

**Epidemiologic Profile of
HIV and AIDS -
Pee Dee Public Health Region
2020**



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

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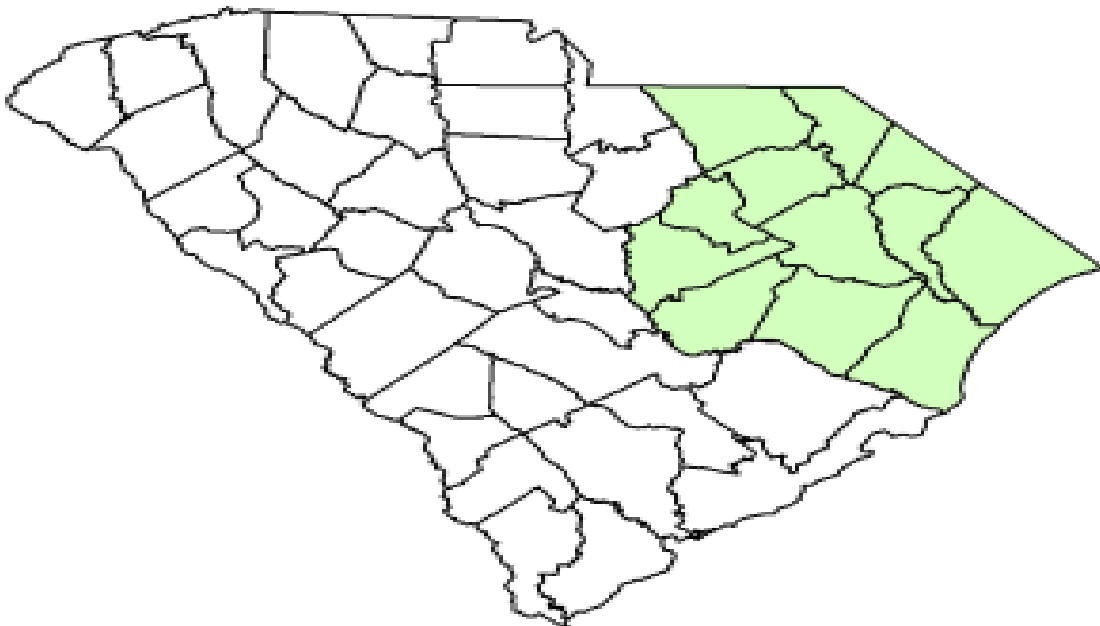
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Executive Summary

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 Pee Dee 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 Pee Dee region, located in the upper eastern area of the state, consists of the following counties: Chesterfield, Clarendon, Darlington, Dillon, Florence, Georgetown, Horry, Lee, Marion, Marlboro, Sumter, Williamsburg.



Recent data for the Pee Dee 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 Pee Dee than any other race/ethnicity and sex at birth combination in the region. Sixty-five percent of newly diagnosed cases of HIV are African Americans and 75% of new cases are men, in the Pee Dee PHR. Seventy-one percent of PLWHA are African American and 67% of PLWHA are men.

New cases of HIV primarily occur between the age of 20-49 (73%). Twenty-three percent of new cases of HIV occur in the Pee Dee PHR. Horry County has the greatest number of new cases (126,35%) but, Dillon County has the highest rate in the region (27.9 per 100,000).

In 2019, 90% of PLWHA were above 30 years of age in the Pee Dee PHR. Twenty-three percent of the state's PLWHA are in the Pee Dee PHR; and Horry County has the greatest number (1,242, 27%) of PLWHA. However, Lee County has the highest prevalence rate in the Pee Dee (1,111.2 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, 94% of people newly diagnosed with HIV are successfully linked to care within three months or less, in the Pee Dee PHR. However, retention in care has been less successful, with only 57% of PLWHA remaining in care as of 2019. For PLWHA in the Pee Dee PHR, just 61% have achieved viral suppression.

Other Sexually Transmitted Infections (STIs) are also of concern in the Pee Dee PHR. In 2019, more than 7,000 cases of Chlamydia, 3,135 cases of Gonorrhea, and 217 cases of Syphilis were reported in the Pee Dee 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.

Pee Dee Public Health Region Overview

Eighteen percent (n=942,238) of South Carolina residents live in the Pee Dee PHR. As of December 31, 2019, there were 4,656 people living with HIV in the Pee Dee PHR, giving the region the 3rd highest number and proportion (23%) of PLWHA in South Carolina. The Pee Dee PHR has the highest rate of PLWHA per 100,000 population (503.0). Twenty-three percent of people newly diagnosed with HIV in 2018-2019 live in the Pee Dee PHR.

The Pee Dee PHR has slightly more females than males and Caucasians are greater in number than African Americans in the Pee Dee PHR. Also, Caucasians vastly outnumber the Hispanic population in the Pee Dee 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 Pee Dee Public Health Region (PHR), 52% of residents are women, and 48% are men. Men in the Pee Dee PHR are disproportionately affected by HIV with 75% of new diagnoses in 2018-2019. Figure 1 displays the number of newly diagnosed cases of HIV by sex at birth in the Pee Dee PHR.

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

Sex at birth	Pee Dee PHR Total Population, 2019		Pee Dee PHR Total Newly Reported HIV Diagnosis, 2018-2019	
	Count	%	Count	%
Men	450,990	48%	274	75%
Women	491,248	52%	89	25%
Total	942,238	100%	363	100%

Newly Diagnosed Cases of HIV by Race/Ethnicity

African Americans in the Pee Dee PHR are disproportionately impacted by HIV. African Americans comprise approximately 33% of the Pee Dee PHR's population, yet 65% of newly diagnosed cases were African American (Figure 2).

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

Race/Ethnicity	Pee Dee PHR Total Population, 2019		Pee Dee PHR Total Reported HIV Diagnosis, 2018-2019	
	Count	%	Count	%
Caucasian	565,365	60%	82	26%
AA	309,739	33%	206	65%
Hispanic	20,954	2%	19	6%
Other	46,180	5%	8	3%
Total ¹	942,238	100%	315 ¹	100%

