| 2023| Sexually Transmitted Infections Data Brief|

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

A 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.

- In 2022, the most commonly occurring sexually transmitted infection in Guilford County was chlamydia, followed by gonorrhea with 4,425 and 1,927 new cases, respectively.
- Rates of new cases of primary, secondary, and early latent syphilis rose sharply from 33.6 per 100,000 population in 2020 to 64.1 per 100,000 population in 2022.
- The rate of new HIV Disease cases increased in Guilford County slightly from 2021 to 2022 but remains lower than in the previous two years; Guilford has the second highest HIV Disease rate among comparison counties.
- Rates of new cases of chlamydia, the county's most common STI, declined for three years in a row since the high in 2019.
- Rates of gonorrhea cases declined somewhat in 2022 from the rate in 2021.

Inside this Data Brief

Sexually Transmitted Infections, Cases and Rates per 100,000 Population Guilford County, 2018-2022

Reportable Disease	2018		2019		2020*		2021		2022	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Chlamydia	5,159	967.5	5,414	1006.6	4,609	851.5	4,346	801.2	4,423	815.4
Gonorrhea	1,970	369.4	2,338	434.7	2,226	411.2	2,347	432.7	1,926	355.1
HIV Infection[1]	110	24.5	119	26.3	91	20.0	136	29.7	96	20.9
Syphilis (Early) [2]	152	28.5	182	33.8	182	33.6	293	54.0	350	64.5
Syphilis (Primary & Secondary)	88	16.5	82	15.2	104	19.2	174	32.1	211	38.9
Syphilis (Early non-primary non-secondary)[3]	64	12.0	100	18.6	78	14.4	119	21.9	139	25.6
Syphilis (Unknown Duration and Late) [4]	71	13.3	59	11.0	56	10.4	120	22.1	180	33.2
Congenital Syphilis (confirmed and probable) [5]	1	0.19	1	0.19	1	0.18	1	0.18	6	1.1
Pelvic Inflammatory Disease (PID)	4	0.7	3	0.6	3	0.6	4	0.7	0	0.0
Non-Gonococcal Urethritis (NGU)	276	51.7	174	32.4	146	27.7	73	13.5	0	0.0
Hepatitis A	2	0.4	10	1.9	2	0.4	12	2.2	2	0.4
Hepatitis B (acute)	13	2.4	16	3.0	13	2.5	6	1.1	2	0.4
Hepatitis B (chronic carrier)	74	13.9	85	15.8	74	14.0	51	9.4	80	14.6
Hepatitis C (acute)	7	1.3	7	1.3	6	1.1	3	0.6	1	0.2
Population	533,670		537,174		541,741		542,756		546,101	

Source: NC Electronic Disease Surveillance System (NC EDSS).

*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.

[1] Newly diagnosed HIV rates among adults and adolescents ages 13 and above. Rates based on that population.

[2] Early includes Primary and Secondary Syphilis and Early non-primary and non-secondary syphilis.

[3] Early non-primary non-secondary (formerly early latent) Syphilis.

[4] Late is defined as having been infected more than one year and presenting with inflammatory lesions of the cardiovascular system, skin, bone, or other tissue/structures. Late Syphilis usually becomes clinically manifest only after a period of 15–30 years of untreated infection.

[5] Includes confirmed and probable congenital Syphilis cases based on 2018 case definition https://ndc.services.cdc.gov/case-definitions/syphilis-2018/.

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, and late—with different signs and symptoms associated with each stage. Primary, secondary, and early non-primary non-secondary (formerly early latent) is defined as having been infected for a year or less and are considered early syphilis. Late is defined as having been infected more than one year and presenting 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 though contact with infectious body fluids.

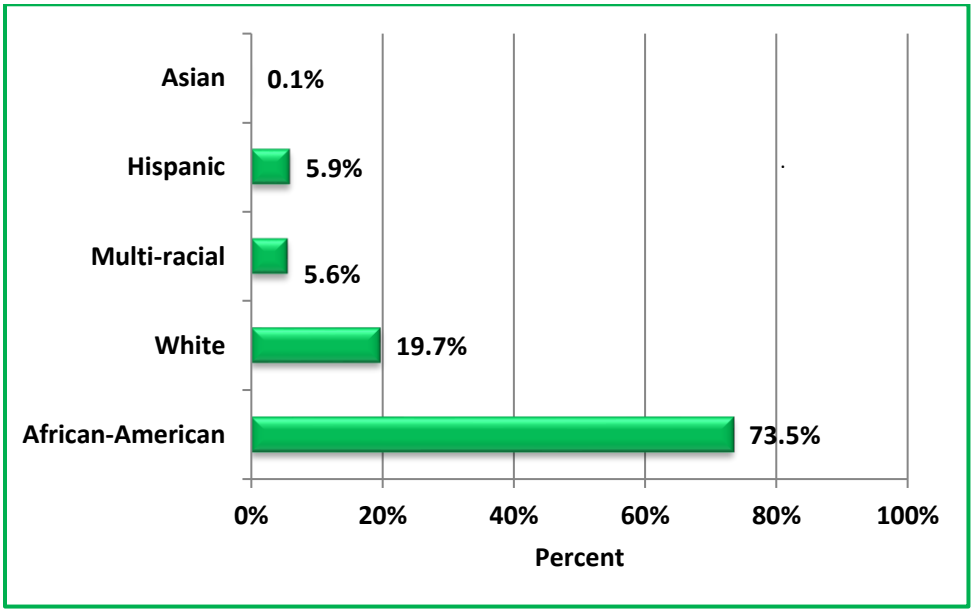
Sexually Transmitted Infections: Syphilis

