| 2022| 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 2021, the most commonly occurring sexually transmitted infection in Guilford County was chlamydia, followed by gonorrhea with 4,344 and 2,346 new cases, respectively.
- Rates of new cases of primary, secondary, and early latent syphilis rose sharply from 33.8 per 100,000 population in 2020 to 53.5 per 100,000 population in 2021 in Guilford County.
- The rate of new HIV Disease cases increased in Guilford County and NC from 2020 to 2021; Guilford has the second highest HIV Disease rate among comparison counties.
- Rates of new cases of chlamydia, the county's most common STI, dropped somewhat in 2020 and 2021 from the high in 2019.
- Rates of gonorrhea cases resumed an increasing trend seen in the county since 2014, occurring in NC overall and the US.

Inside this Data Brief

Sexually Transmitted Infections, Cases and Rates per 100,000 Population Guilford County, 2017-2021

Reportable Disease	2017		2018		2019		2020		2021	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Chlamydia	4,731	897.8	5,162	967.3	5,415	1,006.7	4,609	851.5	4,344	800.9
Gonorrhea	1,713	325.1	1,965	368.2	2,334	433.9	2,221	410.3	2,346	432.5
HIV Infection (HIV & AIDS)[1]	126	28.3	109	24.3	123	22.9	92	20.2	135	29.4
Syphilis (Primary & Secondary - P&S)	111	21.1	87	16.3	83	15.4	102	18.8	172	31.7
Syphilis (P&S and Early Latent)	178	33.8	141	28.3	182	33.8	183	33.8	290	53.5
Pelvic Inflammatory Disease (PID)	3	0.6	4	0.7	3	0.6	4	0.7	0	0.0
Non-Gonococcal Urethritis (NGU)	146	27.7	276	51.7	174	32.4	73	13.5	6	1.1
Hepatitis A	2	0.4	2	0.4	10	1.9	12	2.2	4	0.7
Hepatitis B (acute)	13	2.5	13	2.4	16	3.0	6	1.1	5	0.9
Hepatitis B (chronic carrier)	74	14.0	74	13.9	85	15.8	51	9.4	48	8.8
Hepatitis C (acute)	6	1.1	7	1.3	7	1.3	3	0.6	0	0.0
Population	526,953		533,670		537,174		541,741		542,756	

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

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

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, and latent—with different signs and symptoms associated with each stage.

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.

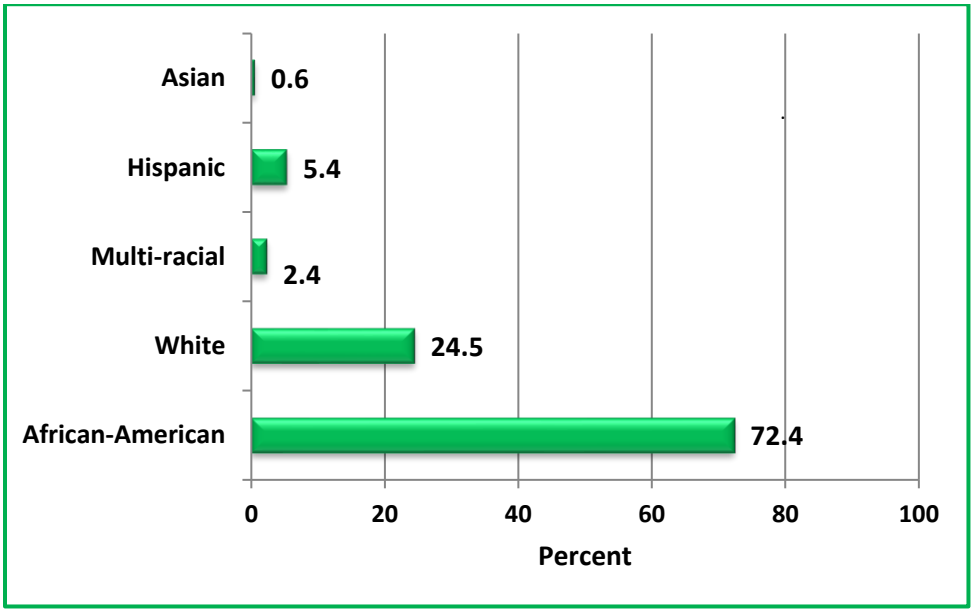
Sexually Transmitted Infections: Syphilis

