

| 2025 | Sexually Transmitted Infections Data Brief |



Key Findings from Guilford County Sexually Transmitted Infection (STI) Data

- In 2024, the most commonly occurring sexually transmitted infection in Guilford County was chlamydia, followed by gonorrhea with 4,460 and 1,882 new cases, respectively. Both declined from 2023 to 2024.
- While Guilford County ranked 11th in the state for the rate of newly diagnosed early syphilis cases, rates of new cases of early syphilis continued to decline from a rate of 51.6 per 100,000 residents in 2023 to a rate of 45.5 per 100,000 residents in 2024.
- In 2024, Guilford County had 98 new HIV cases for a rate of 20.7 per 100,000 residents and 49 newly diagnosed Stage 3 AIDS cases for a rate of 10.5 per 100,000 residents.
- Differences in STI rates exist demographically likely due to the social and systemic conditions that affect population subgroups differently.

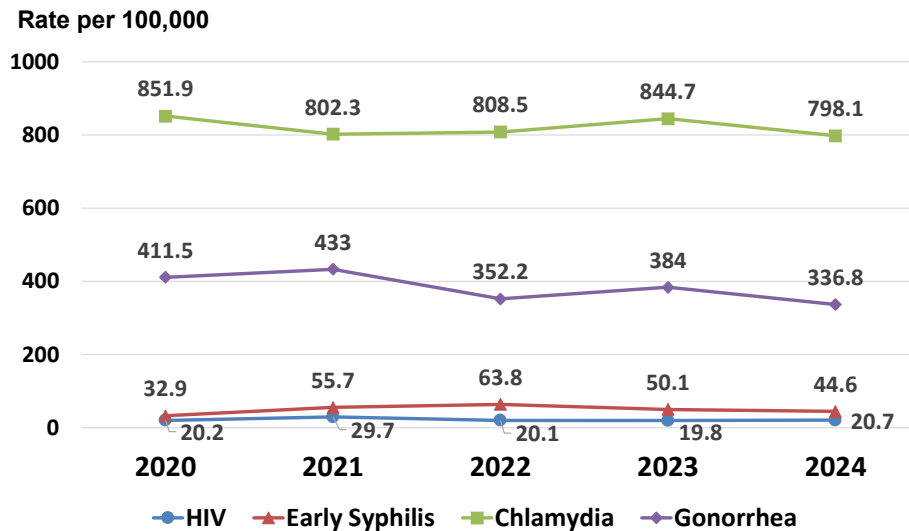
Note on data in this report:

- *The processing of STI data records may result in a delay in public data availability. Published STI data may change with further follow-up and investigation.*
- *Rates are expressed per 100,000 population. Please note that rates based on small numbers (fewer than 20 cases) are unstable and should be interpreted with caution.*
- *2019 through 2024 counts and rates include “confirmed” and “probable” case definitions.*

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Trends for Early Syphilis, Gonorrhea, Chlamydia and HIV, Guilford County, 2020-2024



Source: NC Communicable Disease Data Dashboard, North Carolina Department of Health and Human Services.

Sexually Transmitted Infections, Cases and Rates per 100,000 Population, Guilford County, 2020-2024

Reportable Disease	2020 ¹	2020	2021	2021	2022	2022	2023	2023	2024	2024
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Chlamydia ²	4,611	851.9	4,349	802.3	4,424	808.5	4,670	844.7	4,450	798.1
Gonorrhea	2,227	411.5	2,347	433.0	1,927	352.2	2,123	384	1,882	336.8
HIV Infection ³	92	20.2	136	29.7	93	20.1	93	19.8	98	20.7
HIV – New AIDS Cases ^{3, 4}	32	7.0	20	4.3	36	7.8	33	7.1	49	10.5
Syphilis (Early) ⁵	185	32.9	294	55.7	359	63.7	284	50.1	254	44.5
Syphilis (Primary)	24	4.4	65	12	86	15.7	69	12.5	61	10.9
Syphilis (Secondary)	78	14.4	114	21	126	23	76	13.7	85	15.2
Syphilis (Early Non-Primary Non-Secondary) ⁶	76	14.0	123	22.7	137	25.0	132	23.9	103	18.4
Late Latent ⁷	56	10.3	122	22.5	184	33.6	191	34.5	189	33.8
Congenital Syphilis ⁸	1	0.18	1	0.18	6	1.1	4	0.7	4	0.7
Pelvic Inflammatory Disease (PID)	4	0.7	1	0.2	1	0.2	3	0.5	0	0
Non-Gonococcal Urethritis (NGU)	73	13.5	66	12.2	95	17.4	114	20.6	42	7.5
Hepatitis A	21	3.9	4	0.7	2	0.4	2	0.4	1	0.2
Hepatitis B (acute)	6	1.1	5	0.9	2	0.4	3	0.5	4	0.7
Hepatitis B (chronic carrier)	58	10.7	59	10.9	85	15.5	82	14.8	76	13.6
Hepatitis C (acute)	3	0.6	0	0	1	0.2	1	0.2	3	0.5
Hepatitis C (chronic)	490	90.5	468	86.3	379	69.3	260	47.0	382	68.4

	2020	2021	2022	2023	2024
Population ⁹	541,242	542,050	547,195	552,880	558,816

¹ 2020 data for sexually transmitted diseases should be treated with caution due to the impact of the COVID-19 pandemic on accessing STD testing, STD treatment, and surveillance activities in North Carolina.

² Lymphogranuloma venereum cases are included in the Chlamydia number count starting in 2021.

³ Newly diagnosed HIV and AIDS rates among adults and adolescents ages 13 and above. Rates are based on that population.

⁴ Classification of Stage 3 (AIDS) is defined by ever having a CD4+ T-lymphocyte cell count of less than 200 or a CD4+ T-lymphocyte percentage of total lymphocytes of less than 14, if cell count test was not available.

⁵ Early syphilis includes primary and secondary syphilis and early non-primary and non-secondary syphilis.

⁶ Early non-primary non-secondary (formerly early latent) Syphilis.

⁷ Late latent is defined as asymptomatic infection, usually occurring more than one year after initial infection, characterized by reactive serology tests without clinical signs of syphilis.

⁸ Includes confirmed and probable [congenital syphilis cases based on 2018 case definition](#).

⁹ NCD3 Dashboard uses the Census demographic population estimates from the US Census Bureau's Population Estimates Program (PEP) to estimate population rate denominators.

Notes on data sources used in this STI Data Brief:

- Data in this Data Brief for STIs, including data on age, sex, race, and Hispanic/Latino status are from confirmed and probable cases reported to the NC Electronic Disease Surveillance System and published through the [NC Disease Data Dashboard](#). In some cases, there may be slight differences between these sources depending upon the date of extraction from the source.
- Summary data for New AIDS cases are published in the [Annual HIV Surveillance Reports](#) published by the Epidemiology Section of the NC Department of Health and Human Services.

Descriptions of Sexually Transmitted Infections

Chlamydia is the most common sexually transmitted infection. Chlamydia can infect both men and women. It can cause serious, permanent damage to a woman's reproductive system, which can make future pregnancies impossible. Chlamydia can also cause a potentially fatal ectopic pregnancy, which occurs outside the womb.

Gonorrhea is a common infection transmitted by sexual contact, characterized by inflammation of the mucous membranes of the genital and urinary tracts, an acute discharge containing pus, and painful urination, especially in men. Women often have few or no symptoms, but pregnant women can transmit the infection to their baby during delivery, causing serious health problems for the baby.