Early* Syphilis Rates per 100,000 Population, by Selected Counties and NC, 2018-2022

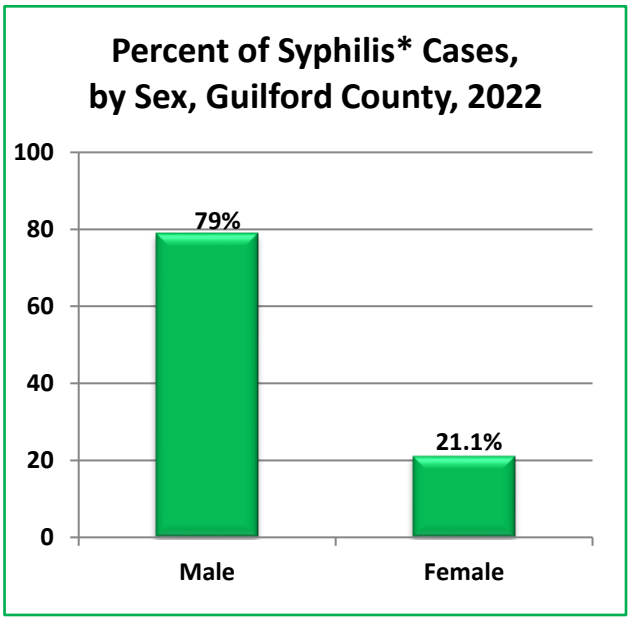
Geographic Area	2018	2019	2020	2021	2022
Cumberland	33.4	33.5	33.7	52.8	72.4
Durham	55.1	50.7	54.2	58.3	62.3
Forsyth	25.8	26.4	17.3	31.1	38.4
Guilford	28.5	33.8	33.6	54.0	64.5
Mecklenburg	38.3	41.6	51.2	64.9	75.2
Wake	22.9	28.0	28.1	31.3	35.4
North Carolina	18.3	20.1	22.5	30.1	39.1

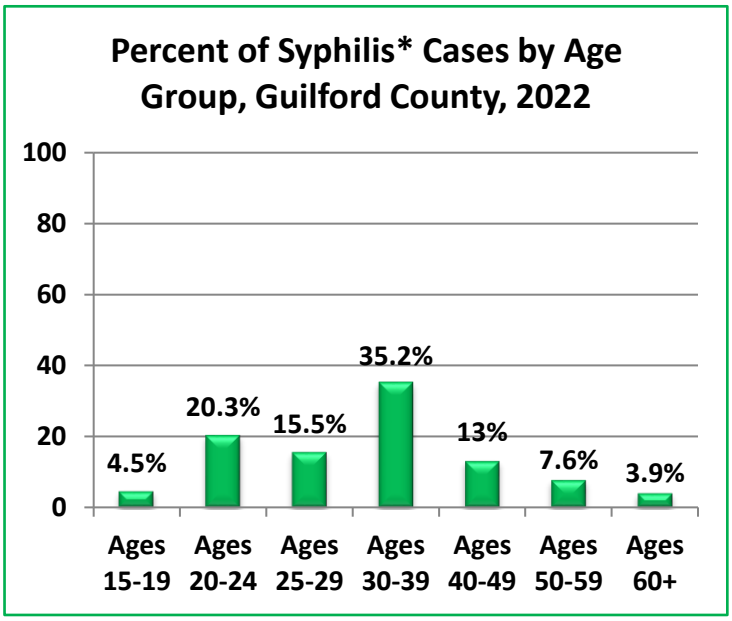
Source: NC HIV/STD Annual Surveillance Report; NCDHHS Communicable Disease Branch.
*Early syphilis is defined as having primary, secondary, or early non-primary non-secondary (formerly early latent) syphilis.

