

# | 2020 | Sexually Transmitted Infections Data Brief |



## Key Findings from 2018 Guilford County Sexually Transmitted Infection 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 2018, the most commonly-occurring sexually-transmitted infection in Guilford County was chlamydia, followed by gonorrhea with 5,162 and 1,965 new cases respectively.
- HIV Infection incidence rates declined in 2017 and 2018, but the county still has higher rates than most peer counties and the state.
- Primary and secondary syphilis incidence rates declined from 23.2 cases per 100,000 in 2015 to 16.3 in 2018.
- Chlamydia incidence rates continued an upward trend, reaching a high of 967.3 cases per 100,000 in 2018.
- Gonorrhea rates climbed to 368.5 per 100,000, a level not seen since 2007.
- Increasing rates of chlamydia, gonorrhea and syphilis are consistent with state and national trends.

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## Sexually Transmitted Infections, Cases and Rates per 100,000 Guilford County, 2014-2018

Reportable Disease	2014		2015		2016		2017		2018	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Chlamydia	3,563	694.6	4,138	799.5	4,102	786.8	4,731	897.8	5,162	967.3
Gonorrhea	1,271	248.0	1,656	320.0	1,776	340.7	1,713	325.1	1,965	368.2
HIV Infection (HIV & AIDS) <sup>1</sup>	96	22.4	122	28.1	136	26.7	126	28.3	109	24.3
Syphilis (Primary & Secondary - P&S)	43	8.4	120	23.2	98	18.8	111	21.1	87	16.3
Syphilis (P&S and Early Latent)	90	17.6	199	38.4	176	33.8	178	33.8	141	28.3
Pelvic Inflammatory Disease (PID)	2	0.4	3	0.6	1	0.2	3	0.6	4	0.7
Non-Gonococcal Urethritis (NGU)	133	26.0	247	47.7	190	36.4	146	27.7	276	51.7
Hepatitis A	4	0.8	0	0.0	5	1.0	2	0.4	2	0.4
Hepatitis B (acute)	7	1.4	2	0.4	7	1.3	13	2.5	13	2.4
Hepatitis B (chronic carrier)	71	13.9	47	9.1	120	23.0	77	14.6	29	5.4
Hepatitis C (acute)	7	1.4	4	0.8	4	0.8	7	1.3	7	1.3
Population	512,119		517,600		521,330		526,953		533,670	

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

<sup>1</sup> Newly diagnosed HIV rates among adults and adolescents age 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 through contact with infectious body fluids.

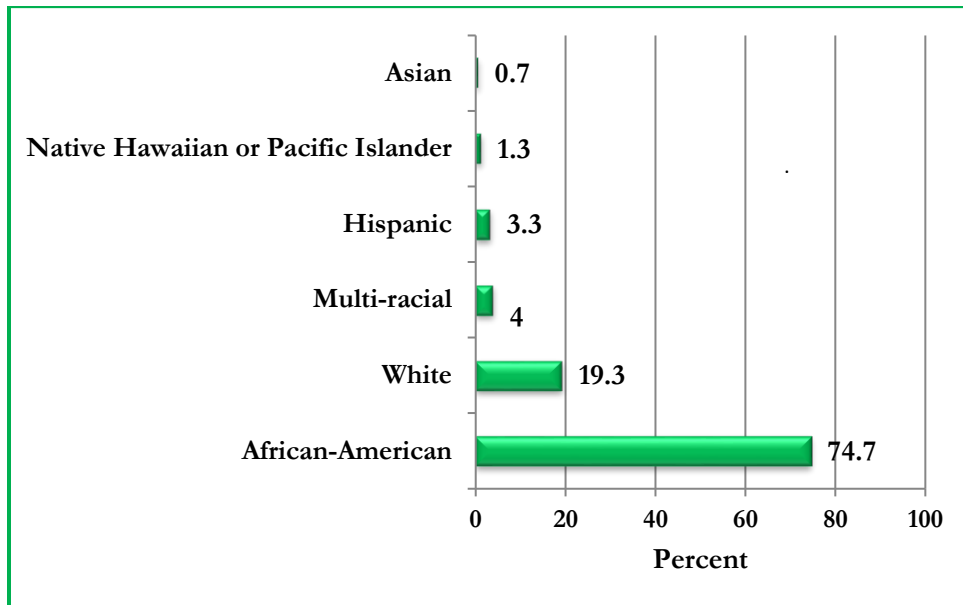
## Sexually Transmitted Infections: Syphilis