Human Immunodeficiency Virus (HIV) is a virus that attacks the body's immune system, making the person more likely to get other infections or infection-related cancers. If untreated, HIV can lead to **Acquired Immunodeficiency Syndrome (AIDS)**, a potentially fatal condition.

Syphilis is a sexually transmitted infection that can cause serious health problems if not treated. Syphilis is divided into stages—primary, secondary, non-primary, non-secondary syphilis, late latent and late —with different signs and symptoms associated with each stage.

Primary, secondary, and early non-primary non-secondary syphilis (Formerly early latent) is defined as having been infected for a year or less and is considered **early syphilis**.

Late latent syphilis is defined as an infection that has been present for more than one year, as shown by reactive serology tests, in an asymptomatic person.

Late syphilis refers to the tertiary stage in which a person has been infected for more than one year—and possibly up to 10 to 30 years after an untreated initial infection — and presents with inflammatory lesions of the cardiovascular system, skin, bone, or other tissues/structures.

Congenital syphilis occurs when an infant is infected with syphilis during pregnancy.

Non-Gonococcal Urethritis (NGU) is inflammation of the urethra not caused by gonorrhea. NGU can result from various infectious and non-infectious conditions.

Pelvic Inflammatory Disease (PID) is an infection of female reproductive organs. It is a complication often caused by some STIs such as chlamydia and gonorrhea. Other infections that are not sexually transmitted can also cause PID.

Hepatitis A, Hepatitis B, and Hepatitis C are potentially serious liver infections caused by three different viruses. Hepatitis A is usually transmitted by ingestion of contaminated food or water, while Hepatitis B and C are typically transmitted through contact with infectious body fluids.

Syphilis, Characteristics of Cases

The following tables and charts include early syphilis cases and rates. Early syphilis is defined as having primary, secondary, or early non-primary non-secondary (formerly early latent) syphilis.

- Early syphilis rates increased substantially between 2018 and 2022 but have continued to drop for the past two years.
- Between 2019 and 2024, men consistently experienced much higher incidence rates of early syphilis than women.
- Very few residents under age 18 or ages 65 and older contract early syphilis. Those between the ages of 18 and 24 and ages 25 to 49 have the highest early syphilis incidence rates.
- Black/African American residents experience the highest rates of early syphilis of all racial and ethnic groups in the county, followed by those reporting multi-race status, who had the highest rates in 2022 and 2024. Asian residents had low rates over the 2019-2024 period.
- In 2019, Hispanic/Latino residents experienced similar early syphilis rates as did White residents, but between 2020 and 2024 had rates exceeding White rates.
- From 2019 to 2021, Guilford County's early syphilis rate was third highest among peer comparison counties and the state overall, and second highest from 2022 to 2024.
- Guilford County syphilis rates per 100,000 have gradually increased in the past 20 years despite periodic declines. Guilford syphilis rates exceeded North Carolina's rates from 2004 to 2024.

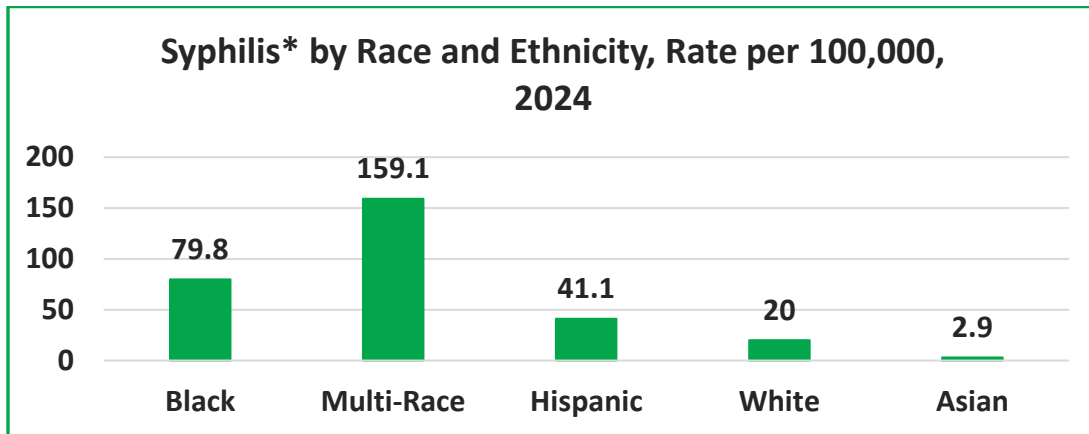
Early Syphilis Cases and Rates per 100,000, by Demographic Characteristic Guilford County Residents, 2020-2024

Demographic Characteristics	2020	2020	2021	2021	2022	2022	2023	2023	2024	2024
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Male	162	60.2	250	101.4	283	103.8	205	75.9	180	66.9
Female	23	8.1	44	14.4	76	27.8	79	26.9	74	24.4
13-17 Years	1	2.8	2	5.6	1	2.7	6	16.4	3	8.3
18-24 Years	49	77.1	71	112.3	86	132.4	79	120.2	41	61.8
25-49 Years	105	60.7	199	116.1	219	127.0	152	87.1	160	90.5
50-64 Years	20	19.6	27	26.3	38	37.0	36	35.2	40	39.3
65+ Years	3	3.7	3	3.6	5	5.9	4	4.4	5	5.4
Asian/Hawaiian Native	1	3.4	1	3.3	3	9.6	1	3.0	1	2.9
Black/African American	138	70.1	213	113.1	259	126.3	206	103.1	166	79.8
White/Caucasian	39	11.7	69	23.5	70	23.9	60	18.8	60	20.0
Multiple Races	7	49.5	11	75.1	26	158.2	17	82.9	27	159.1
Hispanic/Latino*	12	21.1	16	30.0	23	36.8	18	30.0	22	41.1

Source: NC Disease Data Dashboard.

*Hispanic/Latino residents can be of any race.

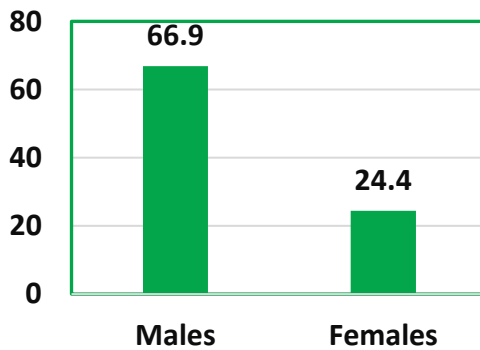
Demographic Characteristics of Guilford County Syphilis* Cases, 2024



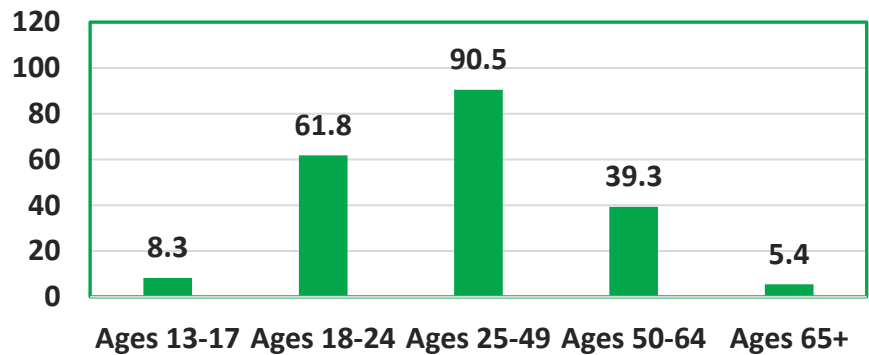
Source: NC Disease Data Dashboard. Notes: Hispanics can be of any race; percentages do not add to 100%.