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

Newly Diagnosed Cases of HIV by Age

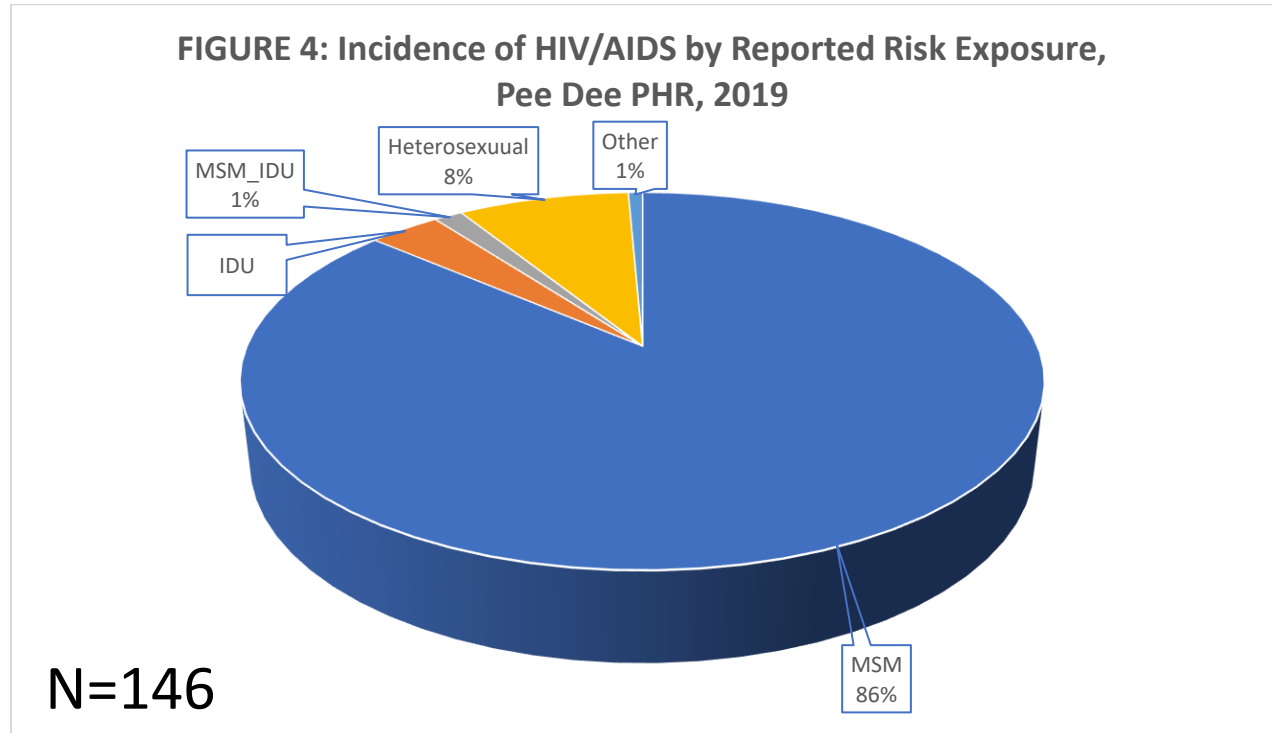
For newly diagnosed cases, there is a disproportionate impact by age between the ages of 20 and 49. This age group makes up 73% of newly diagnosed cases; with 39% in the 30 to 39 age group alone (Figure 3).

Figure 3: Newly Diagnosed Cases of HIV by Age, Pee Dee PHR (2019)

Years of Age	Count	%
<19	18	5%
20-29	125	34%
30-49	141	39%
50+	79	22%
Total	363	100%

Newly Diagnosed Cases of HIV by Risk Exposure

Figure 4 shows the risk exposure for new cases of HIV in the Pee Dee PHR. Sixty percent of new cases of HIV in the Pee Dee PHR have an unreported risk exposure (n=217). Of all cases in the Pee Dee with a reported risk (n=146), men who have sex with men (MSM) represents the highest proportion (86%) followed by heterosexual contact (8%). Injection drug use and MSM_IDU exposures are less likely to be risks for transmission.



Newly Diagnosed Cases of HIV by County

Horry County had the highest number of newly diagnosed cases in 2018-2019 (126). Dillon County has the highest rate of new infections with 27.9 per 100,000 (Figure 5). Of 12 Pee Dee Counties, six counties are above the average incidence rate (18.4 per 100,000): Darlington, Dillon, Florence, Marion, Sumter, Williamsburg, and Richland (Figure 5).

Figure 5: Newly Diagnosed Cases of HIV by County, Pee Dee PHR (2019)

County	Count	%	Rate (per 100,000)
Chesterfield	9	2%	9.9
Clarendon	11	3%	16.4
Darlington	27	7%	20.2
Dillon	17	5%	27.9
Florence	65	18%	23.5
Georgetown	15	4%	12.1
Horry	126	35%	18.1
Lee	<5	<1%	5.9
Marion	13	4%	21.1
Marlboro	9	2%	17.2
Sumter	55	15%	25.8
Williamsburg	14	4%	23.0
Total	>362	100%	N/A
Average	30	N/A	18.4

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 Pee Dee PHR are disproportionately affected by HIV with 67% of PLWHA in 2019 being men (Figure 6).

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

Sex at birth	Pee Dee PHR Total Population, 2019		Pee Dee PHR Total Reported Living With HIV, 2019	
	Count	%	Count	%
Men	450,990	48%	3,122	67%
Women	477,248	52%	1,534	33%
Total	942,238	100%	4,656	100%

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

African Americans in the Pee Dee PHR are disproportionately impacted by HIV. African Americans comprise approximately 33% of the Pee Dee PHR's population, yet 71% PLWHA were African American (Figure 7). The African American population has over three times the number of people living with HIV than Caucasian men and women and over 18 times the number of Hispanic men and women.

Figure 7: People Living with HIV by Race, Pee Dee PHR (2019)

Race/Ethnicity	Pee Dee PHR Total Population, 2019		Pee Dee PHR Total Reported HIV Diagnosis, 2019	
	Count	%	Count	%
Caucasian	565,365	60%	1,062	23%
AA	309,739	33%	3,252	71%
Hispanic	20,954	2%	180	4%
Other	46,180	5%	108	2%
Total ¹	942,238	100%	4,602	100%

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

Persons Living with Diagnosed HIV Infection of All Stages by Age

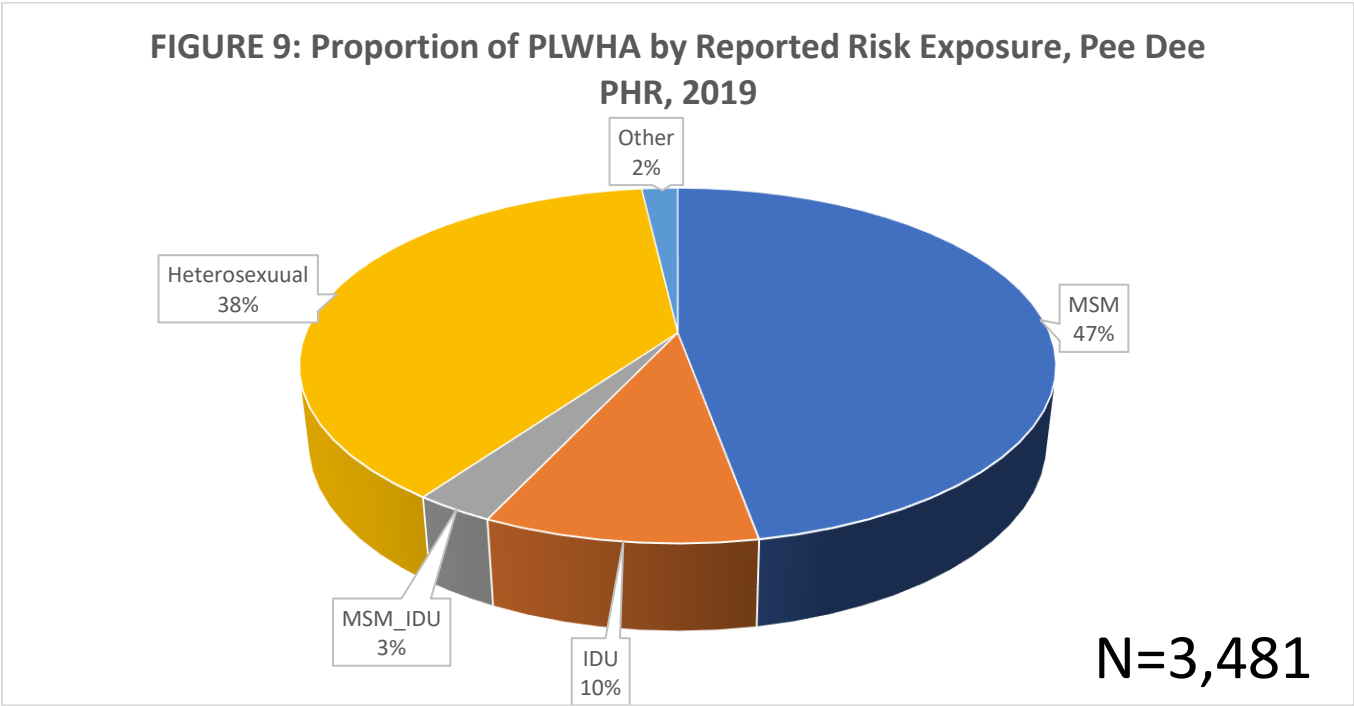
In 2019, about half (52%) of PLWHA in the Pee Dee PHR were 50 years of age or older (Figure 8). Forty-seven percent were between the ages of 20 and 49. Individuals above the age of 30 made up the largest proportion of PLWHA in the Pee Dee PHR (90%).