### Primary, Secondary and Early Latent Syphilis Rates per 100,000 By Selected Counties and NC, 2014-2018

Geographic Area	2014	2015	2016	2017	2018
Cumberland	23.0	35.8	27.6	24.0	35.2
Durham	24.8	44.5	36.3	38.8	55.6
Forsyth	13.7	22.0	19.9	20.7	26.4
Guilford	17.6	38.4	33.8	33.8	28.3
Mecklenburg	26.6	39.2	37.6	40.6	38.9
Wake	17.7	24.2	22.1	22.4	23.1
North Carolina	11.2	18.6	16.2	17.9	18.4

Source: North Carolina HIV/STD Quarterly Surveillance Report, Annual Surveillance Report; NCDHHS Communicable Disease Branch.

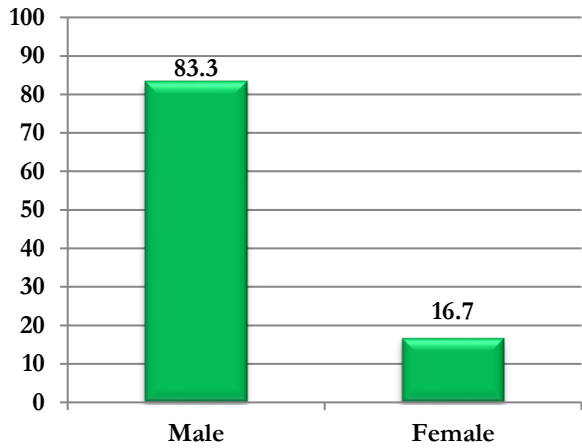
### Characteristics of Guilford County Syphilis Cases, 2018 Percentage of Cases by Race and Ethnicity Number of Cases = 150



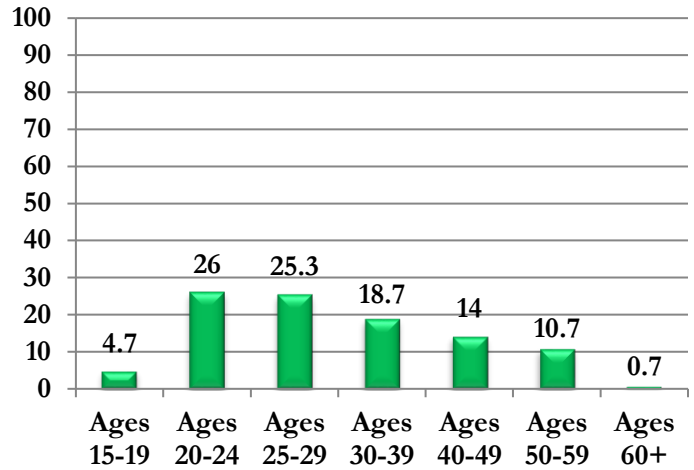
Source: NC Electronic Disease Surveillance System (NC EDSS).

Notes: Hispanics can be of any race; percentages do not add to 100%.

### Percent of Syphilis Cases, by Sex, Guilford County, 2018



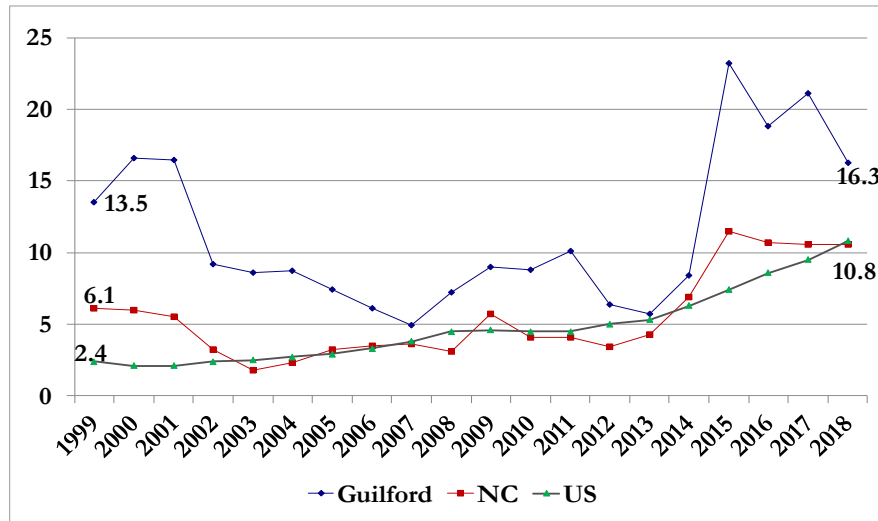
### Percent of Syphilis Cases by Age Group, Guilford County, 2018