*Syphilis rates include primary, secondary and early non-primary, non-secondary syphilis.

Syphilis* by Sex, Rate per 100,000, 2024



Syphilis* by Age Group, Rate per 100,000, 2024

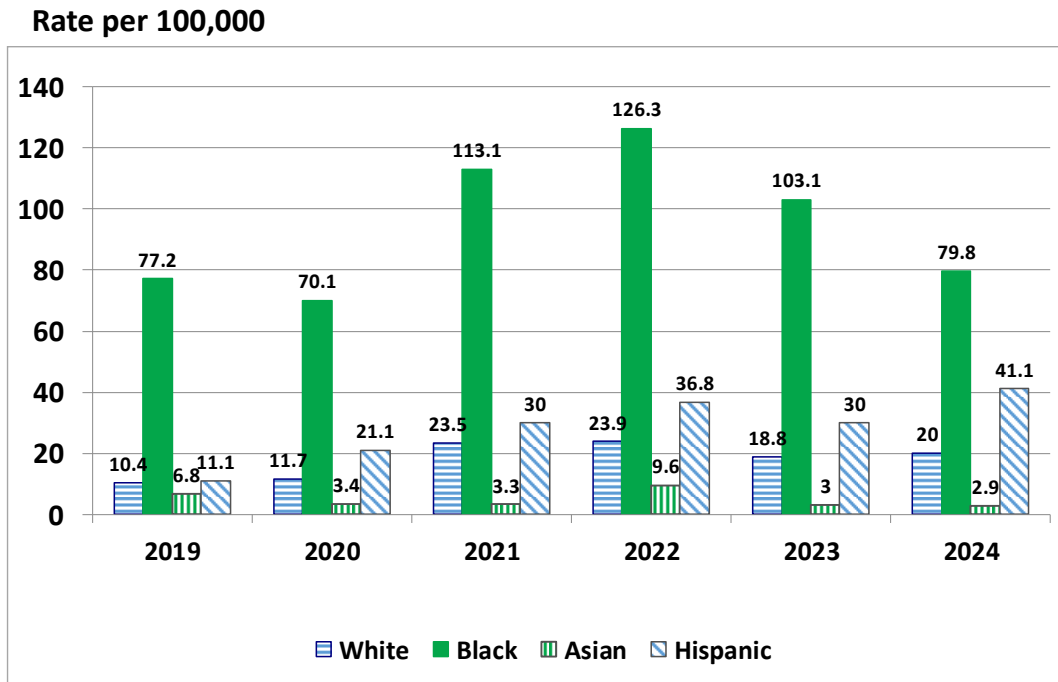


Source: NC Disease Data Dashboard.

* Syphilis rates include primary, secondary and early non-primary, non-secondary syphilis.

Syphilis Trends

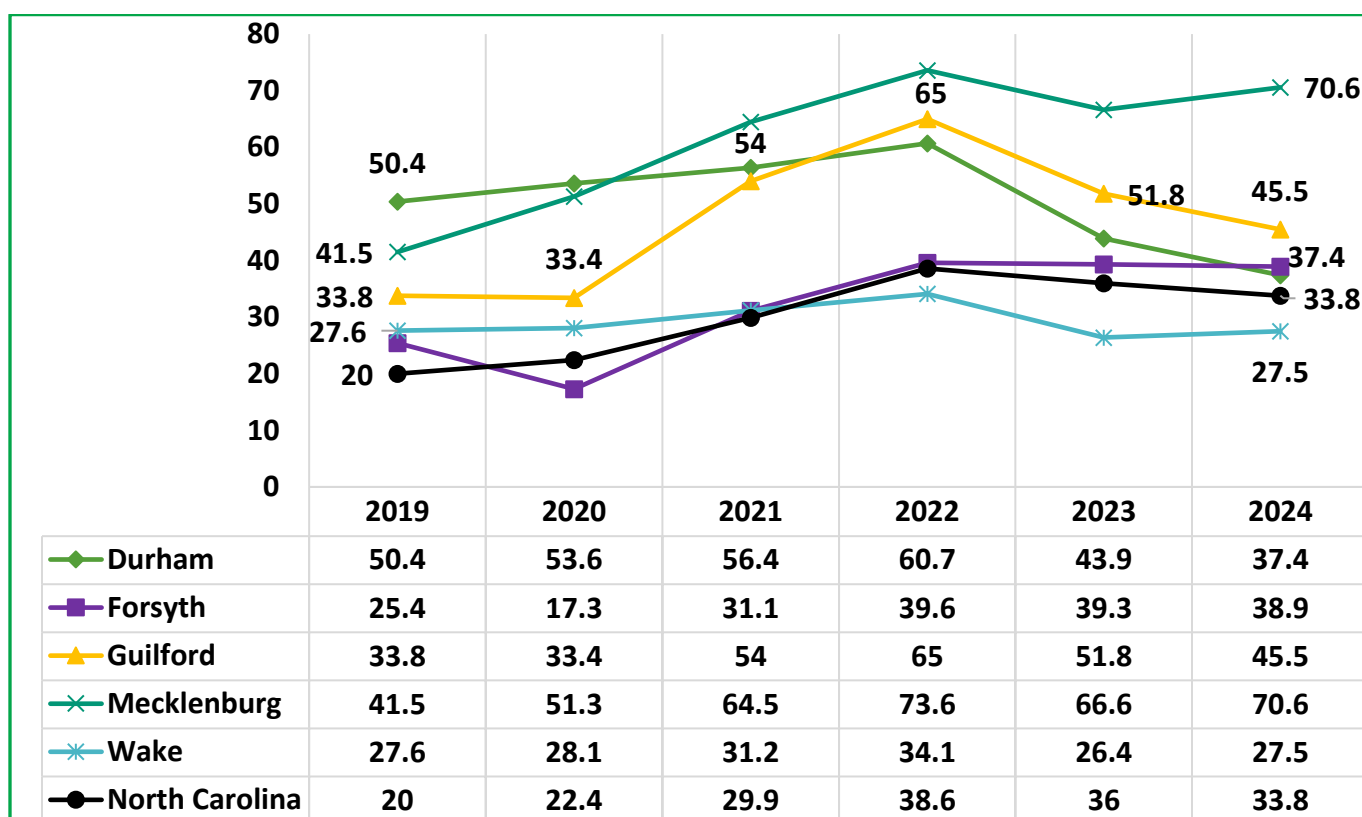
Trends in Syphilis* Rates in Guilford County by Race and Hispanic Status, 2019-2024



Source: NC Disease Data Dashboard.

Note: *Includes early syphilis cases.