Primary, Secondary and Early Latent Syphilis Rates per 100,000 Population By Selected Counties and NC, 2017-2021

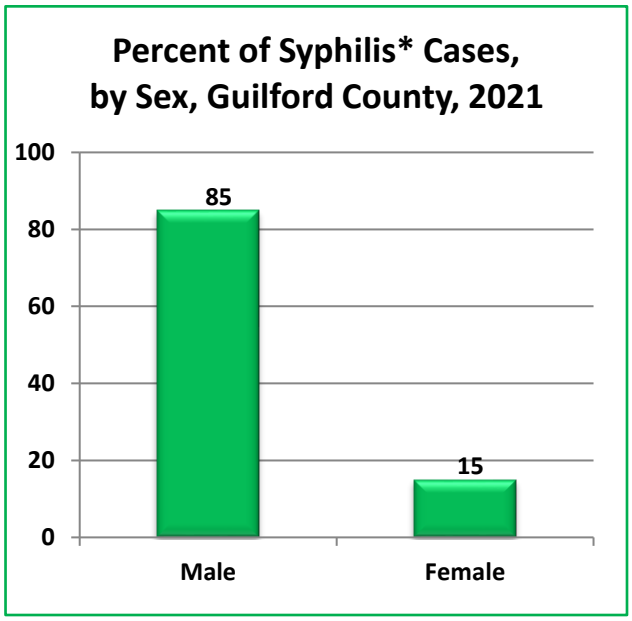
Geographic Area	2017	2018	2019	2020	2021
Cumberland	24.0	35.2	33.4	35.7	40.3
Durham	38.8	55.6	53.8	53.5	54.8
Forsyth	20.7	26.4	26.2	16.7	24.8
Guilford	33.8	28.3	33.9	32.6	40.4
Mecklenburg	40.6	38.9	41.1	50.3	52.8
Wake	22.4	23.1	28.0	29.1	29.5
North Carolina	17.9	18.4	20.2	20.2	24.3

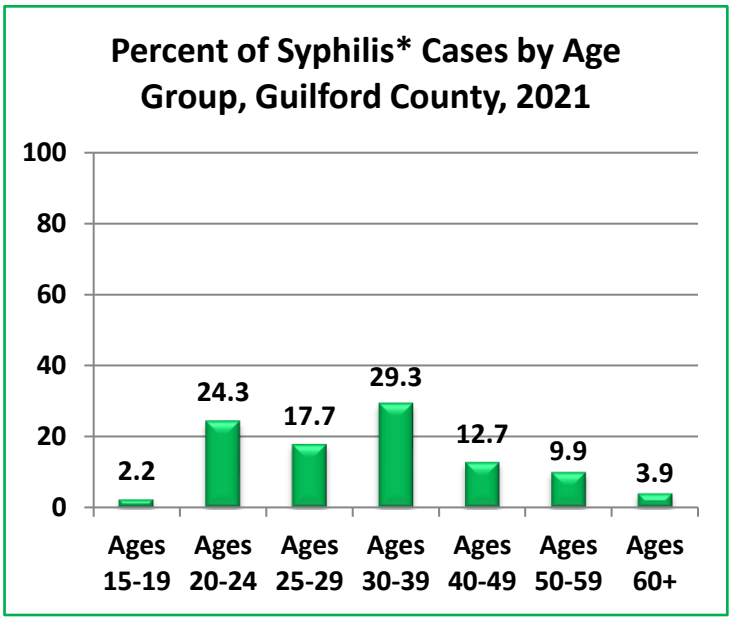
Source: NC HIV/STD Annual Surveillance Report; NCDHHS Communicable Disease Branch.

