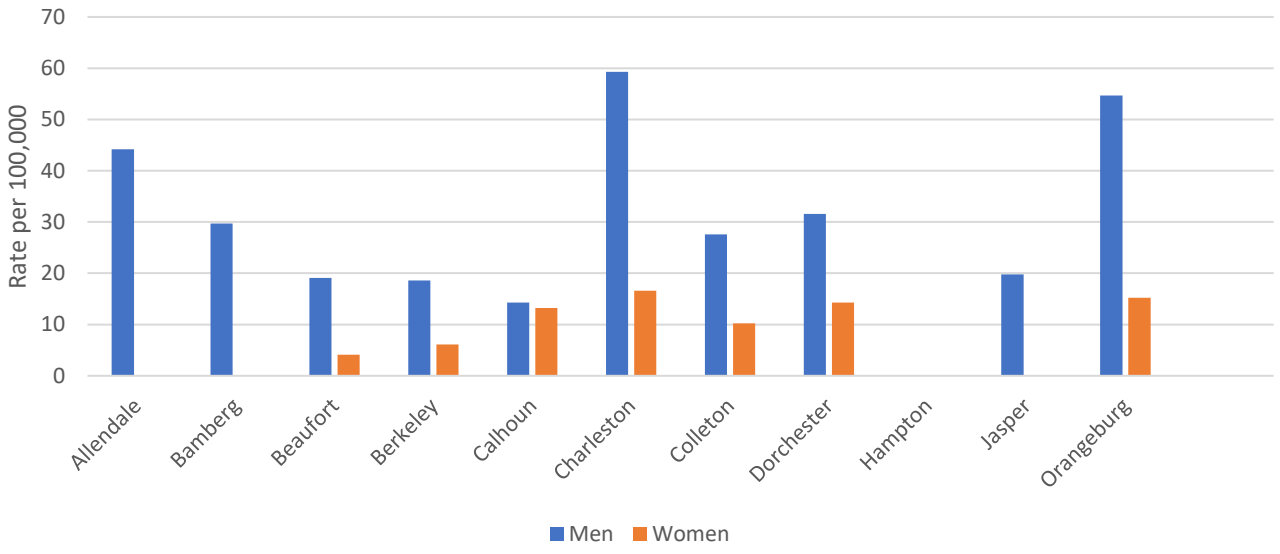
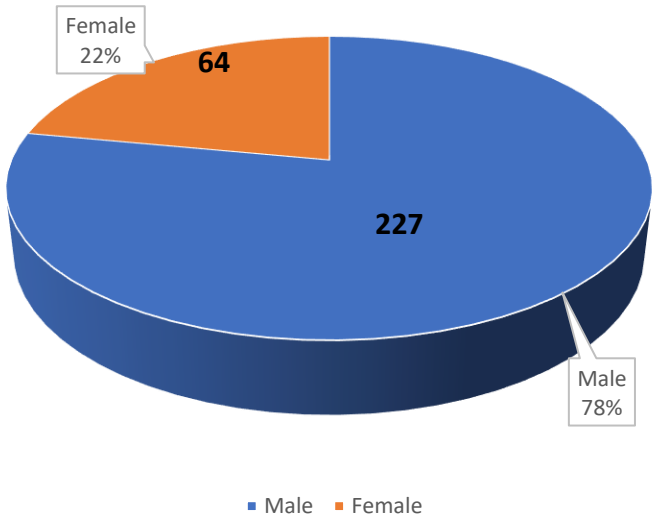



**Figure 26: Syphilis Cases in the Low Country PHR by Sex at birth, 2019**



## Syphilis by Race/Ethnicity

Figure 27 shows the average rate per 100,000 cases of Syphilis by race/ethnicity in the Low Country PHR. The graph below details a large disparity relative to race/ethnicity. African Americans have more than five times the rate of Syphilis cases compared to Caucasians and almost three times the cases of Syphilis compared to Hispanics in the Low Country PHR. Hispanics have the lowest rate of Syphilis in the Low Country PHR. Figure 28 displays the total number of diagnosed cases of Syphilis in the Low Country PHR. As shown in the bar graph African Americans have a greater number of cases of Syphilis than any other race/ethnicity. African Americans account for 65% of the total number of cases diagnosed in the Low Country PHR.