Syphilis* Rates per 100,000 Population, by Selected Counties and NC, 2019-2024

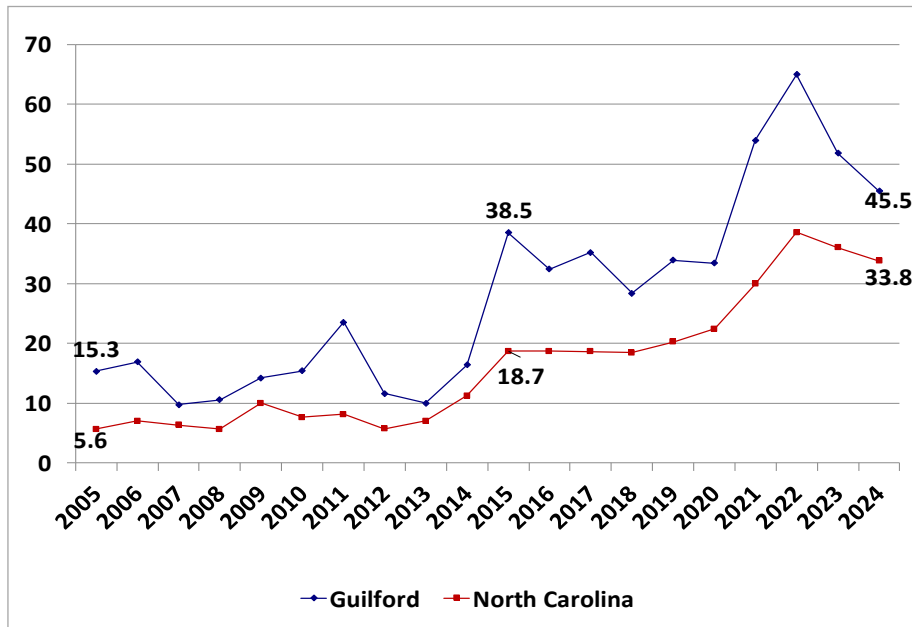


Source: 2024 North Carolina STD Annual Surveillance Report; NC DHHS, Division of Public Health.

*This chart includes early syphilis rates, which comprise primary and secondary syphilis and early non-primary and non-secondary syphilis.

Trends in Early Syphilis Rates Guilford County and North Carolina 2004-2024

Rate per 100,000



Source: NC HIV/STD Annual Surveillance Reports.

Note: Early Syphilis includes Primary, Secondary and Early Non-Primary Non-Secondary Syphilis.

HIV Infection, Characteristics of Cases

- Guilford County HIV infection rates peaked in 2016 and 2021, with lower rates from 2022-2024.
- Across that period, rates of new cases were much higher for men than for women.
- Rates of new HIV cases were highest among those in the 25-49 age group, followed by those 18-24 years old.
- Black/African Americans experienced the highest rates of HIV among race-ethnic groups, followed by those in the multiple race category and Hispanic/Latinos.
- While Guilford County rates exceeded NC rates, it had the second lowest rate of newly diagnosed HIV infection rates from 2022 to 2024 compared to peer counties (20.7 per 100,000).
- Guilford County HIV rates exceeded state and national rates from 2014 to 2024.

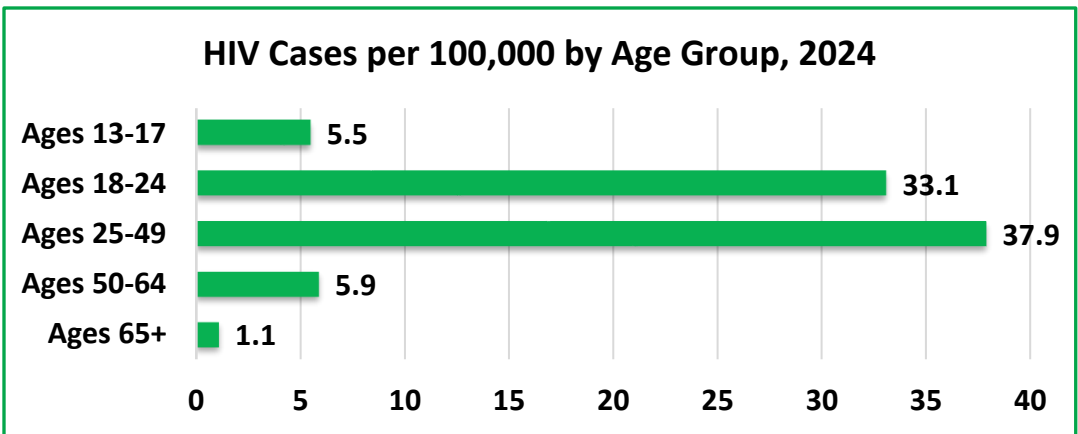
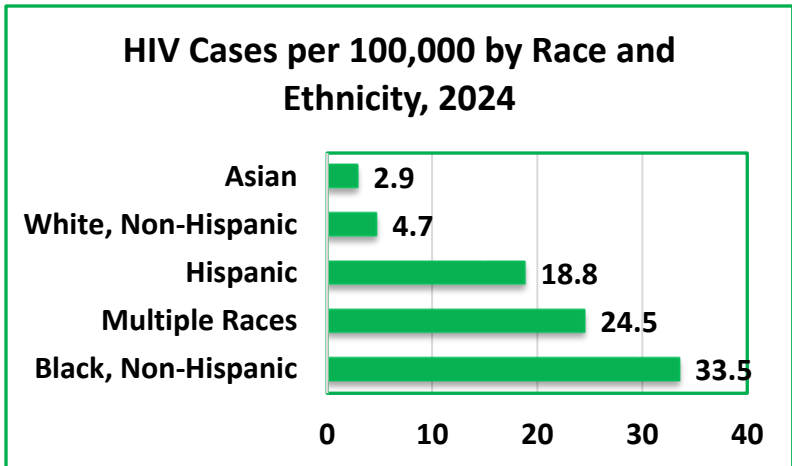
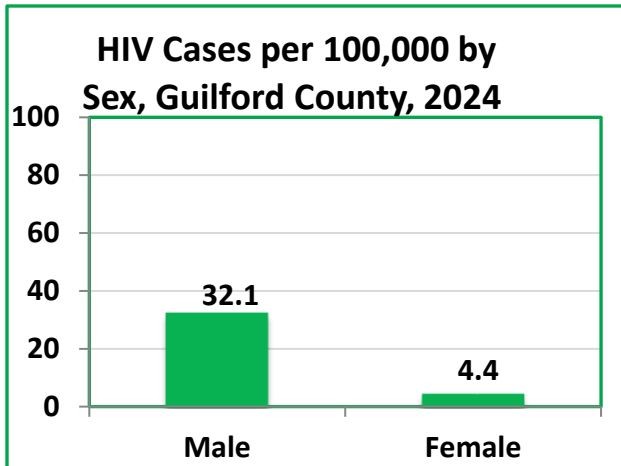
HIV Infection Cases and Rates per 100,000, 2018-2024 Guilford County Residents Ages 13 and Older

Demographic Characteristics	2020	2020	2021	2021	2022	2022	2023	2023	2024	2024
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Male	81	37.8	113	52.6	81	37.7	76	29.2	85	32.1
Female	9	3.7	20	8.2	12	4.9	17	5.9	13	4.4
Transgender*	2	---	2	---	3	---	NA	--	NA	--
13-17 Years	1	2.8	1	2.8	0	0.0	0	0.0	2	5.5

Demographic Characteristics	2020	2020	2021	2021	2022	2022	2023	2023	2024	2024
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
18-24 Years	36	56.7	46	72.3	19	29.2	24	36.5	22	33.1
25-49 Years	44	25.5	73	42.5	63	36.5	57	32.7	67	37.9
50-64 Years	10	9.8	14	13.7	10	9.7	10	9.8	6	5.9
65+ Years	1	1.2	2	2.4	1	1.2	1	1.1	1	1.1
Asian/Hawaiian	0	0.0	1	3.3	1	3.2	0	0.0	1	2.9
Black/African	67	34.8	94	48.3	63	31.8	58	28.9	68	33.5
Hispanic/Latino	5	9.6	15	28.2	4	7.3	15	26.7	11	18.8
White/Caucasian	13	4.3	22	7.4	21	7.0	17	5.7	14	4.7
Multiple Races	4	28.3	3	20.5	4	31.8	3	19.1	4	24.5

Source: NC Disease Data Dashboard.

*Note: The NC Disease Data Dashboard no longer reports transgender under demographic characteristics as of 2023. Transgender data is available at the state and Regional Network of Care and Prevention areas within the [North Carolina HIV, STD, and Hepatitis Surveillance Reports](#).