Characteristics of Guilford County Early* Syphilis Cases, 2022
Percentage of Cases by Race and Ethnicity
Number of Cases = 350



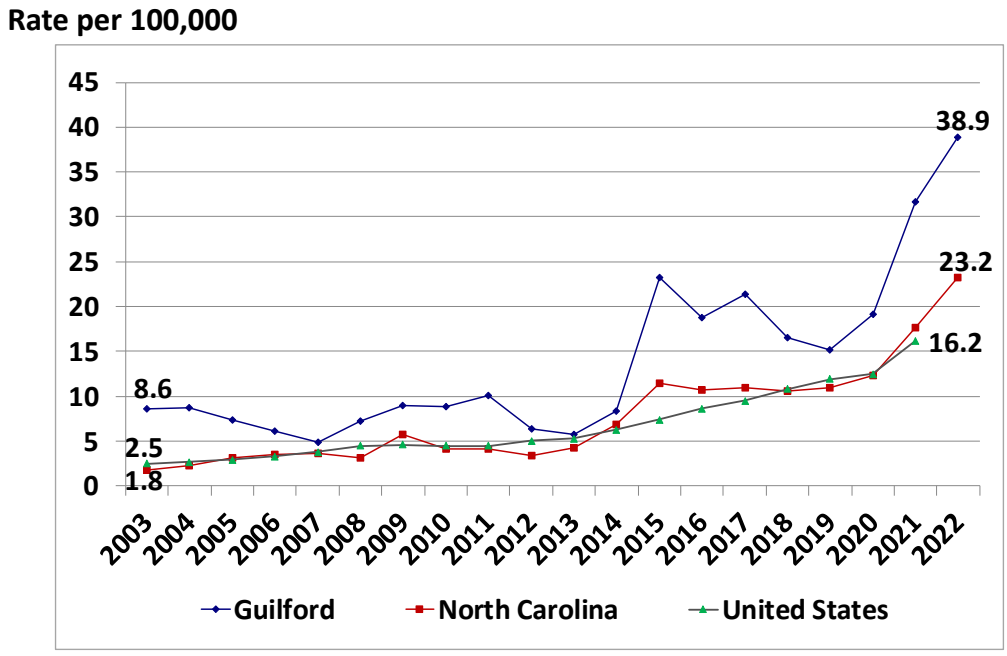
Source: NC Electronic Disease Surveillance System (NC EDSS); Data pulled 11/20/2023.
Notes: Hispanics can be of any race; percentages do not add to 100%.
*Early syphilis is defined as having primary, secondary, or early non-primary non-secondary (formerly early latent) syphilis.





Source: NC Electronic Disease Surveillance System (NCEDSS).
*Early syphilis is defined as having primary, secondary, or early non-primary non-secondary (formerly early latent) syphilis.

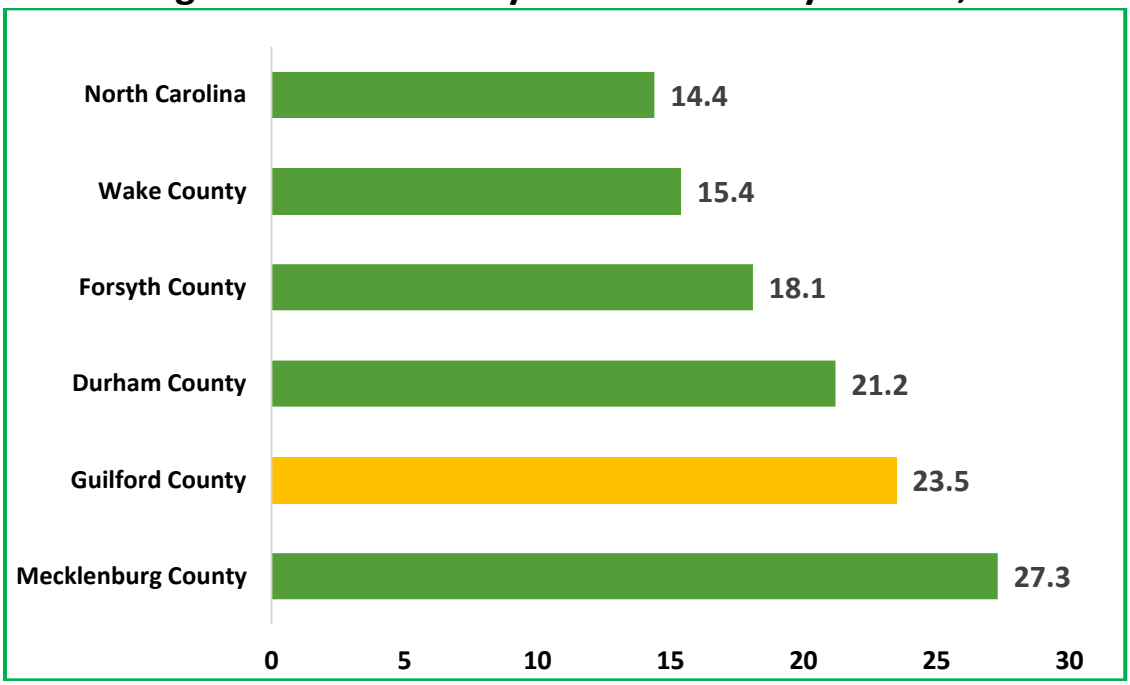
Trends in Primary and Secondary Syphilis Rates Guilford County, NC and US 2003-2022