Figure 8: People Living with HIV by Age, Pee Dee PHR (2019)

Years of Age	Count	%
<19	38	1%
20-29	405	9%
30-49	1,786	38%
50+	2,427	52%
Total	4,656	100%

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

Figure 9 shows the risk of exposure for PLWHA in the Pee Dee PHR. Twenty-five percent of PLWHA in the Pee Dee Public Health Region have an unreported mode of exposure (n= 1,175). Of cases with a reported risk, the category of men who have sex with men (MSM) represents the highest proportion (47%) of individuals living with HIV. Heterosexual contact is the 2nd highest prevalent group of PLWHA (38%). Injection drug use (IDU), MSM & IDU, and other risk of transmission are much less likely than the more prominent modes of transmission in the Pee Dee PHR (15%).



Persons Living with Diagnosed HIV Infection of All Stages by County

Of the 4,656 PLWHA in the Pee Dee PHR, Horry County has the highest count (1,242) and proportion (27%) among counties, followed by Florence County with 868 PLWHA (19%). Lee County has the highest rate of PLWHA (1,111.2 per 100,000), followed by Williamsburg County (941.8 per 100,000). The average prevalence rate in the Pee Dee Counties is 592.2 cases per 100,000. Of the 12 counties, five are above the average prevalence rate of the Pee Dee PHR: Florence, Lee, Marion, Sumter, and Williamsburg (Figure 10).

Figure 10: People Living with HIV by County, Pee Dee PHR (2019)

County	Count	%	Rate
Chesterfield	124	2%	271.6
Clarendon	194	4%	574.9
Darlington	311	7%	466.8
Dillon	166	4%	544.6
Florence	868	19%	627.7
Georgetown	289	6%	461.1
Horry	1,242	27%	350.8
Lee	187	4%	1,111.2
Marion	185	4%	603.5
Marlboro	138	3%	528.3
Sumter	666	14%	624.0
Williamsburg	286	6%	941.8
Total	4,656	100%	N/A
Average	388	N/A	592.2

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 Pee Dee PHR. Of the 12 Pee Dee Counties, two (Chesterfield and Marlboro) had less than 60% of PLWHA receive care. The remaining ten counties had over 60% of PLWHA to receive care in 2019, with six of those ten having over 70% receiving care. The county with the largest number of diagnosed PLWHA is Horry with a count of 1,253. Of these PLWHA, 68% received care in 2019. In the Pee Dee PHR, 70% 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 Pee Dee PHR. Of the 12 counties, about one of every two (57%) PLWHA were retained in care in 2019. Four counties in the Pee Dee PHR had 50% or less of PLWHA retained in care (Chesterfield, Clarendon, Marlboro, and Williamsburg). The highest retention in care county was Lee with 70%. The three counties with the highest number of PLWHA (Horry, Florence, and Sumter, in descending order) had 61% 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 Pee Dee PHR. For most counties (11 of 12) viral suppression is achieved at 50% or higher in PLWHA. Edgefield and Fairfield are the only counties in the Pee Dee 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 Pee Dee PHR, on average, 61% of PLWHA achieved viral suppression in 2019.

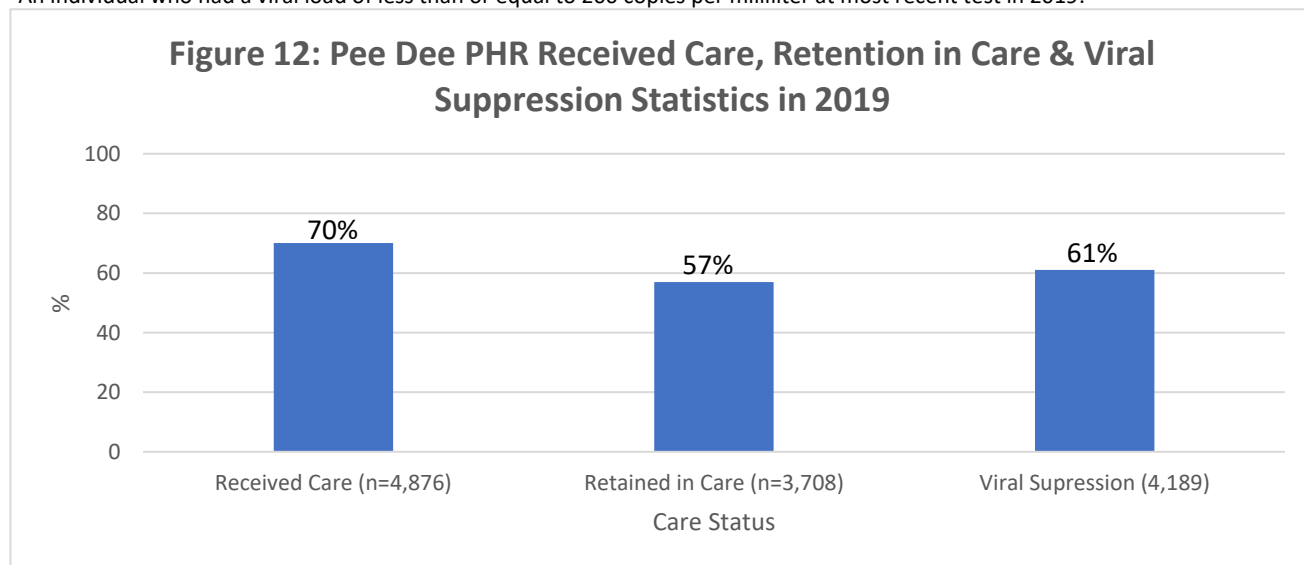
Figure 11: Pee Dee PHR Received Care, Retention in Care & Viral Suppression Statistics (2019)

County	Total Diagnosed PLWHA	Received Care ¹	Retention in Care ²	Viral Suppression Achieved ³
Chesterfield	126	58%	47%	52%
Clarendon	194	68%	50%	60%
Darlington	309	78%	66%	67%
Dillon	164	73%	61%	64%
Florence	873	75%	61%	64%
Georgetown	286	74%	53%	63%
Horry	1,253	68%	57%	61%
Lee	189	81%	70%	72%
Marion	186	76%	68%	67%
Marlboro	140	53%	44%	44%
Sumter	662	71%	60%	62%
Williamsburg	283	61%	50%	52%
Total	4,465	N/A	N/A	N/A
Average	372	70%	57%	61%

¹An individual with greater than or equal to 1 CD4 or viral load test within 3 months after HIV diagnosis in 2019.

²An Individual with at least 1 CD4 or viral load test result during 2019.