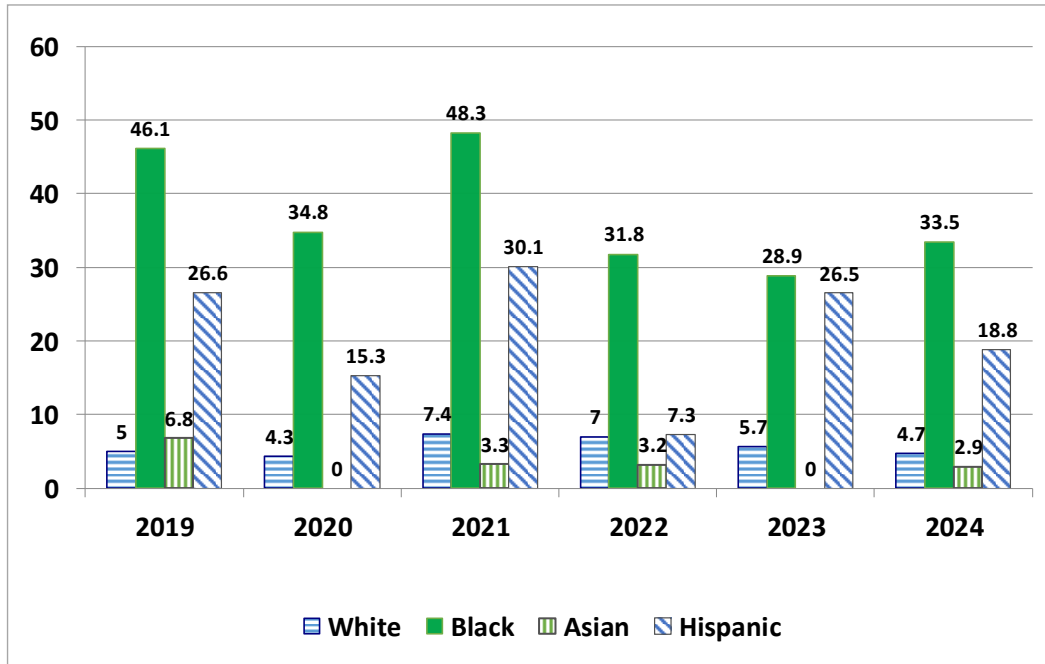
Source: NC Dashboard.

Disease Data

HIV Trends

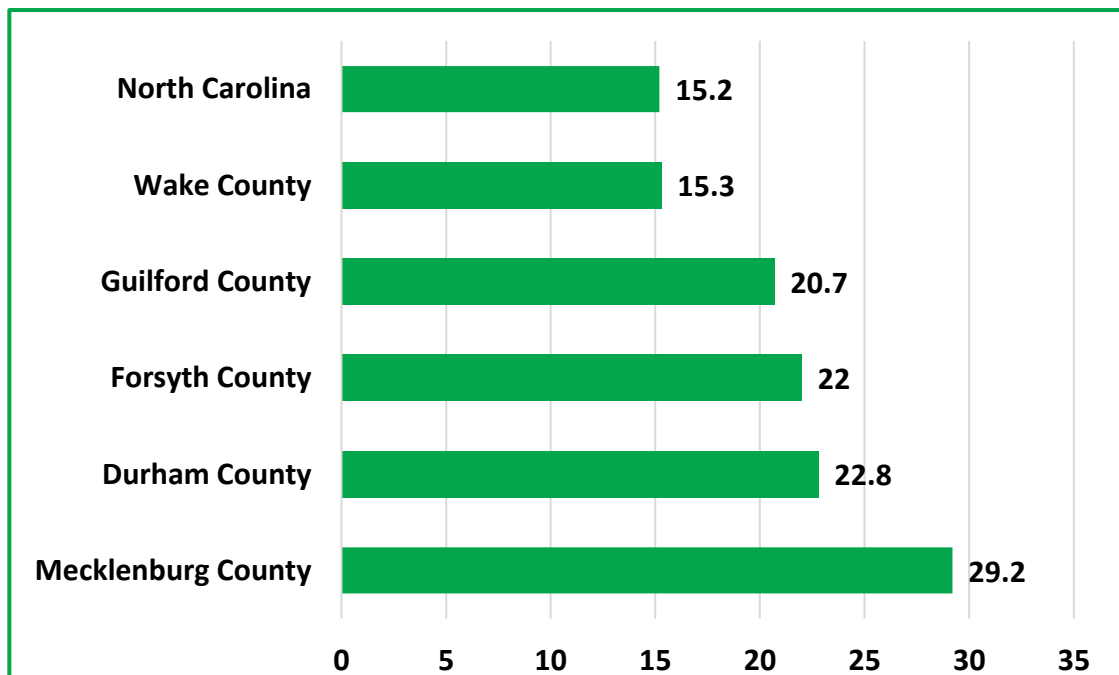
Trends in HIV Infection Rates in Guilford County by Race and Hispanic Status, 2019-2024

Rate per 100,000

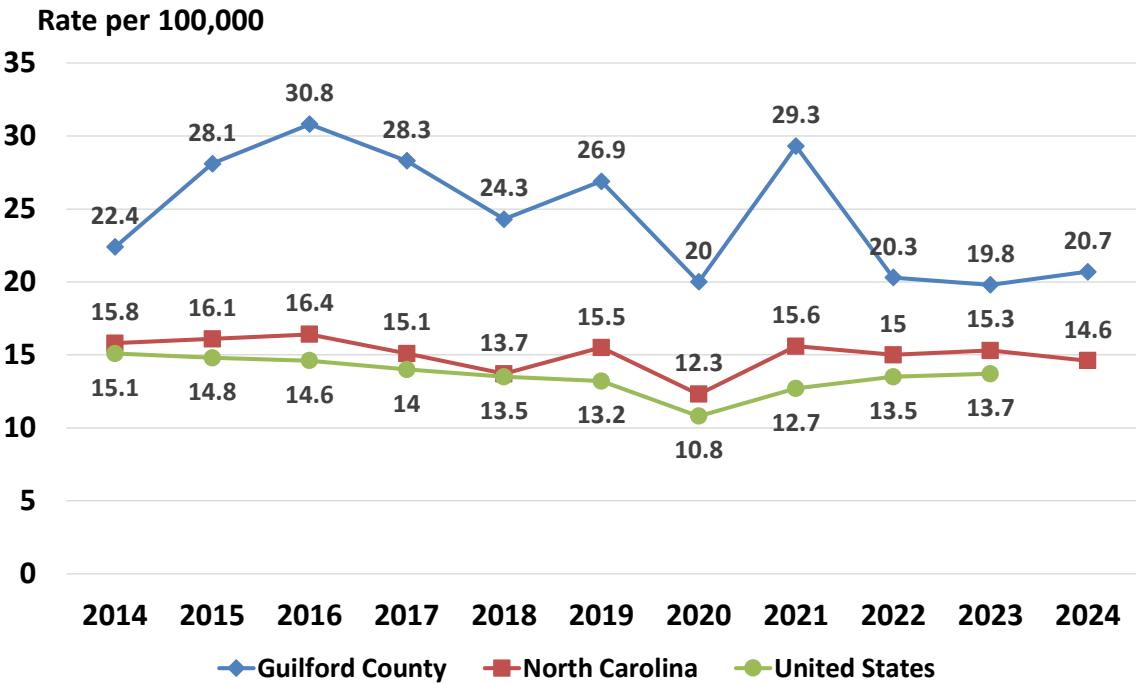


Source: NC Disease Data Dashboard.