Source: NC DHHS Communicable Disease Control Branch; NC Electronic Disease Surveillance System (NCEDSS); Centers for Disease Control. Chart prepared by the GCDHHS, Division of Public Health.
2022 Syphilis data for the United States is not yet available.

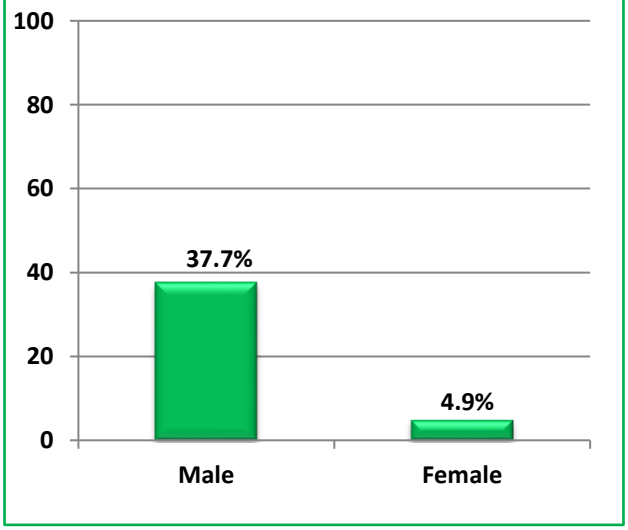
Sexually Transmitted Infections: HIV Disease

Newly Diagnosed HIV Rates per 100,000 among Residents Ages 13 and Older by Selected County and NC, 2020-2022

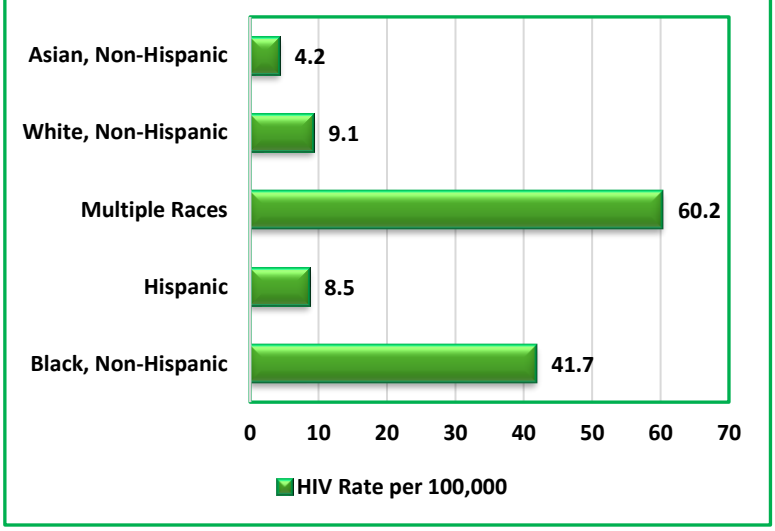


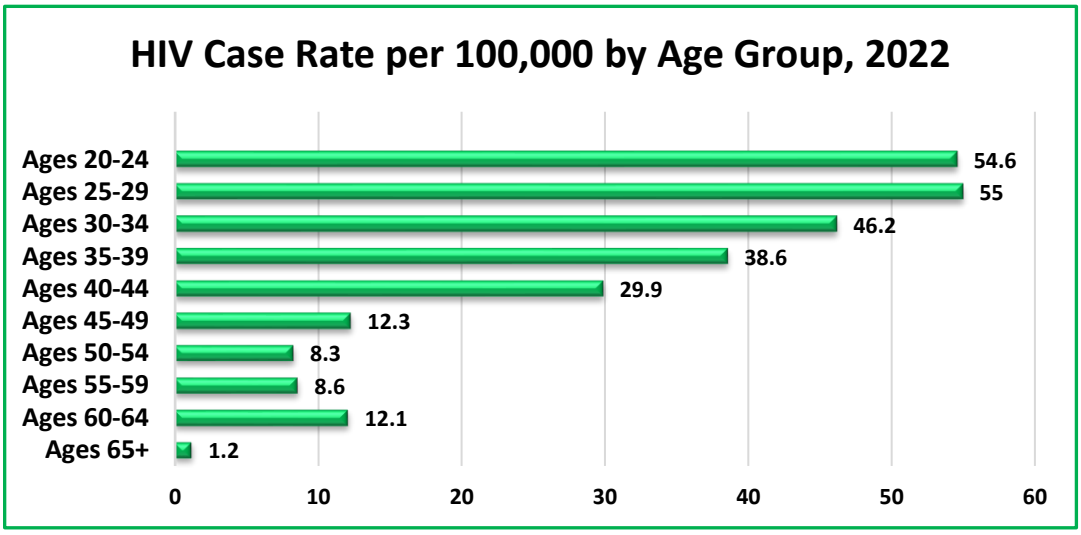
Source: 2020 North Carolina HIV Annual Surveillance Report; NC DHHS, Division of Public Health.