³An 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 Pee Dee 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 Pee Dee PHR, 82% of persons newly diagnosed are linked to care within one-month and 94% 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: Pee Dee 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 (%)
Chesterfield	<5	N/A	N/A
Clarendon	7	86%	100%
Darlington	11	82%	100%
Dillon	13	68%	92%
Florence	35	89%	94%
Georgetown	10	68%	70%
Horry	60	83%	95%
Lee	<5	N/A	N/A
Marion	9	78%	89%
Marlboro	6	83%	100%
Sumter	24	79%	96%
Williamsburg	10	100%	100%
Total	185	N/A	N/A
Average	19	82%	94%

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 Pee Dee 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

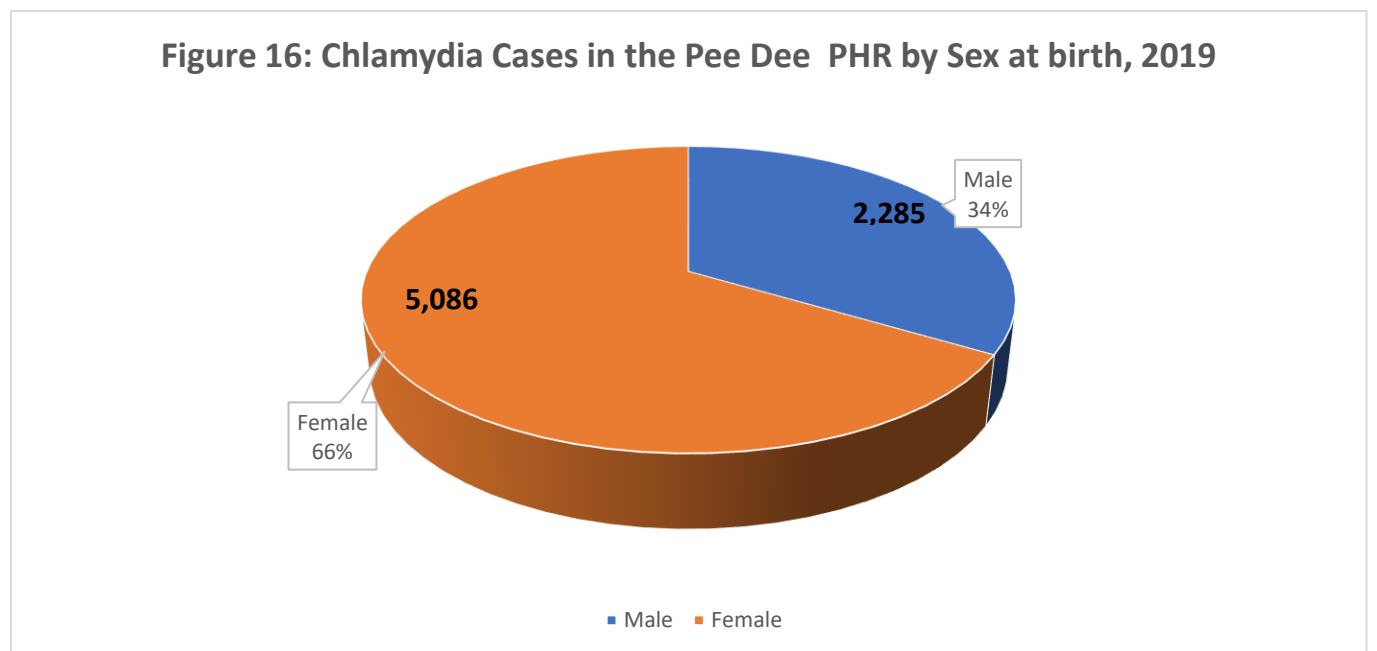
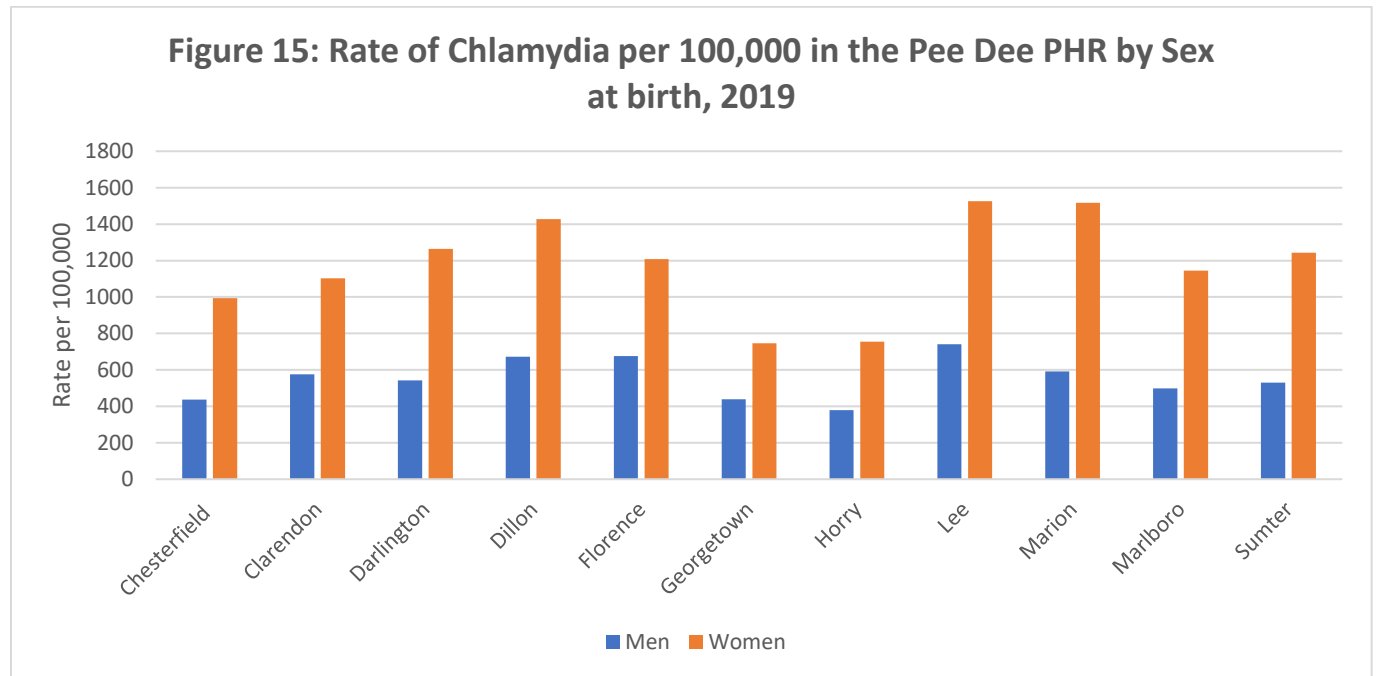
Figure 14 displays the total cases of Chlamydia by county as well as the rate per 100,000 based on that county's population. Among the counties in the Pee Dee PHR, Horry County has the largest number of cases (1,335). However, Williamsburg County has the greatest rate among all counties (1,254.7 per 100,000) with Lee County having the second-highest rate (1,129.0 per 100,000). Four counties exceed 1,000 documented cases of Chlamydia in 2019 in the Pee Dee PHR (Dillon, Lee, Marion, and Williamsburg).