Newly Diagnosed HIV Infection Rates per 100,000 among Residents Ages 13 and Older by Selected County and NC, 2022-2024



Trends in HIV Infection Rates among Residents Ages 13 and Older, Guilford County, NC and US, 2014-2024



Sources: NC HIV Surveillance Report and NC Communicable Disease Dashboard, NCDHHS.
US data from HIV surveillance reports, CDC. 2024 US data not currently available.

Chlamydia, Characteristics of Cases

- The highest chlamydia incidence rates are among African-American residents, with large disparities compared to Whites and other race/ethnic groups.
- The age groups with the highest rates of chlamydia are ages 18-24, followed by ages 13-17 and ages 25-49.
- Incidence rates of Chlamydia are higher among women. Chlamydia cases are diagnosed largely as a result of screening, and women are more likely to have screening tests.
- Guilford County's 2024 chlamydia rate of 811.1 per 100,000 was higher than Wake, Durham and Forsyth counties and North Carolina but lower than Mecklenburg County.
- Apart from 2024, Guilford County chlamydia rates per 100,000 have gradually increased in the past 20 years and have exceeded North Carolina's rates from 2004 to 2024.

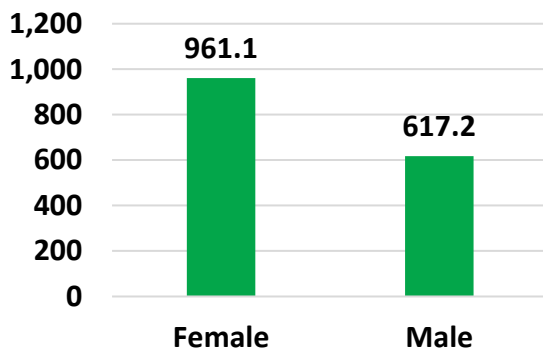
Characteristics of Guilford County Chlamydia Cases and Rates per 100,000 by Race and Hispanic Status, 2019-2024

	2020	2020	2021	2021	2022	2022	2023	2023	2024	2024
Race or Ethnicity	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
American Indian	10	228.9	7	159.0	8	177.7	14	304.0	7	150.0
Asian/Hawaiian Native	42	141.6	50	164.1	58	183.8	44	133.7	41	118.7
Black/African American	2,762	1,433.4	2,430	1,249.5	2,505	1,265.8	2,718	1,353.7	2,425	1,194.0
White	551	183.4	506	169.8	489	164.1	488	163.3	471	156.9
Other	125	---	121	---	155	---	236	---	218	---
Missing/Unknown	1,100	---	1,215	---	1,188	---	1,147	---	1,269	---
Multi-Racial	20	141.7	20	136.6	20	131.8	23	146.5	29	177.4
Race Total	4,611	---	4,348	---	4,424	---	4,670	---	4,462	---
Hispanic*	206	396.1	198	371.7	255	466.2	270	476.2	297	507.1

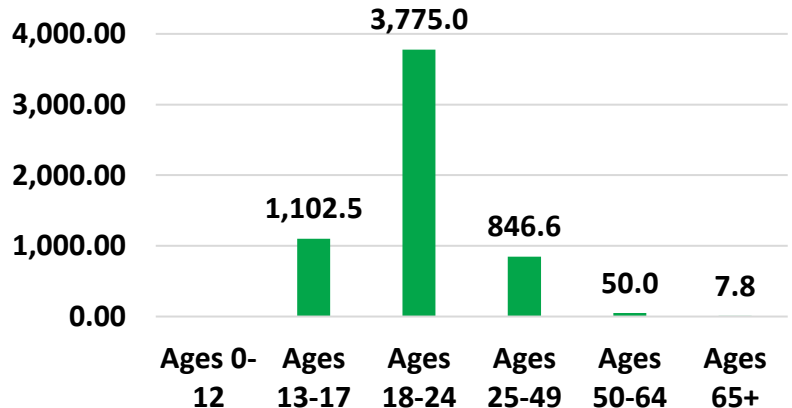
*Hispanics can be of any race.

Source: NCEDSS.

Chlamydia Rates per 100,000 by Sex, Guilford County, 2024



Chlamydia Rates per 100,000, by Age Group, Guilford County, 2024

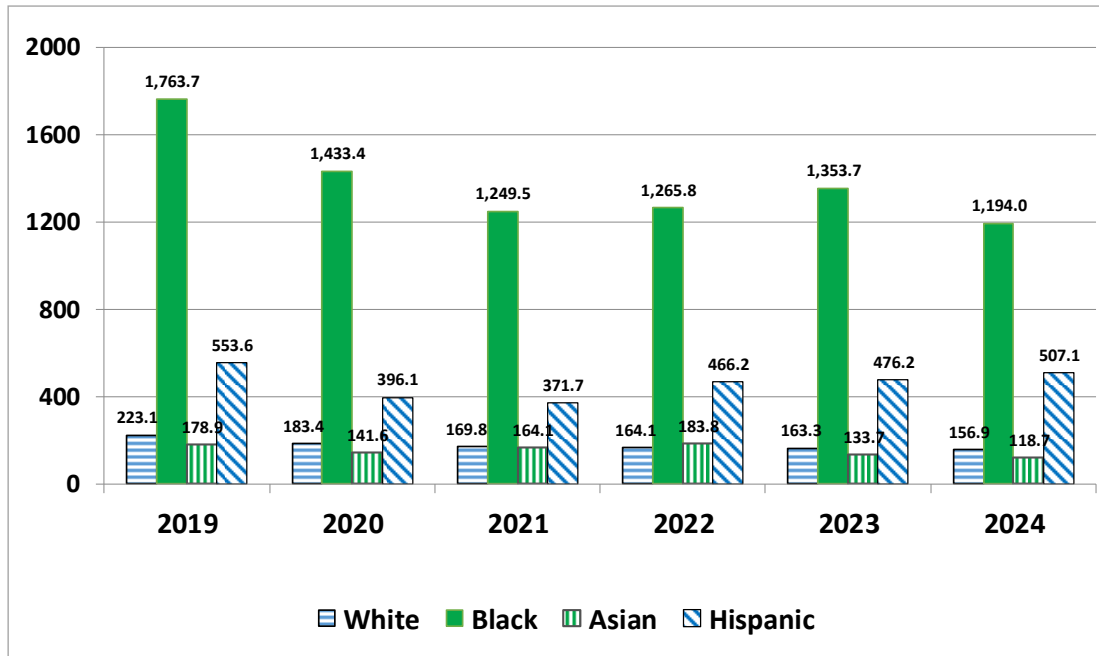


Source: NC Disease Data Dashboard.