HIV Cases per 100,000 by Sex, Guilford County, 2022



HIV Cases per 100,000 by Race and Ethnicity, 2022





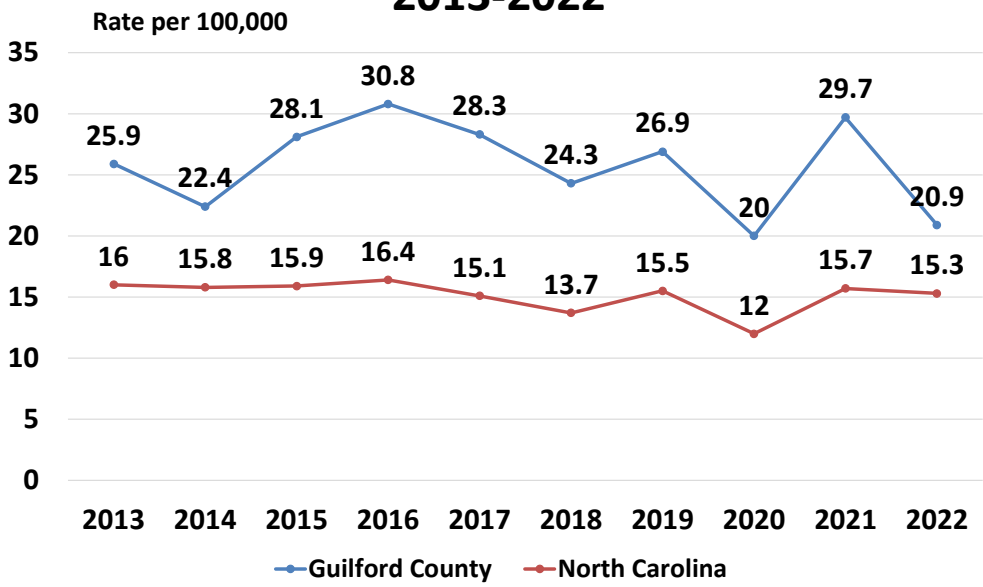
Source: Epidemiology Section; NCDPH.

HIV Disease Cases and Rates per 100,000, 2017-2022
Guilford County Residents Ages 13 and Older

Demographic Characteristics	2017		2018		2019		2020		2021		2022	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Male	89	42.9	85	40.6	93	44.0	81	37.8	113	52.6	81	37.7
Female	27	11.4	21	8.8	27	11.2	9	3.7	20	8.2	12	4.9
Transgender	4	---	4	---	1	---	2	---	2	---	3	---
13-14 Years	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15-19 Years	9	22.4	12	29.3	11	26.8	6	14.3	8	19.1	0	0.0
20-24 Years	36	94.2	30	78.6	27	70.7	30	79.1	39	101.4	21	54.6
25-29 Years	24	61.3	21	53.5	31	79.7	16	42.9	27	74.2	20	55.0
30-34 Years	10	29.9	12	35.1	15	42.4	14	38.7	24	65.2	17	46.2
35-39 Years	9	27.1	5	15.0	12	36.1	4	11.9	10	29.7	13	38.6
40-44 Years	4	12.6	6	18.9	5	15.6	6	18.3	4	12.0	10	29.9
45-49 Years	6	16.6	4	11.2	4	11.4	5	14.5	7	21.5	4	12.3
50-54 Years	7	19.9	6	17.3	10	28.9	3	8.5	4	11.1	3	8.3
55-59 Years	10	28.9	7	20.0	3	8.5	2	5.6	7	20.0	3	8.6
60-64 Years	3	9.7	5	15.9	3	9.4	5	15.3	3	9.1	4	12.1
65 Years and over	2	2.6	2	2.5	0	0.0	1	1.2	2	2.3	1	1.2
Asian/Pacific Islander, Non-Hispanic/Latino	1	4.7	1	4.5	2	8.7	0	0.0	1	4.2	1	4.2
Black/African American, Non-Hispanic/Latino	99	66.6	80	52.9	94	61.2	69	44.2	93	58.7	66	41.7
Hispanic/Latino	7	24.0	12	39.4	9	28.2	5	15.0	15	42.7	3	8.5
White/Caucasian, Non-Hispanic/Latino	12	5.1	16	6.8	15	6.4	15	6.4	23	10.0	21	9.1
Multiple Races	1	14.4	1	13.6	1	13.0	3	37.7	3	36.1	5	60.2
Total	120	27.0	110	24.5	121	26.7	92	20.2	135	29.4	96	20.9