Figure 14: Pee Dee PHR New Cases of Chlamydia by County (2019)

County	Count	Rate per 100,000
Chesterfield	331	725.1
Clarendon	286	847.6
Darlington	619	929.2
Dillon	327	1,072.8
Florence	1,335	965.4
Georgetown	376	599.8
Horry	2,043	577.0
Lee	190	1,129.0
Marion	336	1,096.0
Marlboro	211	807.8
Sumter	964	903.3
Williamsburg	381	1,254.7
Total	7,399	N/A
Average	617	909.0

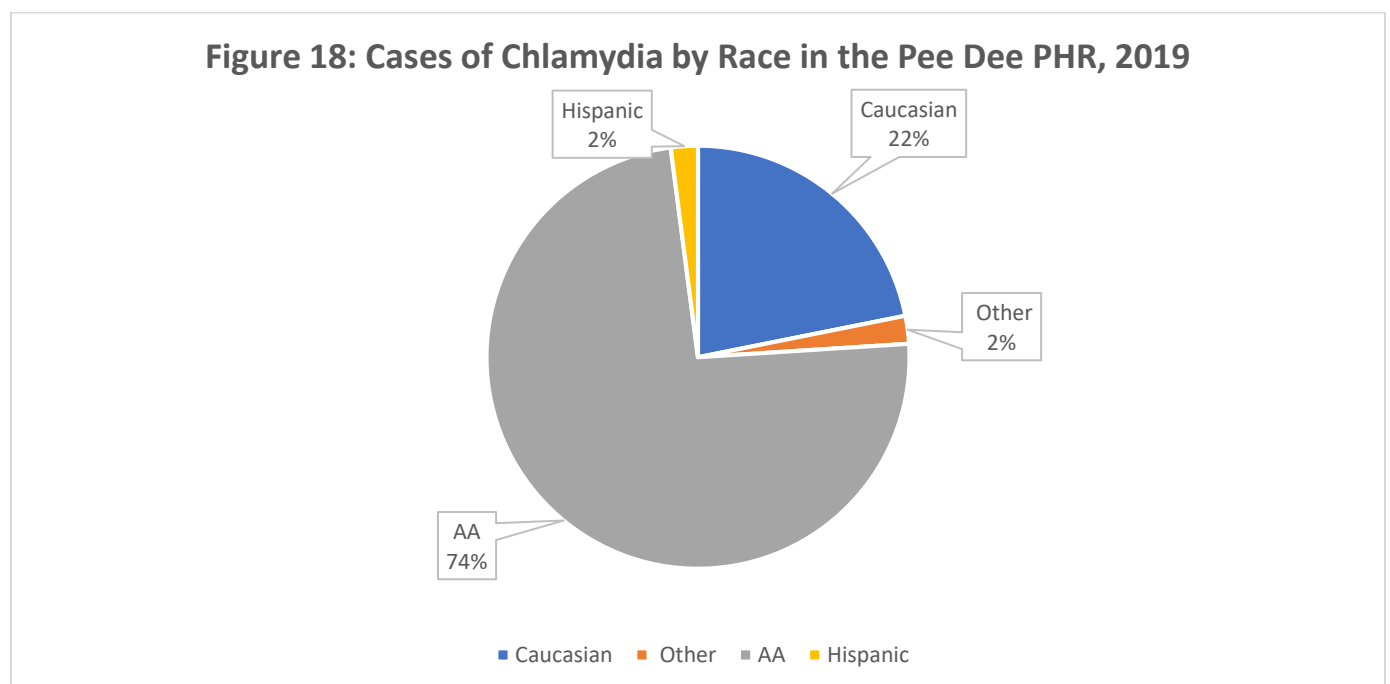
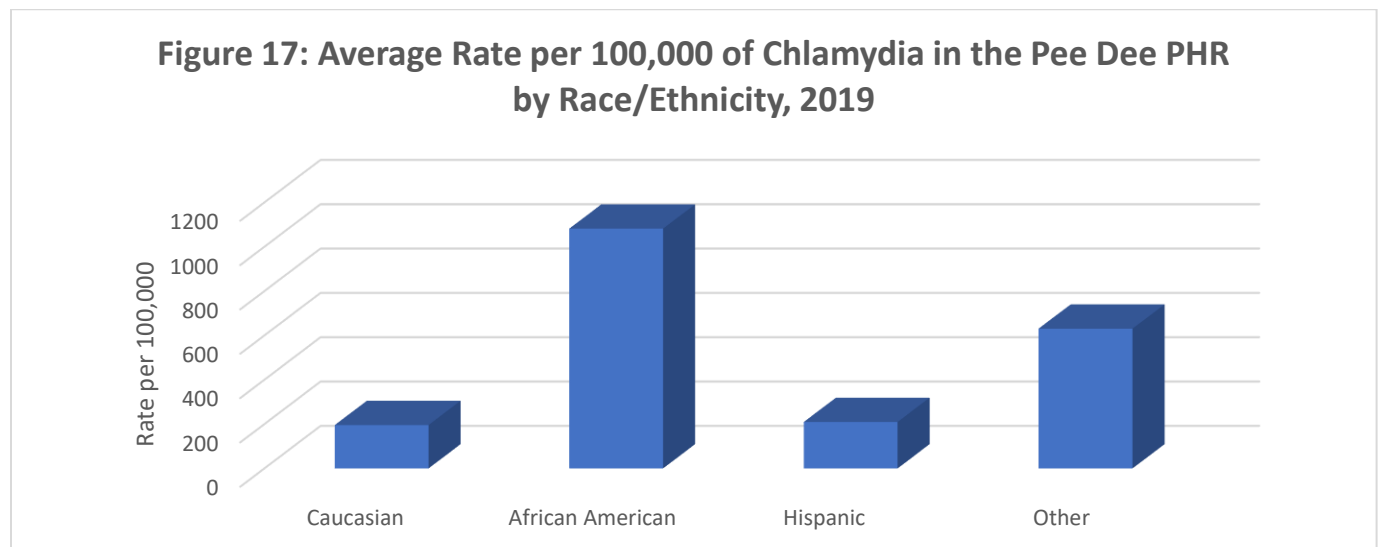
Chlamydia by Sex at birth

Figure 15 displays data on the rate of Chlamydia by county and by sex at birth. Within the Pee Dee PHR there is an apparent disparity of cases based on sex at birth. Women in all 12 counties in the Pee Dee PHR have a higher rate than men. Further, the women's rate is above 600 per 100,000 in all counties. In Figure 16, a pie chart shows throughout the Pee Dee PHR that more cases are occurring among women (66%) than among men. Women have greater than two times as many cases of Chlamydia diagnoses compared with the diagnoses among men.



Chlamydia by Race/Ethnicity

Figure 17 shows the average rate per 100,000 cases of Chlamydia by race/ethnicity in the Pee Dee 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 Pee Dee. Caucasians have the lowest rate among all four documented race/ethnicities. Hispanic are slightly higher than Caucasians but still much lower than African Americans. Figure 7 displays the total number of diagnosed cases of Chlamydia in the Pee Dee 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 74% of the total number of cases diagnosed in the Pee Dee PHR.