Characteristics of Guilford County Early* Syphilis Cases, 2021
Percentage of Cases by Race and Ethnicity
Number of Cases = 294



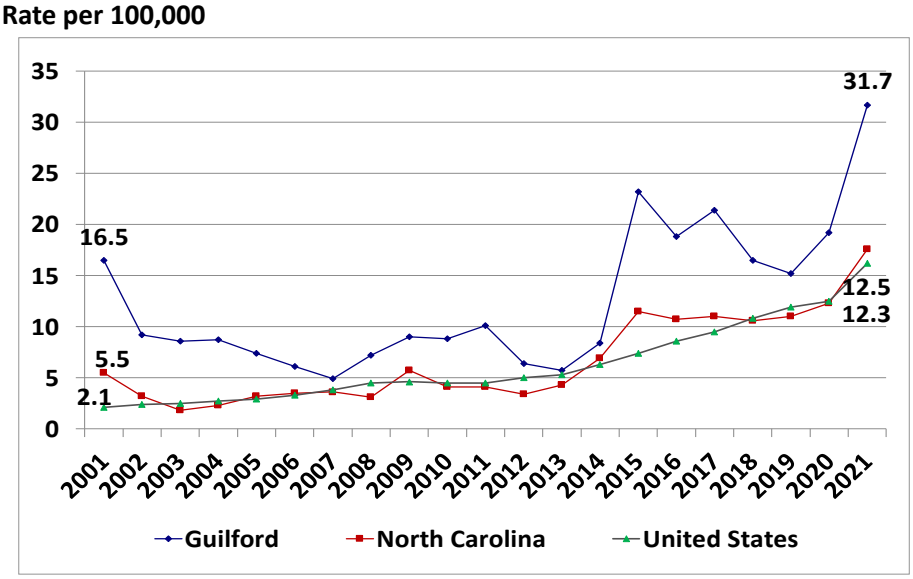
Source: NC Electronic Disease Surveillance System (NC EDSS).
Notes: Hispanics can be of any race; percentages do not add to 100%.
*Early Syphilis includes Primary and Secondary and Early Latent Syphilis.





Source: NC Electronic Disease Surveillance System (NCEDSS).
*Includes Primary and Secondary and Early Latent Syphilis.

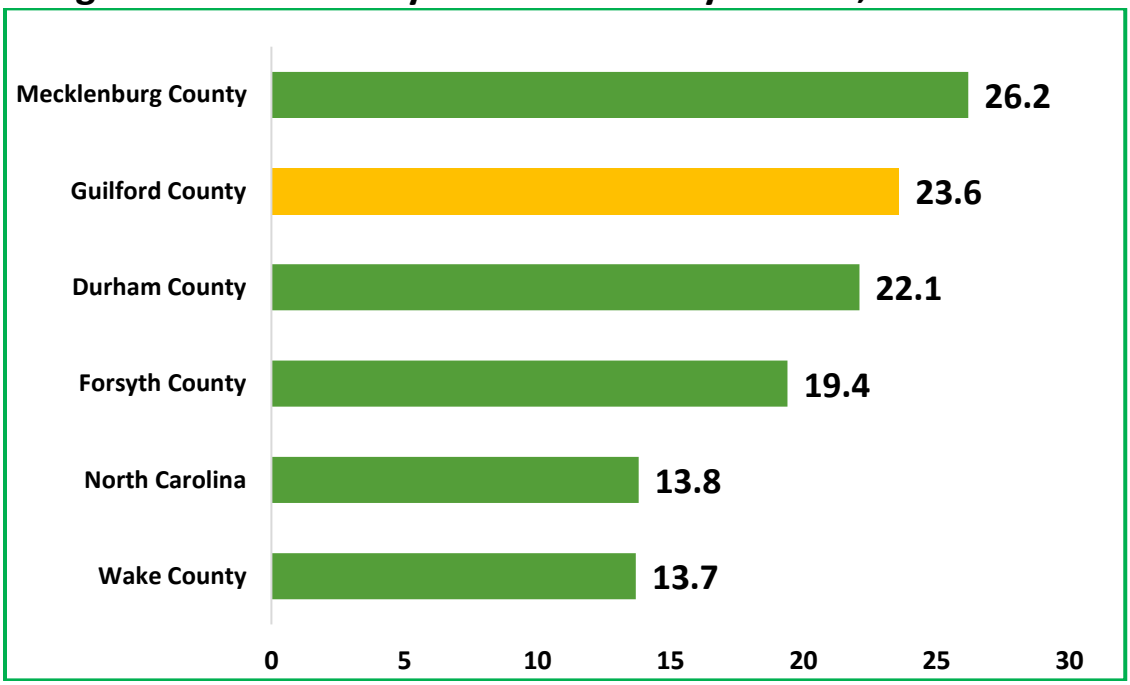
Trends in Primary and Secondary Syphilis Rates Guilford County, NC and US 2001-2021



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.