Chlamydia Trends

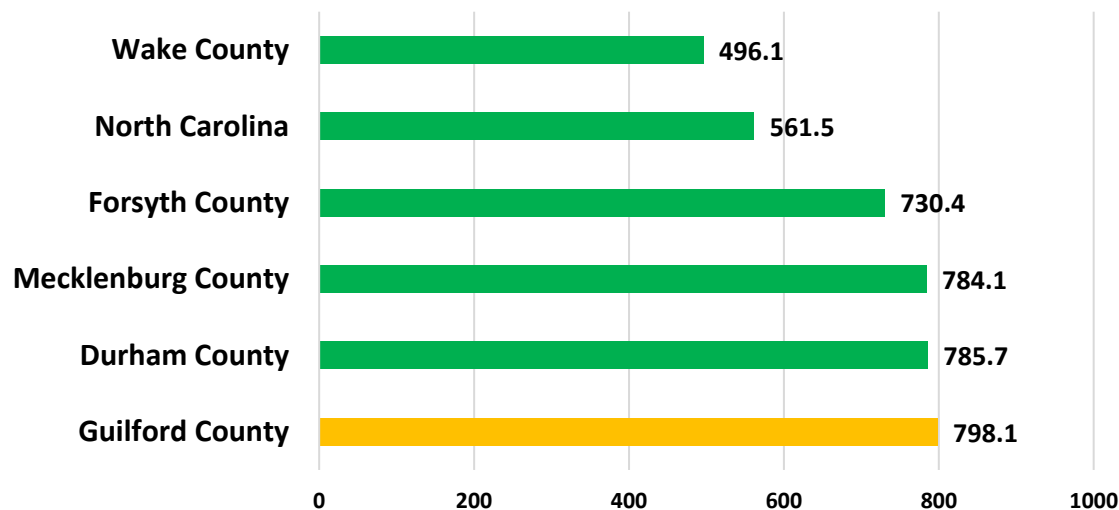
Trends in Chlamydia Rates in Guilford County by Race and Hispanic Status, 2019-2024

Rate per 100,000



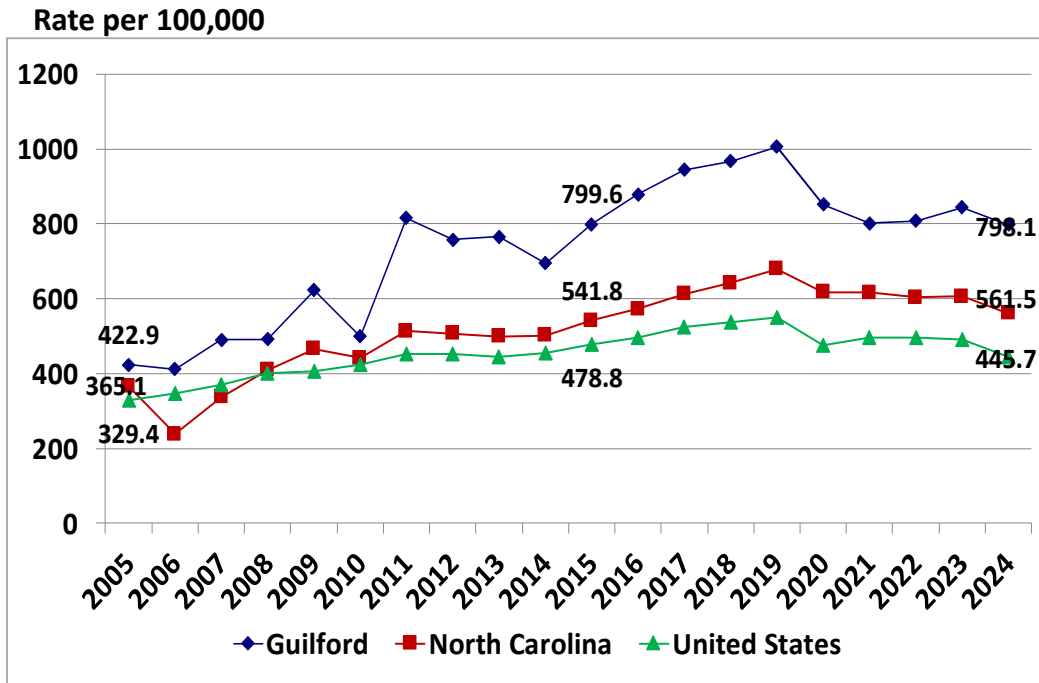
Source: NC Disease Data Dashboard.

Chlamydia Rates per 100,000 by Comparison County Guilford County, 2024



Source: NC Disease Data Dashboard.

Trends in Chlamydia Incidence Rates Guilford County, NC and US 2005-2024



Source: NC DHHS, Communicable Disease Control Branch, STD Annual Report; NC Disease Data Dashboard; Centers for Disease Control.

Gonorrhea, Characteristics of Cases

- The highest gonorrhea incidence rates are among African-American residents, with large disparities compared to Whites and other race/ethnic groups.
- The age groups with the highest rates of gonorrhea are ages 18-24, followed by ages 25-49 and ages 13-17.
- In 2024, Guilford County's gonorrhea rate of 342.3 per 100,000 was higher than Wake, Forsyth, Mecklenburg counties and North Carolina but lower than Durham County.
- Guilford County gonorrhea rate per 100,000 exceeded state and national rates from 2004 to 2024.

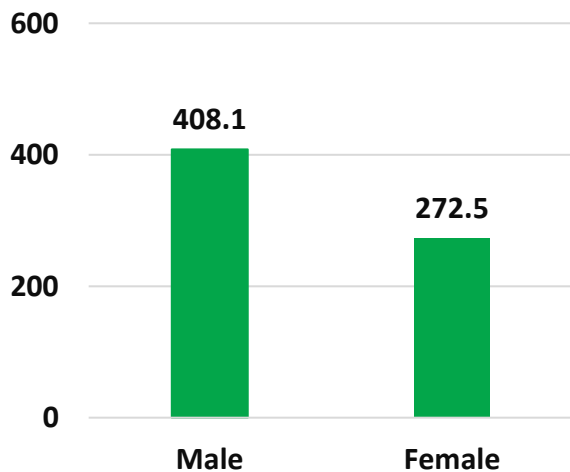
Characteristics of Guilford County Gonorrhea Cases and Rates per 100,000 by Race and Hispanic Status, 2019-2024

	2020	2020	2021	2021	2022	2022	2023	2023	2024	2024
Race or Ethnicity	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
American Indian	7	160.3	5	113.7	2	44.4	2	43.4	3	64.3
Asian/Hawaiian Native	15	50.6	13	42.7	10	31.7	7	21.9	12	34.7
Black/ African American	1,547	802.3	1,601	823.2	1,289	651.3	1,442	718.2	1,206	593.8
White	194	64.6	187	62.7	169	56.7	165	55.2	184	61.3
Other	34	---	28	---	32	---	43	---	26	---
Missing/Unknown	421	---	507	---	417	---	450	---	438	---
Multi-Racial	10	70.8	6	41.0	8	52.9	14	89.2	14	85.6
Race Total	2,229	---	2,348	---	1,927	---	2,123	---	1,883	---
Hispanic*	49	94.2	44	82.6	50	91.4	63	111.1	62	105.9

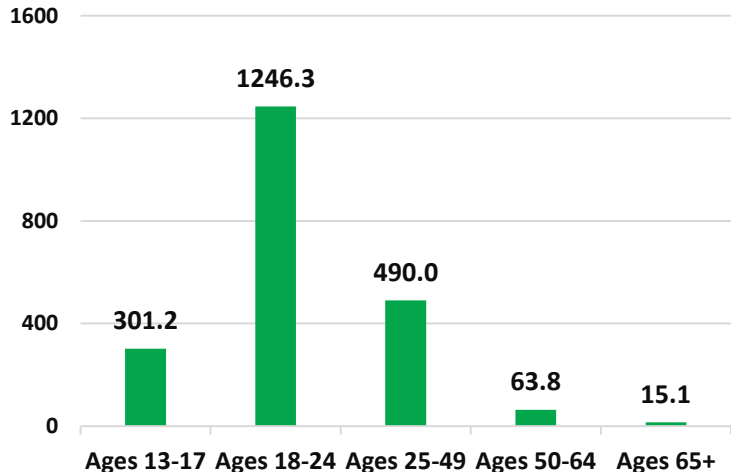
*Hispanics can be of any race.

Source: NC Disease Data Dashboard.