Gonorrhea

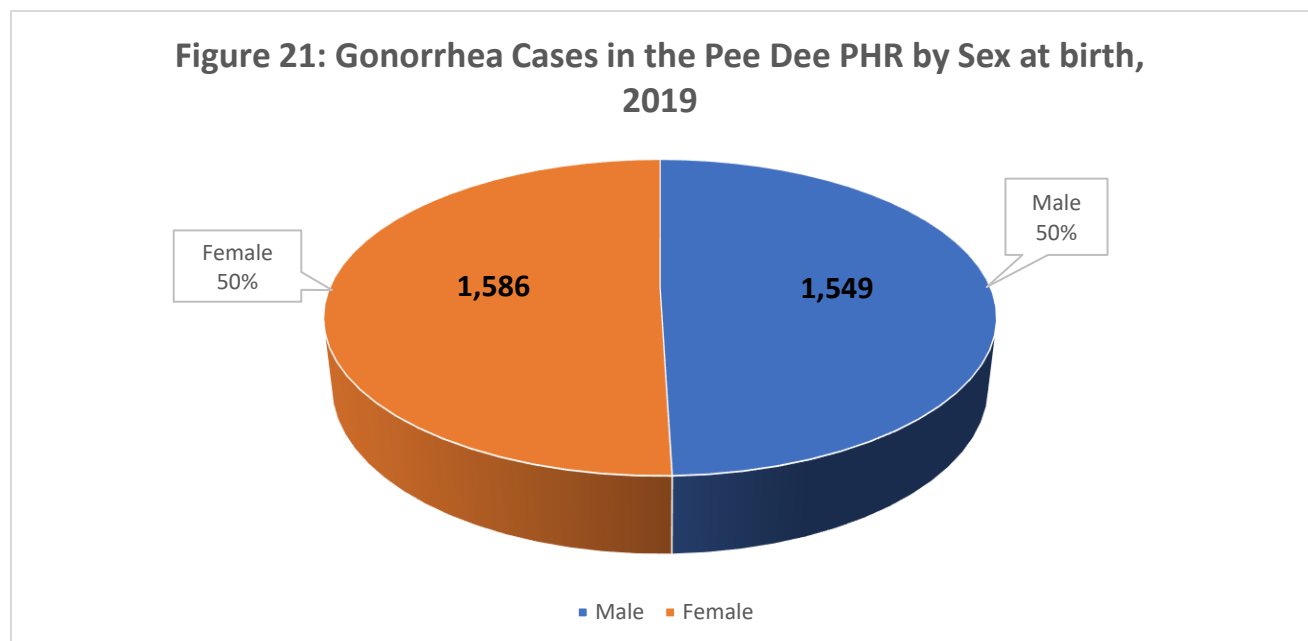
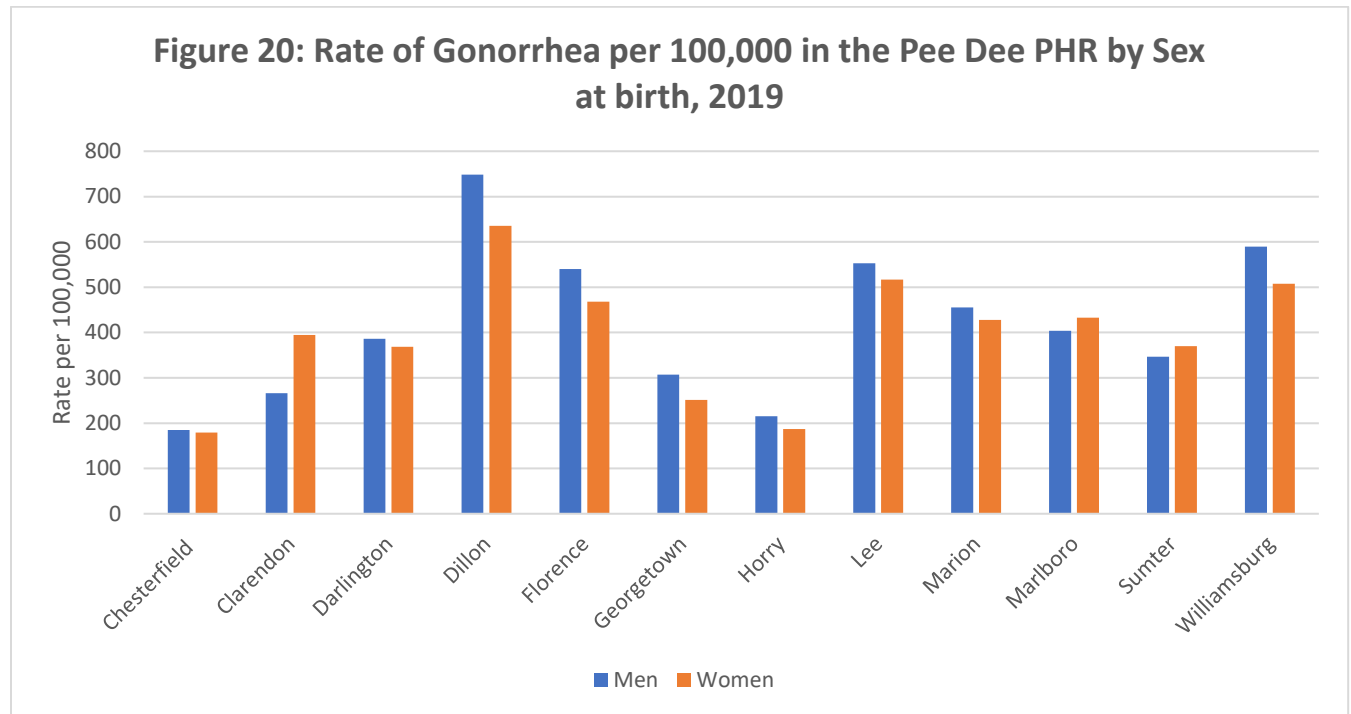
Figure 19 displays the total cases of Gonorrhea by county as well as the rate per 100,000 based on that county's population. Among the counties in the Pee Dee PHR, Horry County has the largest number of cases (713). However, Dillon has the greatest rate among all counties (692.2 per 100,000) with Williamsburg County having the second-highest rate (546.6 per 100,000).

Figure 19: Pee Dee PHR New Cases of Gonorrhea by County (2019)

County	Count	Rate per 100,000
Chesterfield	83	181.8
Clarendon	112	331.9
Darlington	253	379.8
Dillon	211	692.2
Florence	702	507.7
Georgetown	174	277.6
Horry	713	201.4
Lee	90	534.8
Marion	135	440.3
Marlboro	109	417.3
Sumter	387	362.7
Williamsburg	166	546.6
Total	3,135	N/A
Average	261	406.2