Source: NC Electronic Disease Surveillance System (NCEDSS).

## Trends in Primary and Secondary Syphilis Rates Guilford County, NC and US 1999-2018

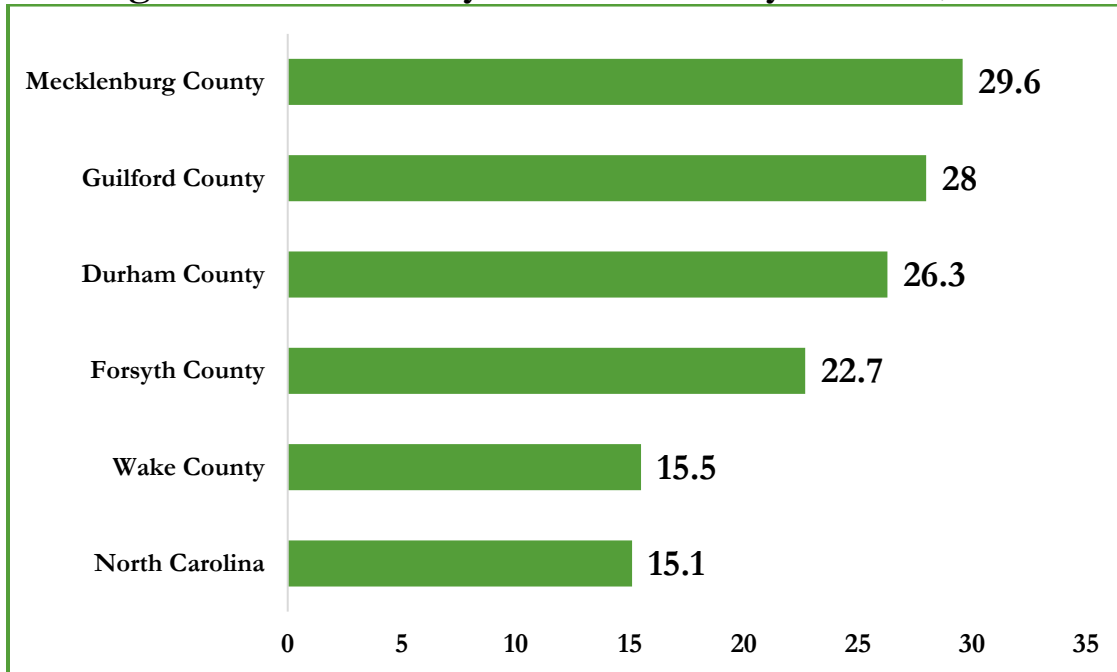
Rate per 100,000



Source: NC DHHS Communicable Disease Control Branch; NC Electronic Disease Surveillance System (NCEDSS).