**Figure 27: Average Rate per 100,000 of Syphilis in the Low Country PHR by Race/Ethnicity, 2019**

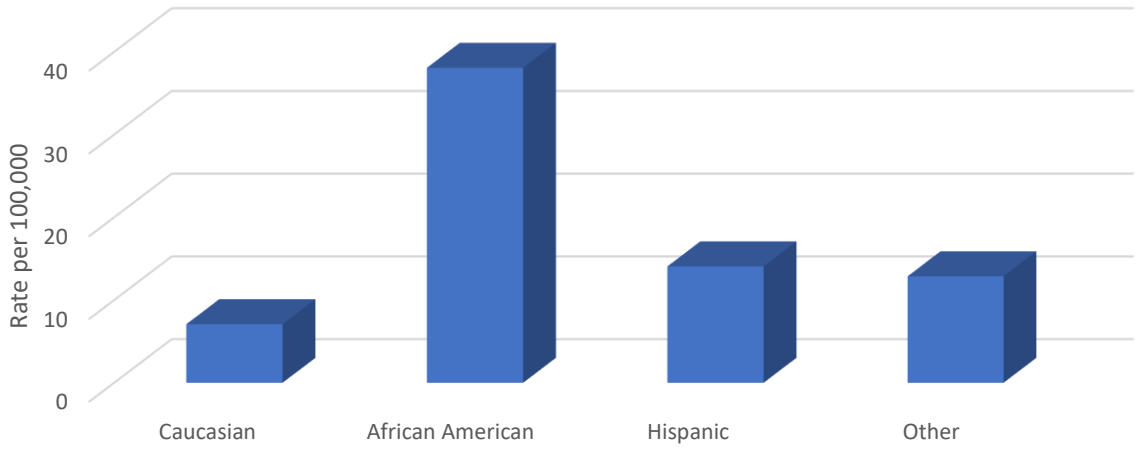
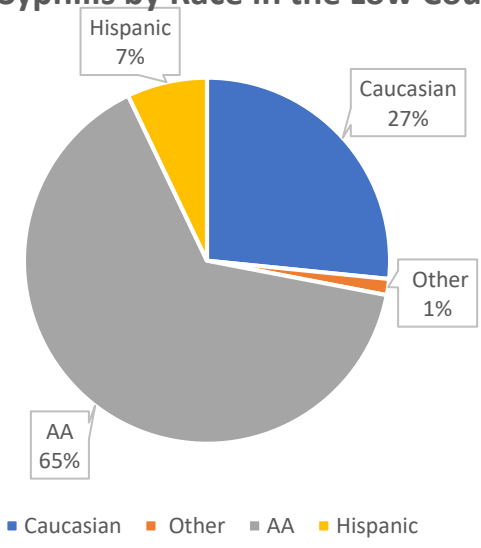



**Figure 28: Cases of Syphilis by Race in the Low Country PHR, 2019**



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## Appendix A

### Methodology

The following describes the methodology used to obtain the statistics contained in Figures 1 through 3. Percentages are calculated by taking the number of individuals in a group diagnosed with a new case of HIV and is divided by the total of all groups. For example, in Figure 1, 79% is obtained by 176 / 224 = 0.79 x 100 = 79%. Rates are calculated per 100,000 people. An incidence is calculated such as: (Total New cases of HIV / Total population) x 100,000. The rate indicated in the total row is the average rate by county. This however is not the rate for the Region as a whole. This rate is for counties to compare themselves to the rest of the region. 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”.


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