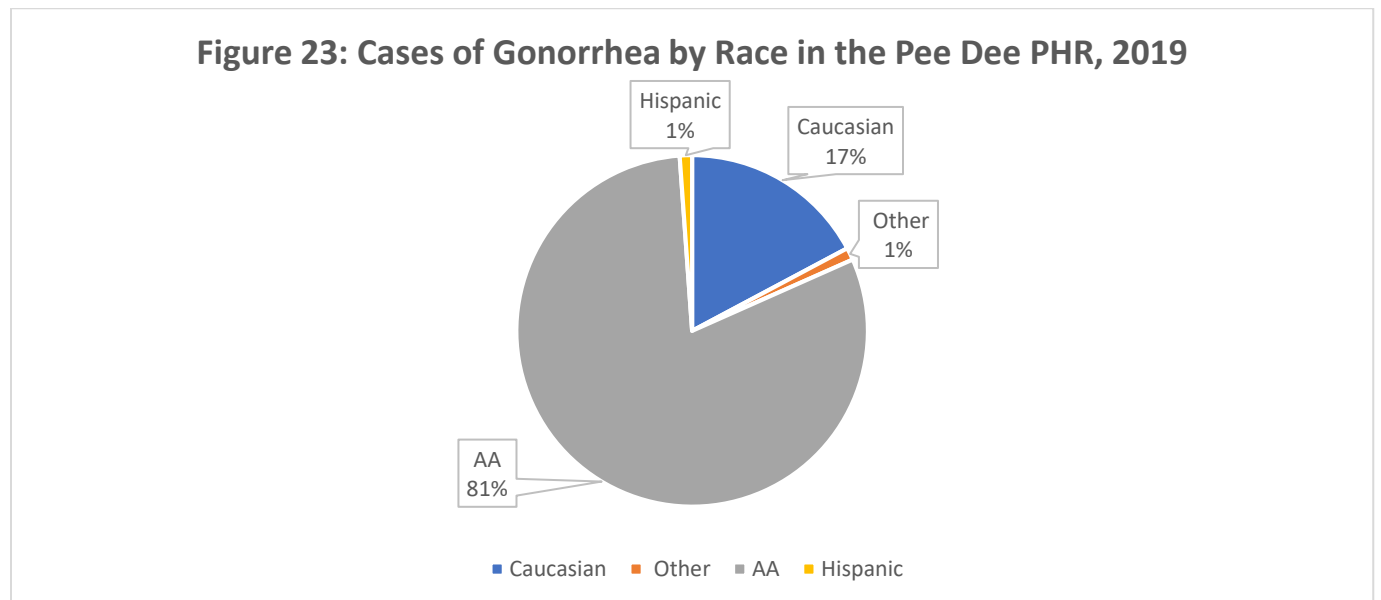
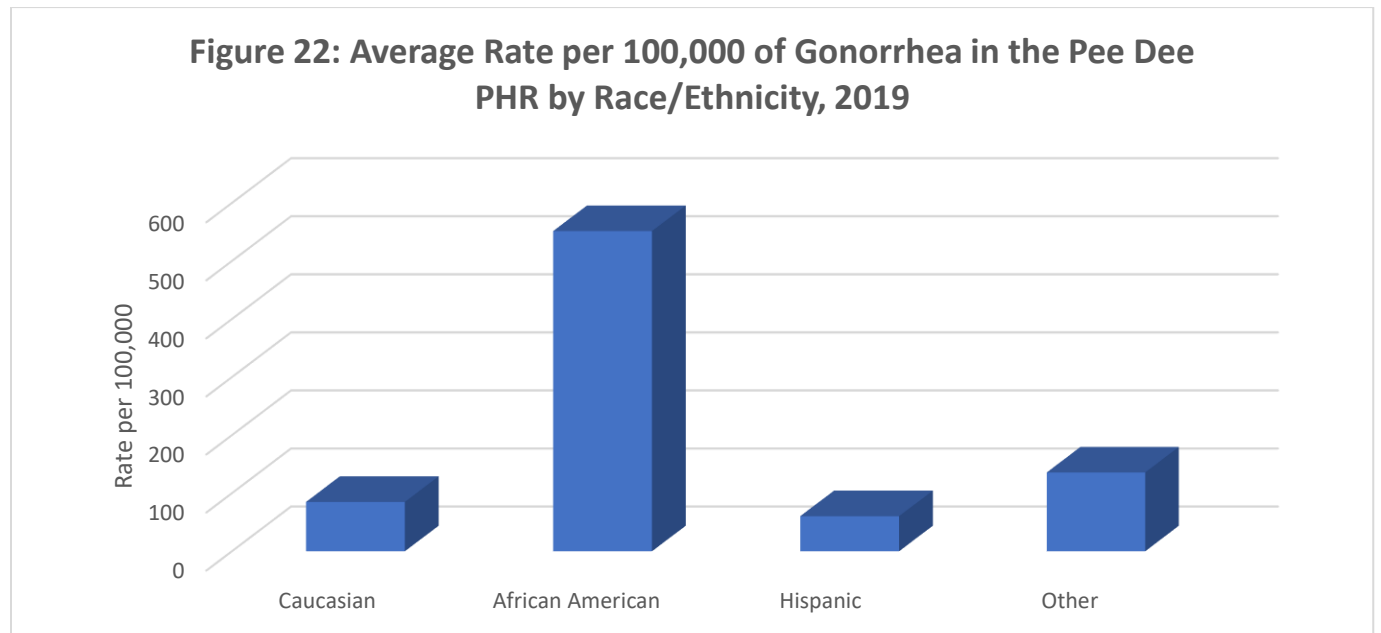
Gonorrhea by Sex at birth

Figure 20 displays data on the rate of Gonorrhea by county and by sex at birth. Within the Pee Dee PHR the rates between both sexes at birth are approximately equal. Men in nine of the 12 counties in the Pee Dee PHR have a higher rate than women. In Figure 21, a pie chart shows more cases are occurring among women (50%) than among men. However, the raw count is much closer to equal and does not reflect a significant sex at birth disparity as Chlamydia previously displayed.



Gonorrhea by Race/Ethnicity

Figure 22 shows the average rate per 100,000 cases of Gonorrhea by race/ethnicity in the Pee Dee PHR. The graph below details a large disparity relative to race/ethnicity. African Americans have over six times the rate of Gonorrhea cases compared to Caucasians in the Pee Dee 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 Pee Dee 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 81% of the total number of cases diagnosed in the Pee Dee PHR.



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 Pee Dee PHR, Horry has the largest number of cases (84). However, Marlboro has the greatest rate among all counties (38.3 per 100,000) with Williamsburg having the second-highest rate (32.9 per 100,000).

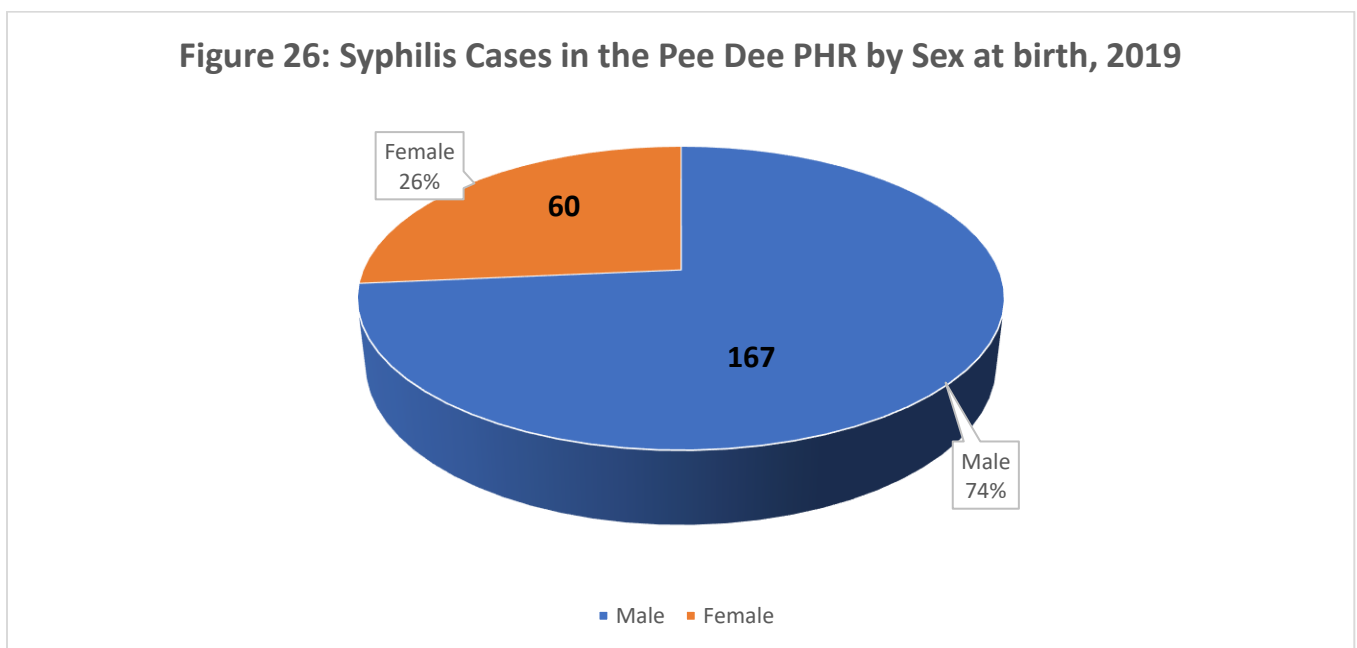
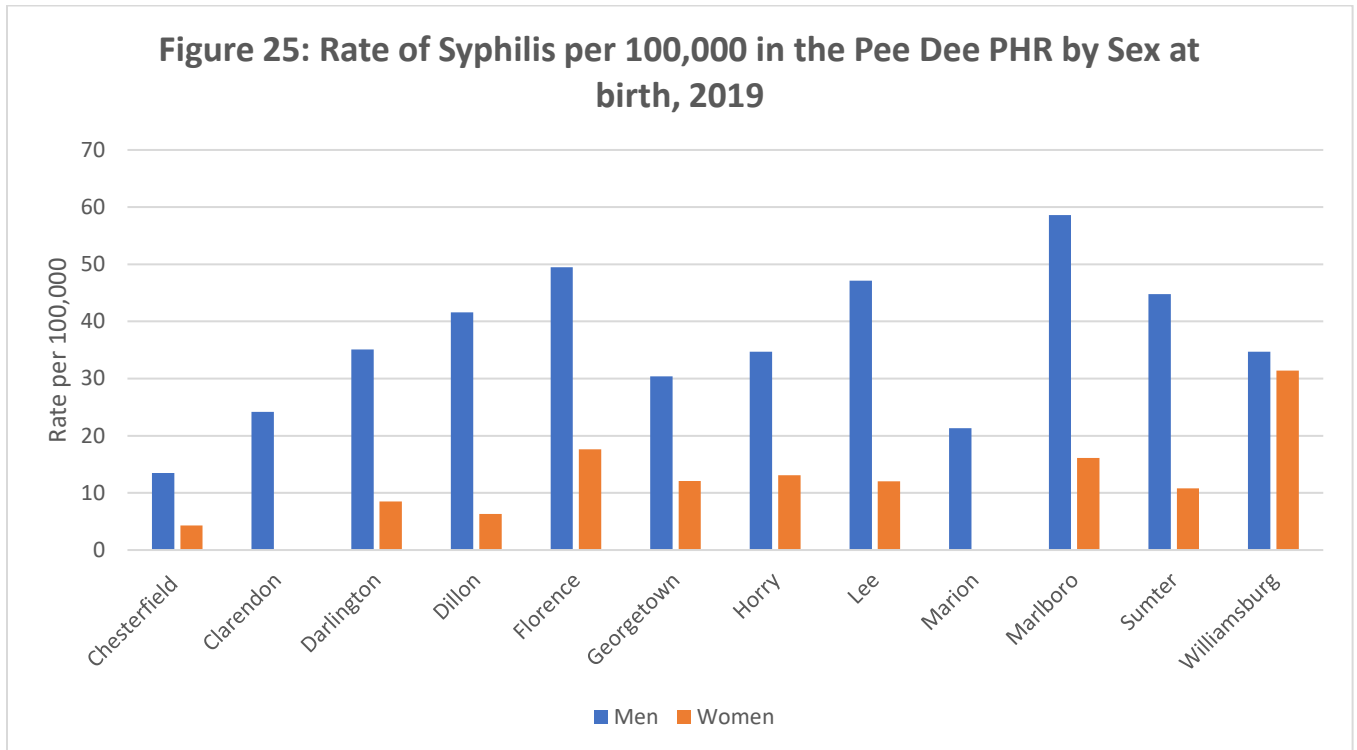
Figure 24: Pee Dee PHR New Cases of Syphilis by County (2019)