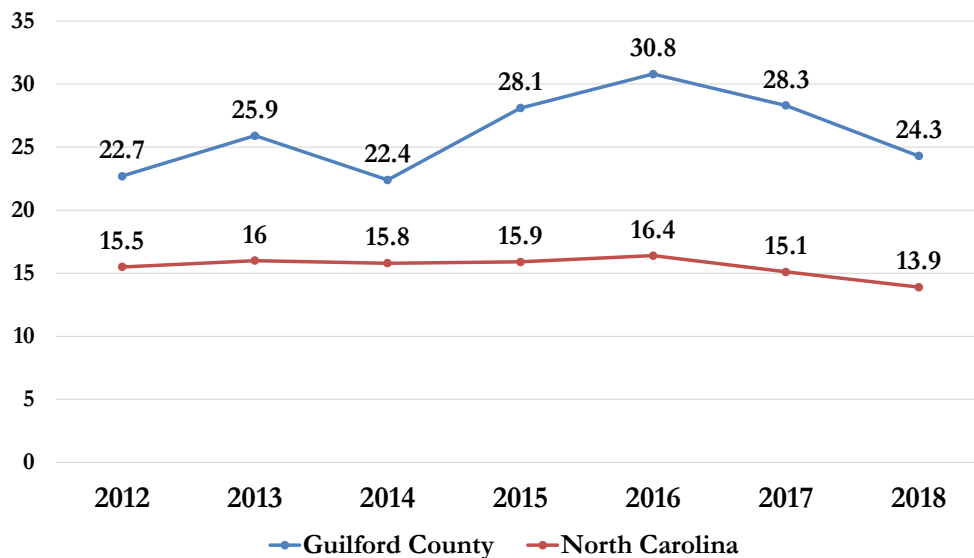
## Sexually Transmitted Infections: HIV and AIDS

### Newly Diagnosed HIV Rates among Adults and Adolescents Ages 13 and Older by Selected County and NC, 2018



Source: 2018 North Carolina HIV Surveillance Report; NC DHHS, Division of Public Health.

### Trends in Rates of Newly Diagnosed HIV among Adults and Adolescents Ages 13 and Older, Guilford County and NC, 2012-2018



2018 NC HIV Surveillance Report, HIV/STD/Hepatitis Surveillance Unit, Division of Public Health, NCDHHS.

## Sexually Transmitted Infections: Chlamydia

### Characteristics of Guilford County Chlamydia Cases and Rates by Race and Hispanic Status, 2016-2018

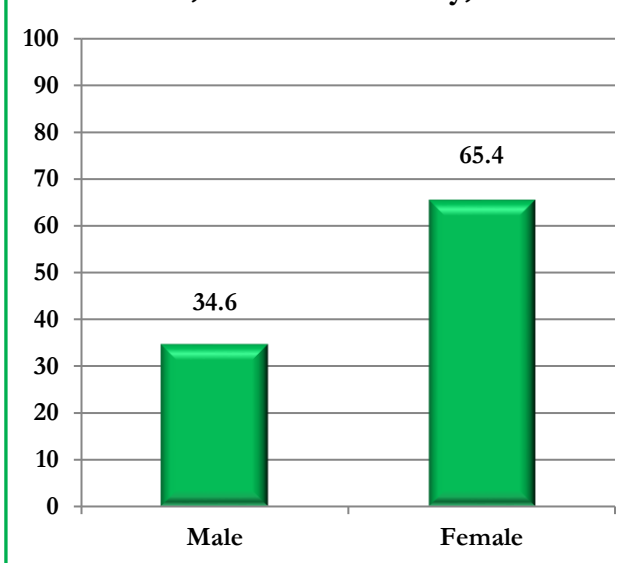
Race or Ethnicity Classification	2016		2017		2018	
	Number of Cases	Percent of Cases	Number of Cases	Percent of Cases	Number of Cases	Percent of Cases
American Indian	8	0.2%	3	0.01%	12	0.2%
Asian	56	1.4%	48	1.0%	65	1.3%
African-American	2,534	61.8%	2,952	62.4%	3,249	62.9.0%
Hawaiian/Pacific	4	0.1%	3	0.1%	8	0.2%
White	467	11.4%	579	12.2%	696	13.5%
Other	105	2.6%	129	2.7%	155	3.0%
Unknown	914	22.3%	929	19.6%	946	18.3%
Multi-Racial	10	0.24%	11	0.2%	24	0.5%
Missing	4	0.10%	77	1.6%	7	0.1
Race Total	4,102	100%	4,731	100%	5,162	100%
Hispanic*	153	3.7%	181	3.8%	237	4.6%

\*Hispanics can be of any race.