Source: Epidemiology Section; NCDPH.

Trends in HIV Disease Rates among Residents Ages 13 and Older, Guilford County and NC, 2013-2022



NC HIV Surveillance Report, HIV/STD/Hepatitis Surveillance Unit, Division of Public Health, NCDHHS.
Chart prepared by the GCDHHS, Division of Public Health.

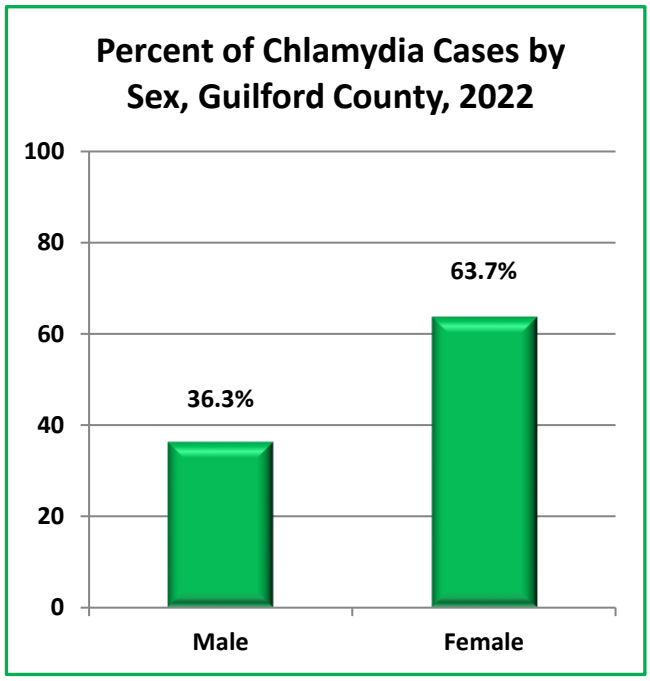
Sexually Transmitted Infections: Chlamydia

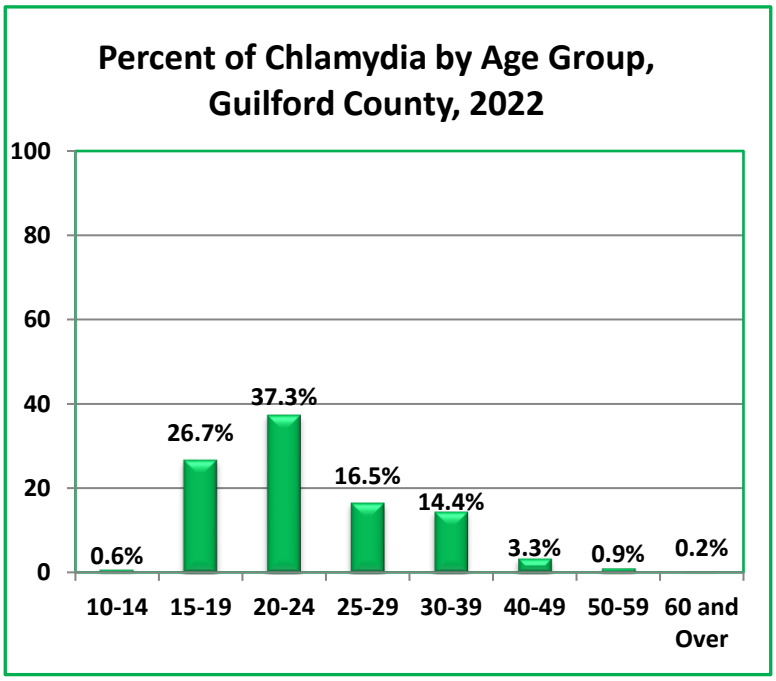
Characteristics of Guilford County Chlamydia Cases and Rates by Race and Hispanic Status, 2019-2022