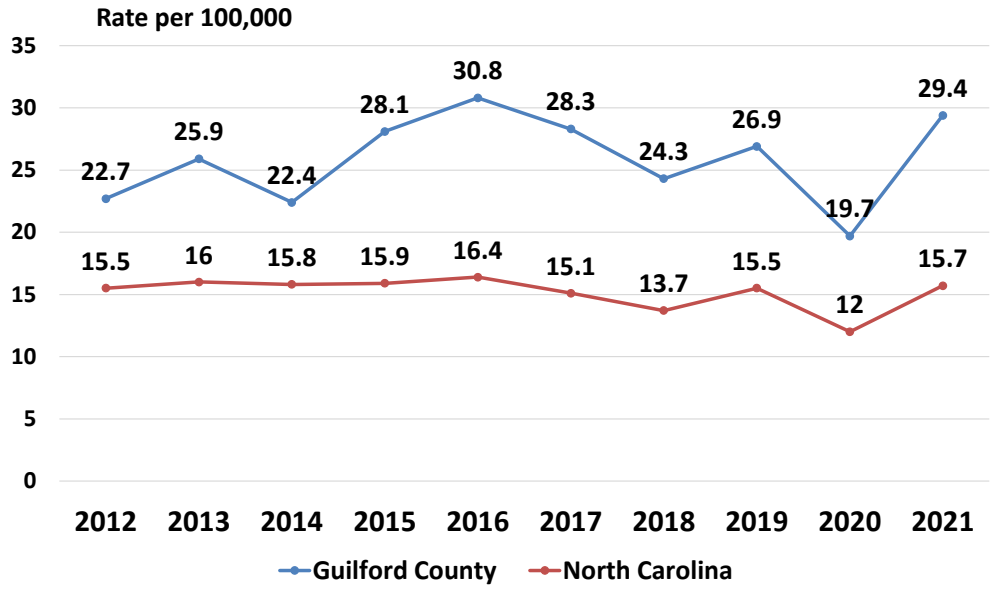
Sexually Transmitted Infections: HIV Disease

Newly Diagnosed HIV Rates among Residents Ages 13 and Older by Selected County and NC, 2019 - 2021