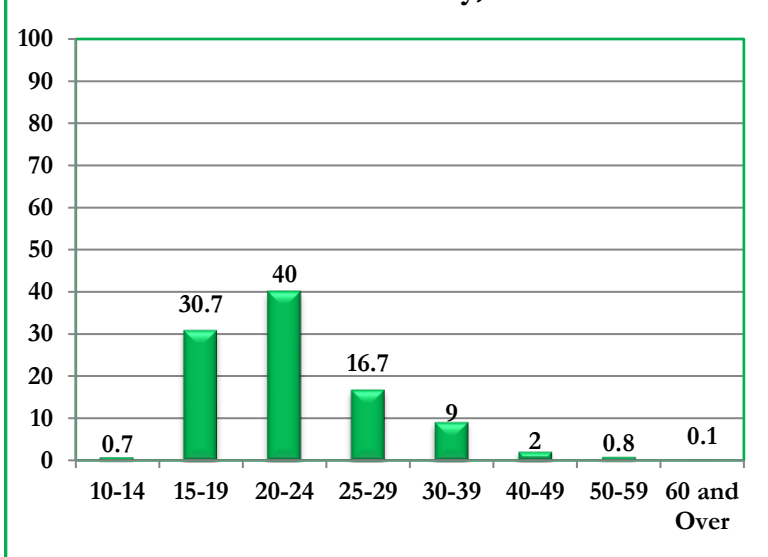
Source: NC Electronic Disease Surveillance System (NCEDSS).

- 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.

**Percent of Chlamydia Cases by Sex, Guilford County, 2018**



**Percent of Chlamydia by Age Group, Guilford County, 2018**



Source: NC Electronic Disease Surveillance System (NCEDSS).

## Sexually Transmitted Infections: Gonorrhea

### Characteristics of Guilford County Gonorrhea Cases and Percentages by Race and Hispanic Status, 2016-2018

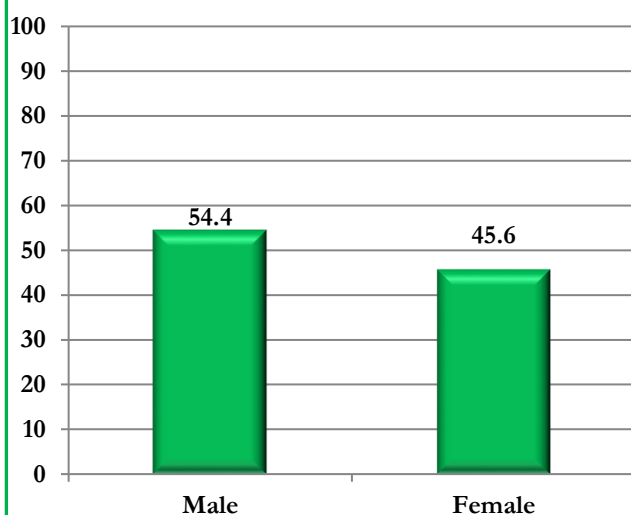
Race or Ethnicity	2016		2017		2018	
	Number of Cases	Percent of Cases	Number of Cases	Percent of Cases	Number of Cases	Percent of Cases
American Indian	4	0.2%	1	0.1%	6	0.3%
Asian	4	0.2%	12	0.7%	9	0.5%
African-American	1,207	73.5%	1,258	73.4%	1,475	75.1%
White	156	9.5%	2	0.1%	170	8.7%
Other	16	1.0%	164	9.6%	24	1.2%
Unknown	243	14.8%	222	13.0%	271	13.8%
Multi-Racial	6	0.4%	4	0.2%	7	0.4%
Race Total	1,642	100%	1,713	100%	1,965	100%
Hispanic*	31	1.9%	44	2.6%	33	1.7%

\*Hispanics can be of any race.

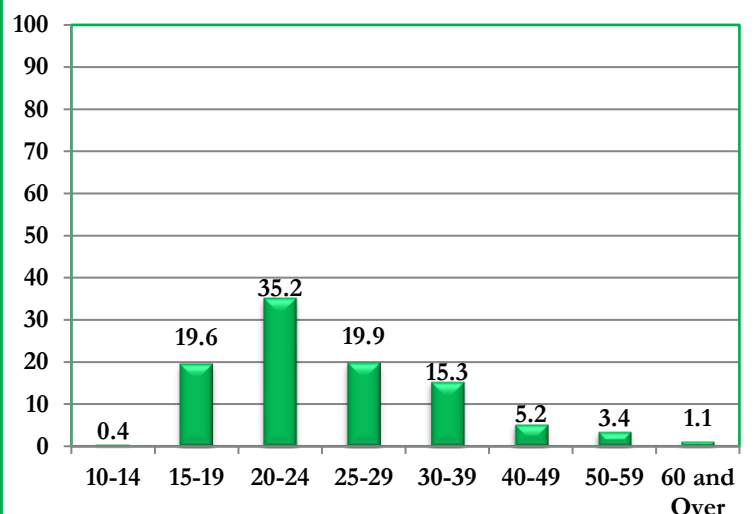
Source: NC Electronic Disease Surveillance System (NCEDSS).