Race or Ethnicity Classification	2019		2020		2021		2022	
	Number of Cases	Percent of Cases	Number of Cases	Percent of Cases	Number of Cases	Percent of Cases	Number of Cases	Percent of Cases
American Indian	3	0.1%	10	0.2%	7	0.2%	8	0.2%
Asian	51	0.9%	36	0.8%	43	1.0%	49	1.1%
African-American	3,364	62.1%	2,740	59.8%	2,429	55.9%	2,507	56.7%
Hawaiian/Pac. Islander	2	0.04%	6	0.1%	7	0.2%	9	0.2%
White	669	12.3%	548	12.0%	506	11.6%	489	11.0%
Other	148	2.7%	124	2.7%	120	2.8%	155	3.5%
Unknown	1,134	20.9%	1,068	23.3%	1,204	27.7%	1,186	26.8%
Multi-Racial	30	0.6%	20	0.4%	20	0.5%	20	0.4%
Missing	14	0.3%	29	0.6%	10	0.2	2	0.1%
Race Total	5,415	100%	4,581	100%	4,346	100%	4,425	100%
Hispanic*	249	4.6%	202	4.4%	197	4.5%	255	5.8%

*Hispanics can be of any race.
Source: NC Electronic Disease Surveillance System (NCEDSS).

- 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 20-24, followed by ages 15-19 and ages 25-29.
- Two-thirds of chlamydia cases are among females. Chlamydia cases are diagnosed largely as a result of screening, and women are more likely to have screening tests.





Source: NC Electronic Disease Surveillance System (NCEDSS).

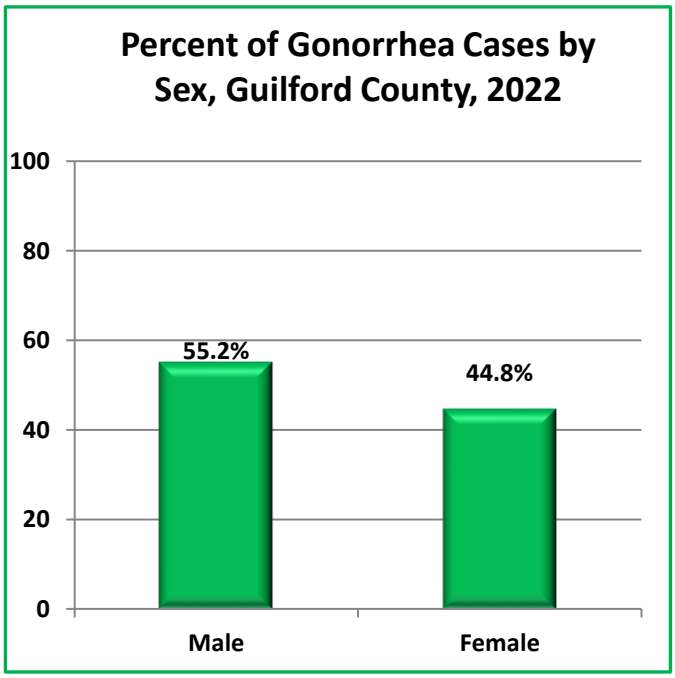
Sexually Transmitted Infections: Gonorrhea

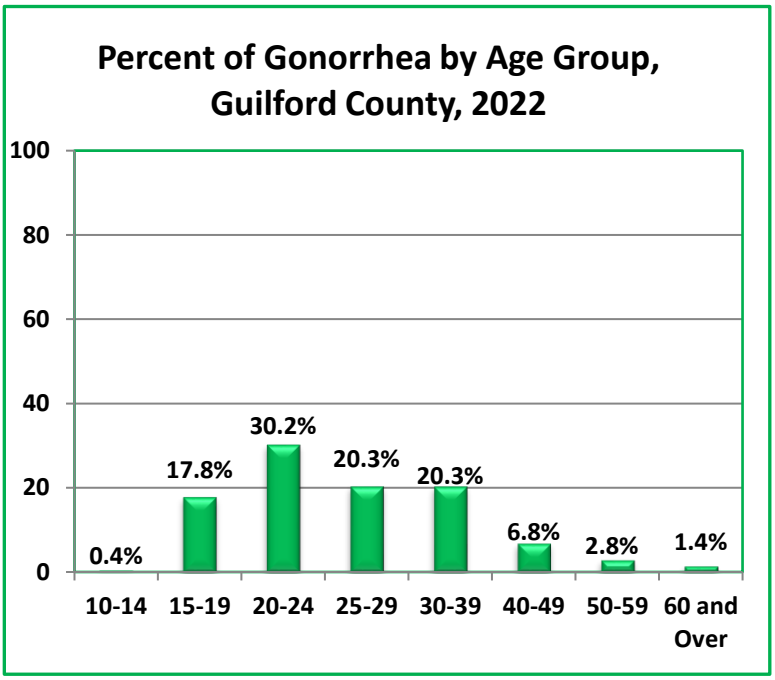
Characteristics of Guilford County Gonorrhea Cases and Percentages by Race and Hispanic Status, 2019-2022