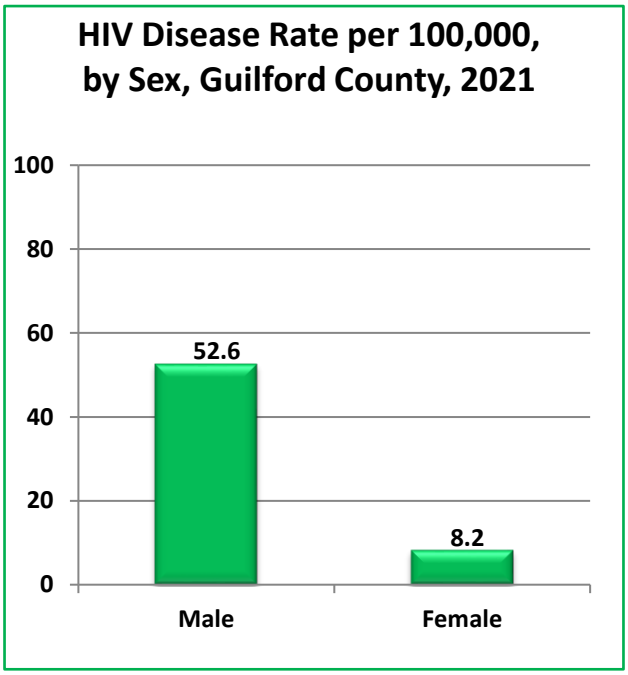


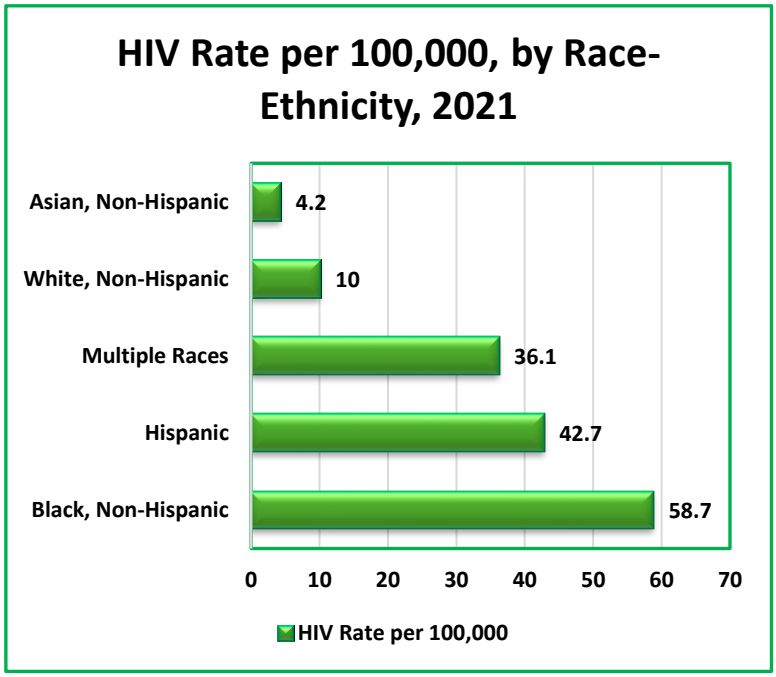
Source: 2020 North Carolina HIV Annual Surveillance Report; NC DHHS, Division of Public Health.

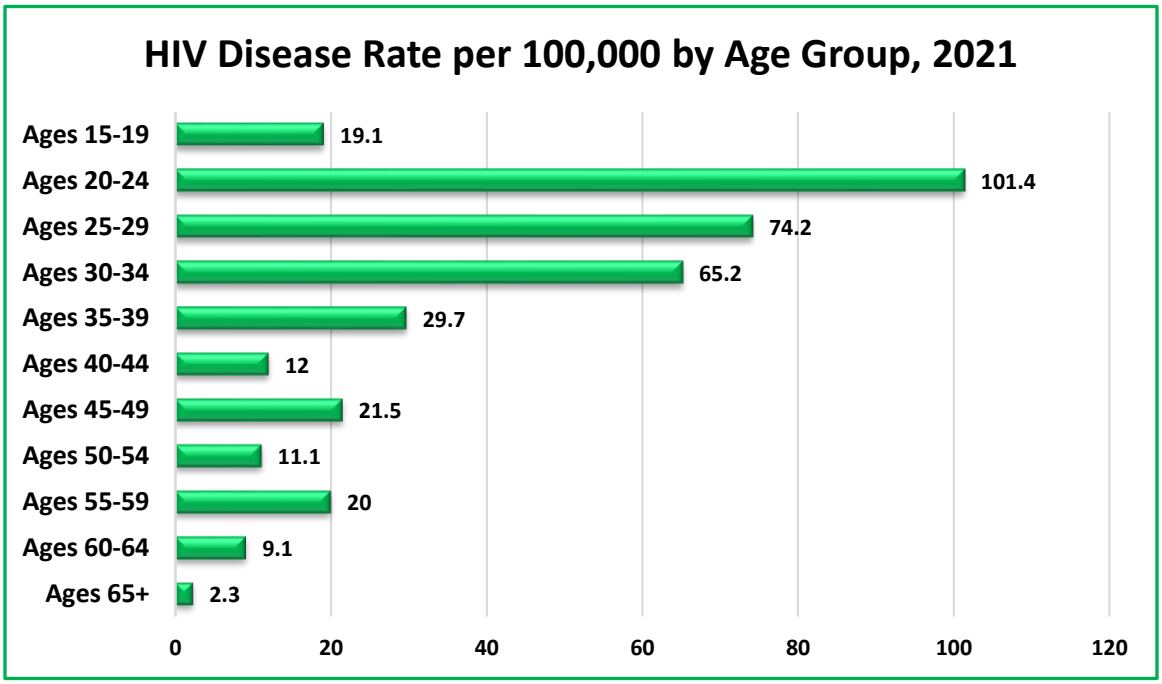
HIV Disease Rates per 100,000 among Residents Ages 13 and Older, Guilford County and NC, 2012-2021



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







Source: Epidemiology Section; NCDPH.