County	Count	Rate per 100,000
Chesterfield	<5	8.8
Clarendon	<5	11.9
Darlington	14	21.0
Dillon	7	23.0
Florence	46	33.2
Georgetown	13	20.8
Horry	84	23.8
Lee	<5	29.7
Marion	<5	9.8
Marlboro	10	38.3
Sumter	29	27.2
Williamsburg	10	32.9
Total	217	N/A
Average	18	23.4

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 Pee Dee PHR the rates for men are higher in all 12 counties with reported cases. In Figure 26, a pie chart displays throughout the Pee Dee PHR that more cases are occurring among men (74%) than among women.



Syphilis by Race/Ethnicity

Figure 27 shows the average rate per 100,000 cases of Syphilis by race/ethnicity in the Pee Dee PHR. The graph below details a large disparity relative to race/ethnicity. African Americans have over ten times the rate of Syphilis cases compared to Caucasians and over 30 times the cases of Syphilis compared to Hispanics in the Pee Dee PHR. Hispanics have the lowest rate of Syphilis in the Pee Dee PHR. Figure 28 displays the total number of diagnosed cases of Syphilis in the Pee Dee 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 77% of the total number of cases diagnosed in the Pee Dee PHR.

Figure 27: Average Rate per 100,000 of Syphilis in the Pee Dee PHR by Race/Ethnicity, 2019

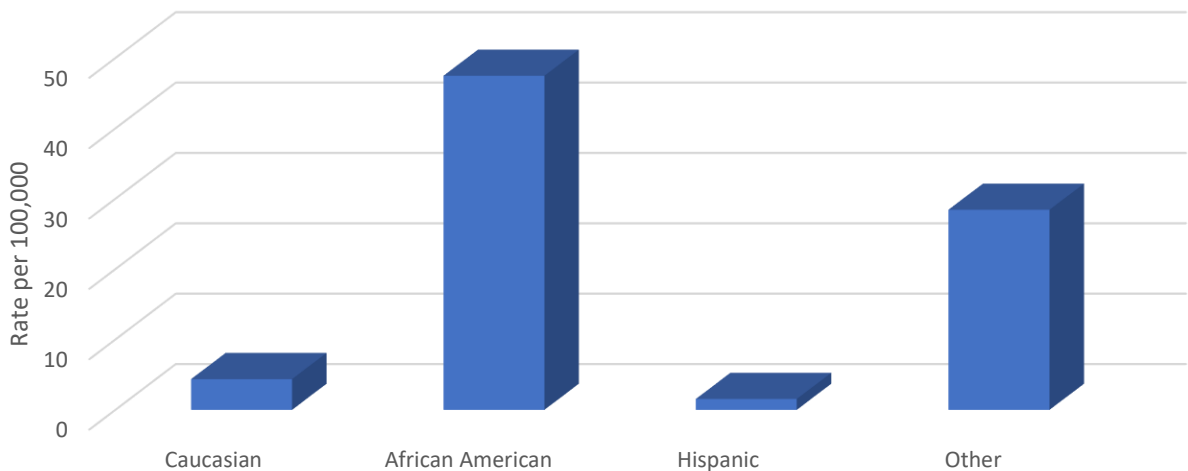
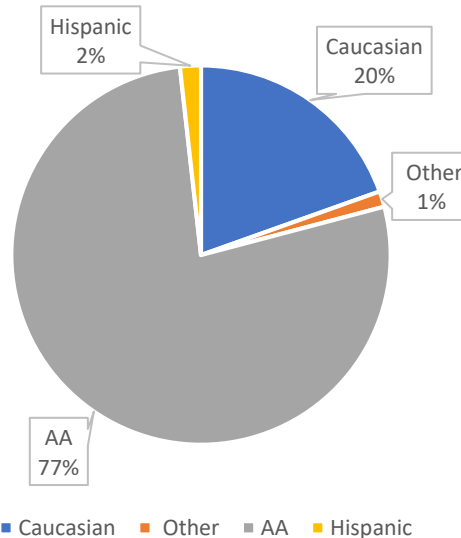


Figure 28: Cases of Syphilis by Race in the Pee Dee PHR, 2019



References

1. Norma S. Harris, Anna Satcher Johnson, Ya-Lin A. Huang, Dayle Kern, Paul Fulton, Dawn K. Smith, Linda A. Valleroy, H. Irene Hall (2019). Vital Signs: Status of Human Immunodeficiency Virus Testing, Viral Suppression, and HIV Preexposure Prophylaxis — United States, 2013–2018 CDC Morbidity and Mortality Weekly Report, Early Release Vol.68

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 $176 / 224 = 0.79 \times 100 = 79\%$. Rates are calculated per 100,000 people. An incidence is calculated such as: $(\text{Total New cases of HIV} / \text{Total population}) \times 100,000$. 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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