- 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.

**Percent of Gonorrhea Cases by Sex, Guilford County, 2018**



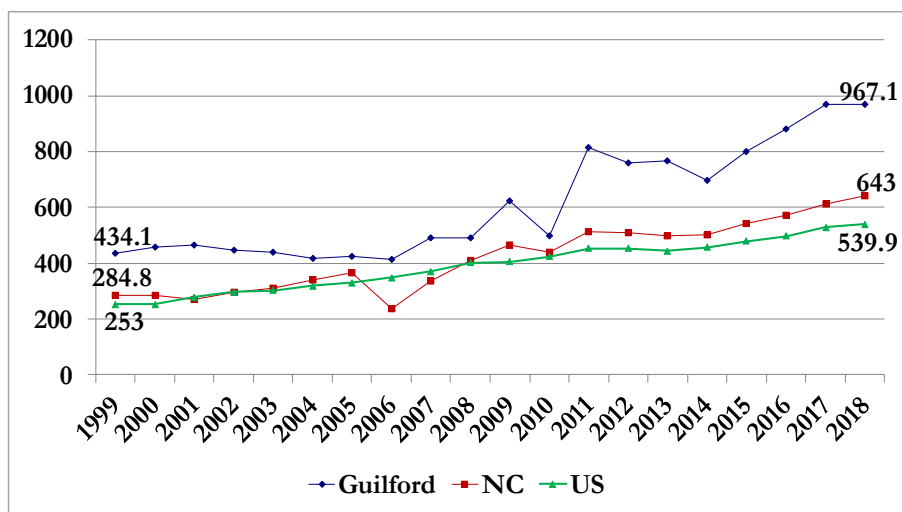
**Percent of Gonorrhea Cases by Age Group, Guilford County, 2018**



Source: NC Electronic Disease Surveillance System (NCEDSS).

## Trends in Chlamydia Incidence Rates Guilford County, NC and US 1999-2018

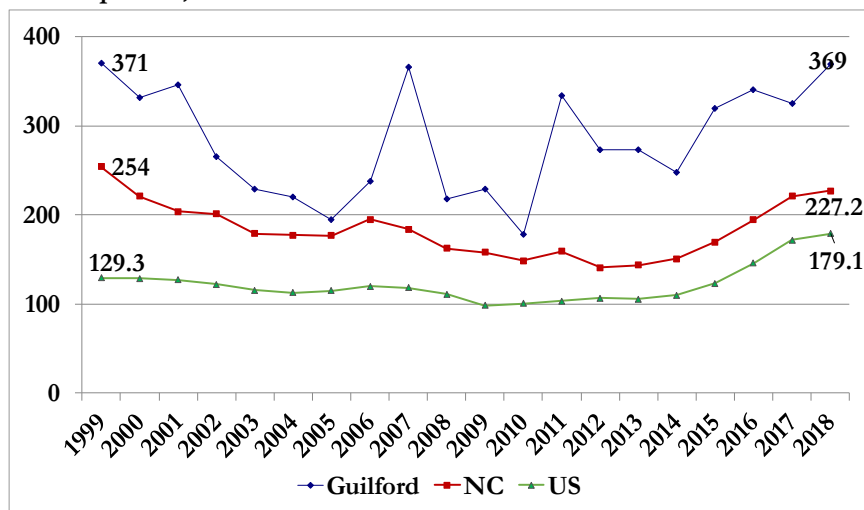
Rate per 100,000



Source: NC DHHS - Communicable Disease Control Branch; NC Electronic Disease Surveillance System (NCEDSS).

## Trends in Gonorrhea Incidence Rates Guilford County, NC and US 1999-2018

Rate per 100,000



Sources: North Carolina Electronic Disease Surveillance System (NCEDSS); NC DHHS, Communicable Disease Control Branch; CDC.

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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>