HIV Disease Cases and Rates per 100,000, 2017-2021
Guilford County Residents Ages 13 and Older

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

Source: Epidemiology Section; NCDPH.

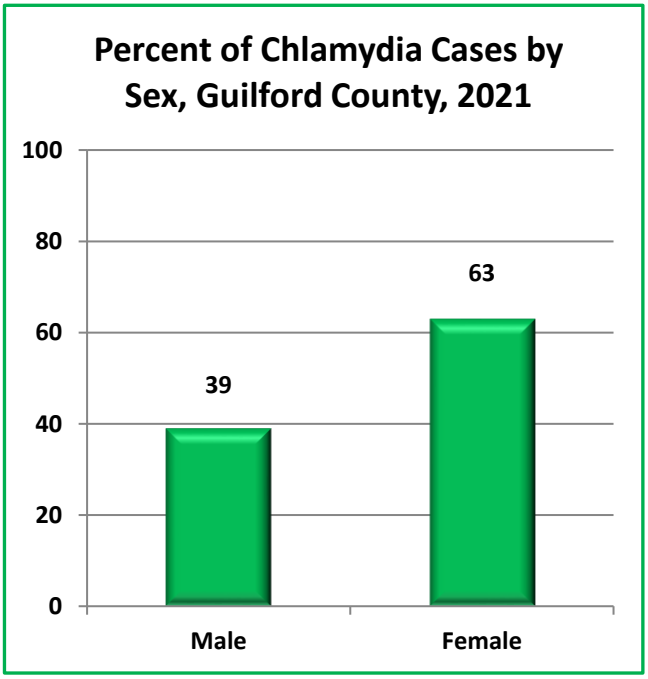
Sexually Transmitted Infections: Chlamydia

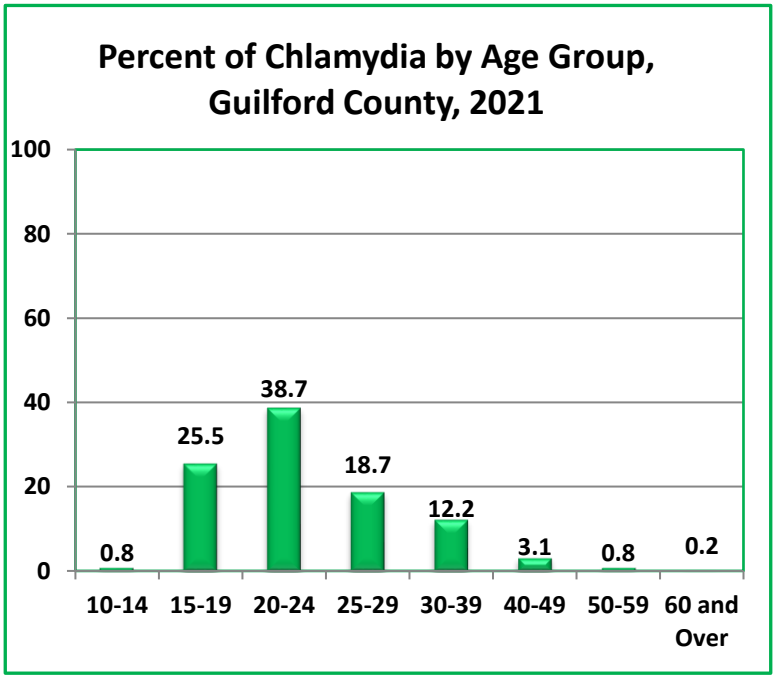
Characteristics of Guilford County Chlamydia Cases and Rates by Race and Hispanic Status, 2018-2021