Gonorrhea Rates per 100,000 by Sex, Guilford County, 2024



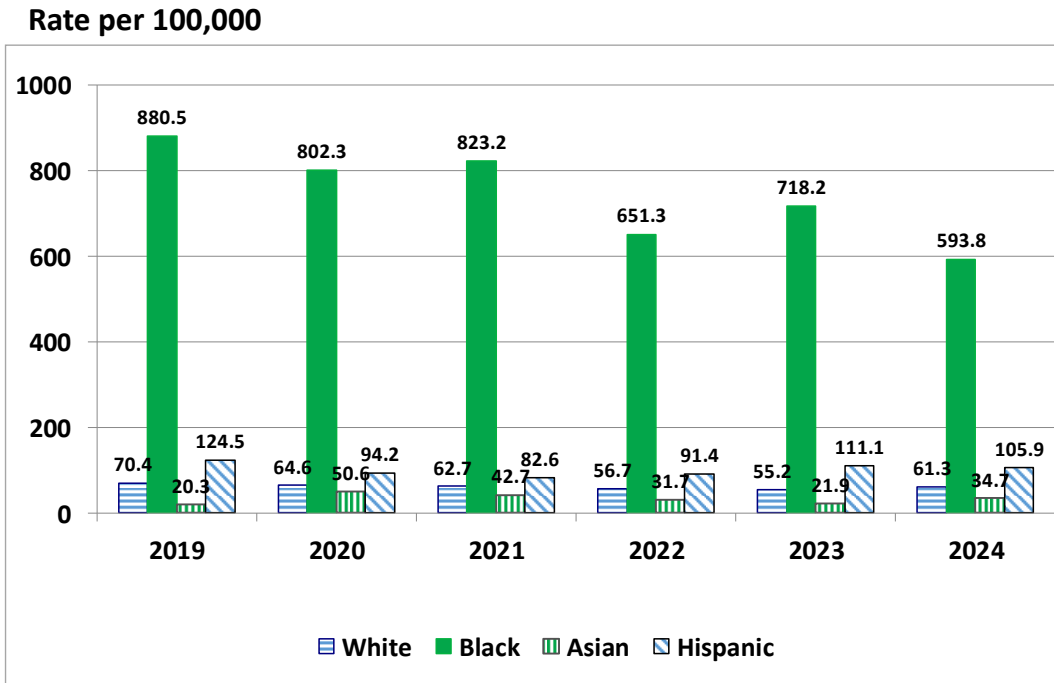
Gonorrhea Rates per 100,000 by Age Group, Guilford County, 2024



Source: NC Disease Data Dashboard

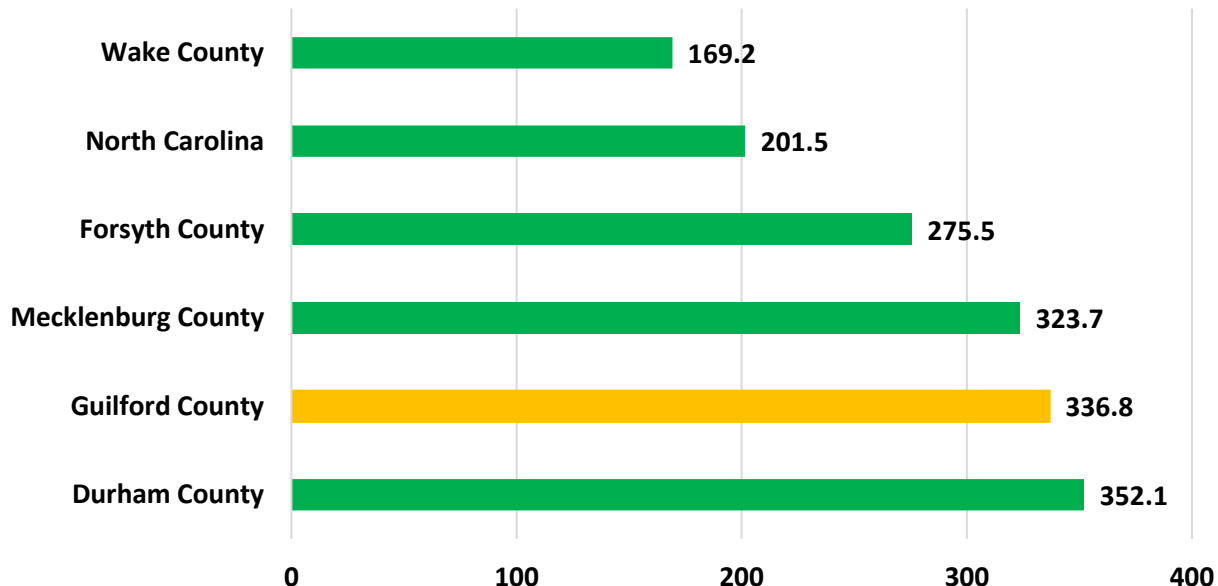
Gonorrhea Trends

Trends in Gonorrhea Rates in Guilford County by Race and Hispanic Status, 2019-2024



Source: NC Disease Data Dashboard.

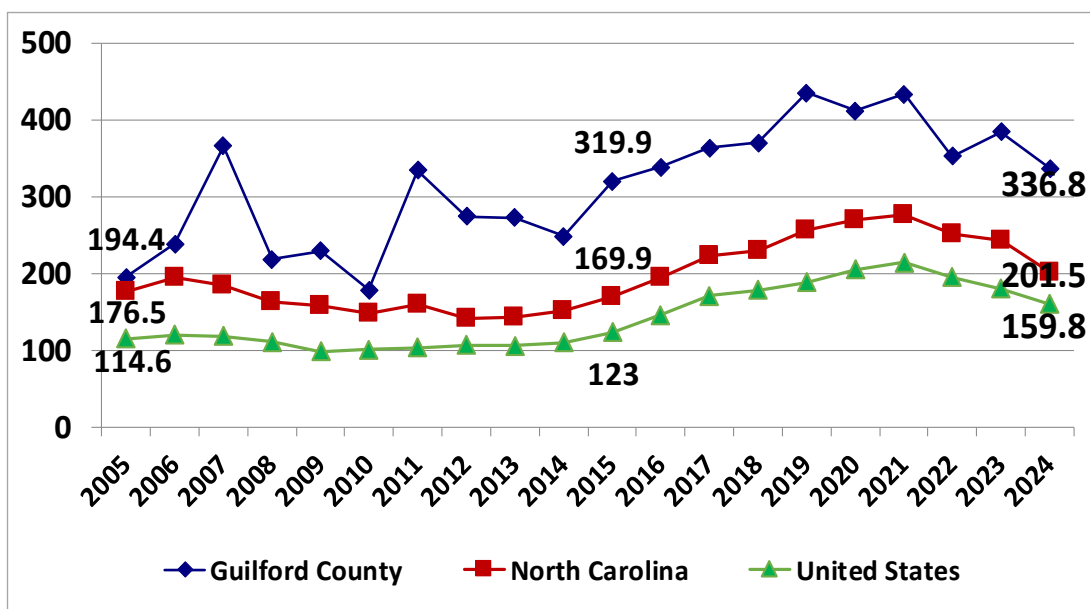
Gonorrhea Rates per 100,000 by Comparison County Guilford County, 2024



Source: NC Disease Data Dashboard.

Trends in Gonorrhea Incidence Rates Guilford County, NC and US 2005-2024

Rate per 100,000



Sources: NC DHHS, Communicable Disease Control Branch, NC Disease Data Dashboard; STD Annual Report; CDC.

This report was prepared by the Guilford County Department of Public Health:

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