	2019		2020		2021		2022	
Race or Ethnicity Classification	Number of Cases	Percent of Cases	Number of Cases	Percent of Cases	Number of Cases	Percent of Cases	Number of Cases	Percent of Cases
American Indian	1	0.04%	7	0.3%	5	0.2%	2	0.1%
Asian	6	0.3	14	0.6%	10	0.4%	9	0.5
African-American	1,677	71.8%	1,535	69.3%	1,602	68.2%	1,289	66.9%
White	211	9.0%	193	8.7%	187	8.0%	169	8.8%
Other	33	1.4%	34	1.5%	28	1.2%	32	1.7%
Unknown	390	16.7%	409	18.5%	504	21.5%	417	21.6
Multi-Racial	16	0.7%	10	0.5%	6	0.3	8	0.4
Race Total	2,335	100%	2,214	100%	2,348	100%	1,927	100%
Hispanic*	56	2.4%	50	2.3%	44	1.9%	50	2.6%

*Hispanics can be of any race.
Source: NC Electronic Disese Surveillance System (NCEDSS).

- 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 20-24, followed by ages 25-29 and ages 15-19.

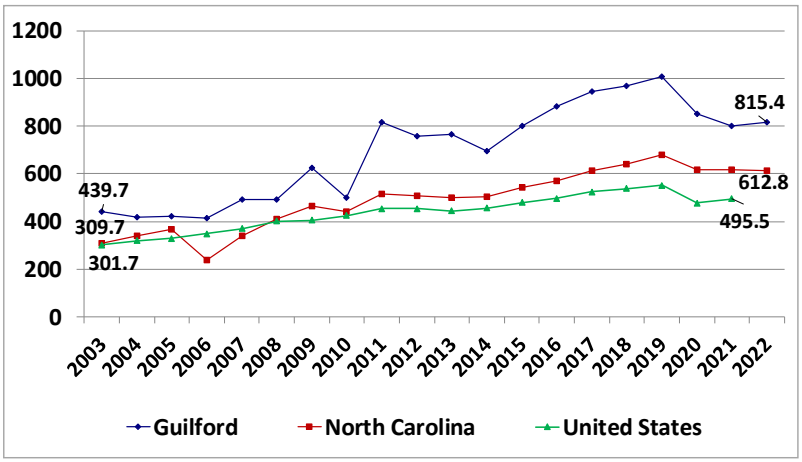




Source: NC Electronic Disease Surveillance System (NCEDSS).

Trends in Chlamydia Incidence Rates Guilford County, NC and US 2003-2022

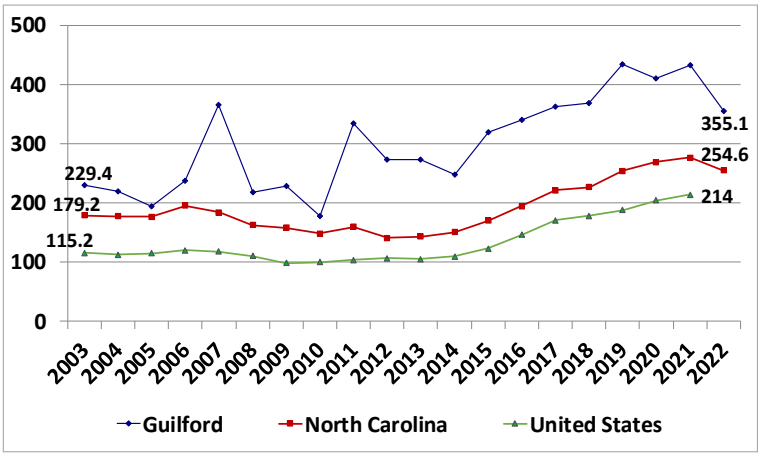
Rate per 100,000



Source: NC DHHS Communicable Disease Control Branch, STD Annual Report; Centers for Disease Control.
Chart prepared by the GCDHHS, Division of Public Health.
2022 Chlamydia data for the United States is not yet available.

Trends in Gonorrhea Incidence Rates Guilford County, NC and US 2003-2022

Rate per 100,000



Sources: NC DHHS, Communicable Disease Control Branch, STD Annual Report; CDC.
Chart prepared by the GCDHHS, Division of Public Health.
2022 Gonorrhea data for the United States is not yet available.

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For more information about Guilford County health statistics, visit
https://www.guilfordcountync.gov/our-county/human-services/health-department/health-statistics