Race or Ethnicity Classification	2019		2020		2021	
	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%
Asian	51	0.9%	36	0.8%	43	1.0%
African-American	3,364	62.1%	2,740	59.8%	2,429	55.9%
Hawaiian/Pacific	2	0.04%	6	0.1%	7	0.2%
White	669	12.3%	548	12.0%	506	11.6%
Other	148	2.7%	124	2.7%	120	2.8%
Unknown	1,134	20.9%	1,068	23.3%	1,204	27.7%
Multi-Racial	30	0.6%	20	0.4%	20	0.5%
Missing	14	0.3%	29	0.6%	10	0.2
Race Total	5,415	100%	4,581	100%	4,346	100%
Hispanic*	249	4.6%	202	4.4%	197	4.5%

*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).

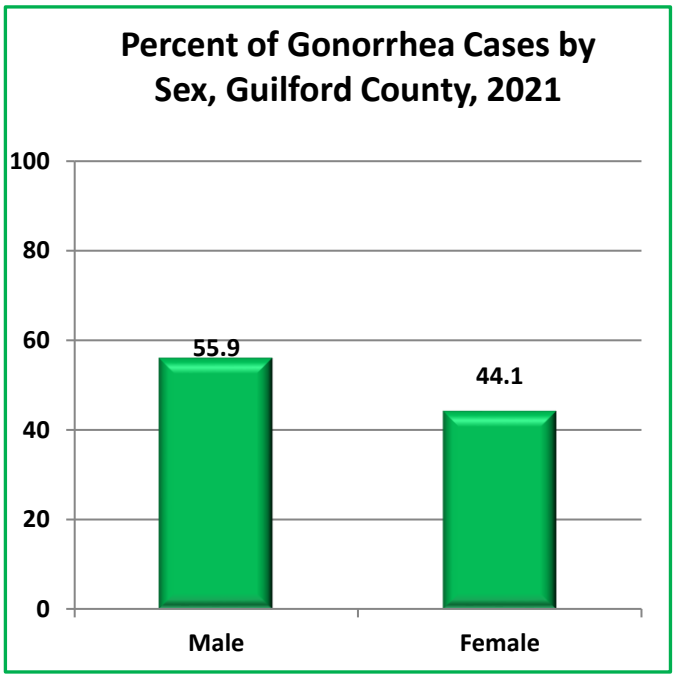
Sexually Transmitted Infections: Gonorrhea

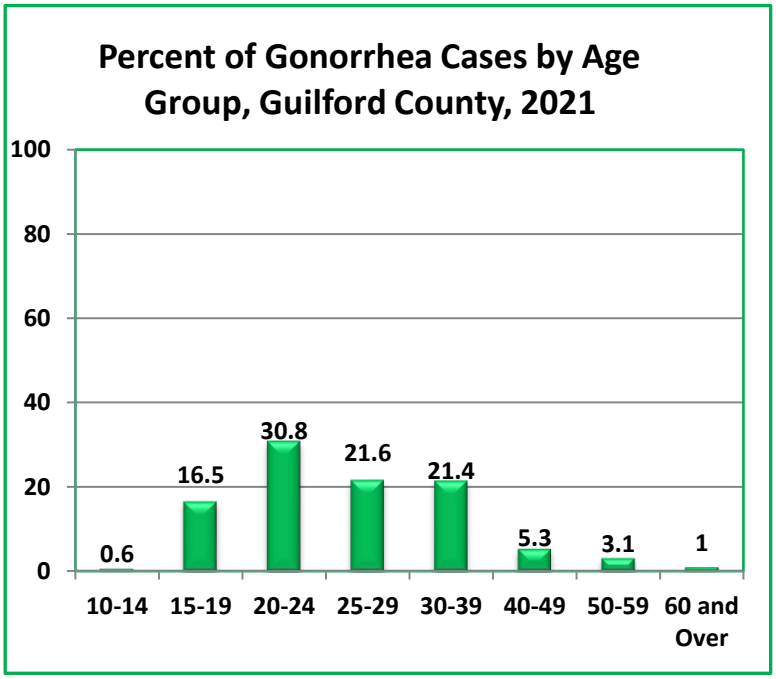
Characteristics of Guilford County Gonorrhea Cases and Percentages by Race and Hispanic Status, 2019-2021

	2019		2020		2021	
Race or Ethnicity Classification	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%
Asian	6	0.3	14	0.6%	10	0.4%
African-American	1,677	71.8%	1,535	69.3%	1,602	68.2%
White	211	9.0%	193	8.7%	187	8.0%
Other	33	1.4%	34	1.5%	28	1.2%
Unknown	390	16.7%	409	18.5%	504	21.5%
Multi-Racial	16	0.7%	10	0.5%	6	0.3
Race Total	2,335	100%	2,214	100%	2,348	100%
Hispanic*	56	2.4	50	2.3%	44	1.9%

*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.

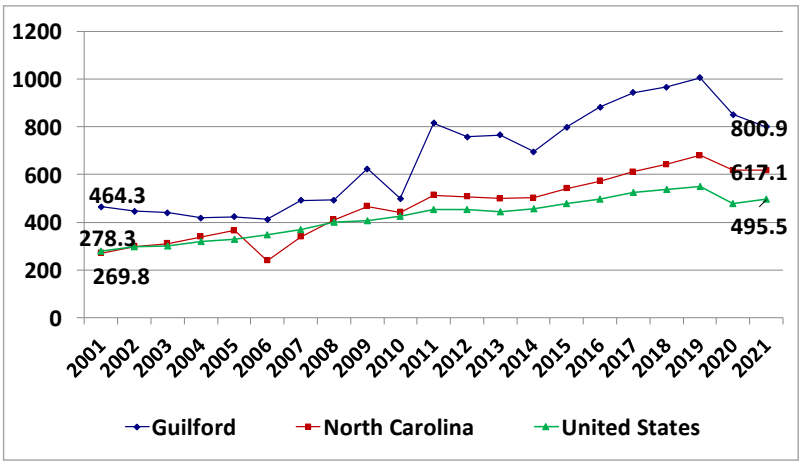




Source: NC Electronic Disease Surveillance System (NCEDSS).

Trends in Chlamydia Incidence Rates Guilford County, NC and US 2001-2021

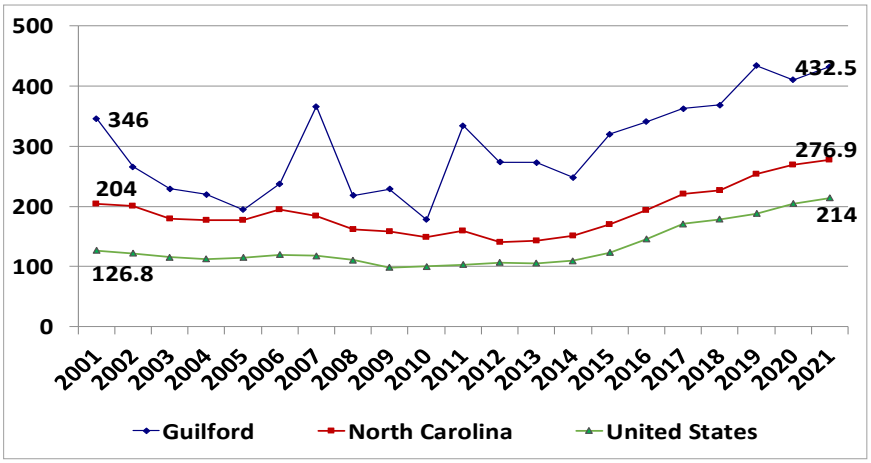
Rate per 100,000



Source: NC DHHS Communicable Disease Control Branch, STD Annual Report; Centers for Disease Control.
Chart prepared by the GCDHHS, Division of Public Health.

Trends in Gonorrhea Incidence Rates Guilford County, NC and US 2001-2021

Rate per 100,000



Sources: NC DHHS, Communicable Disease Control Branch, STD Annual Report; CDC.
Chart prepared by the GCDHHS, Division of Public Health.

This report was prepared by the Health Surveillance and Analysis Unit of the Division of Public Health:
Mark H. Smith, Ph.D., Epidemiologist Laura Mrosla, MPH, MSW, Community Health Educator

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

PEC APP 9/2023