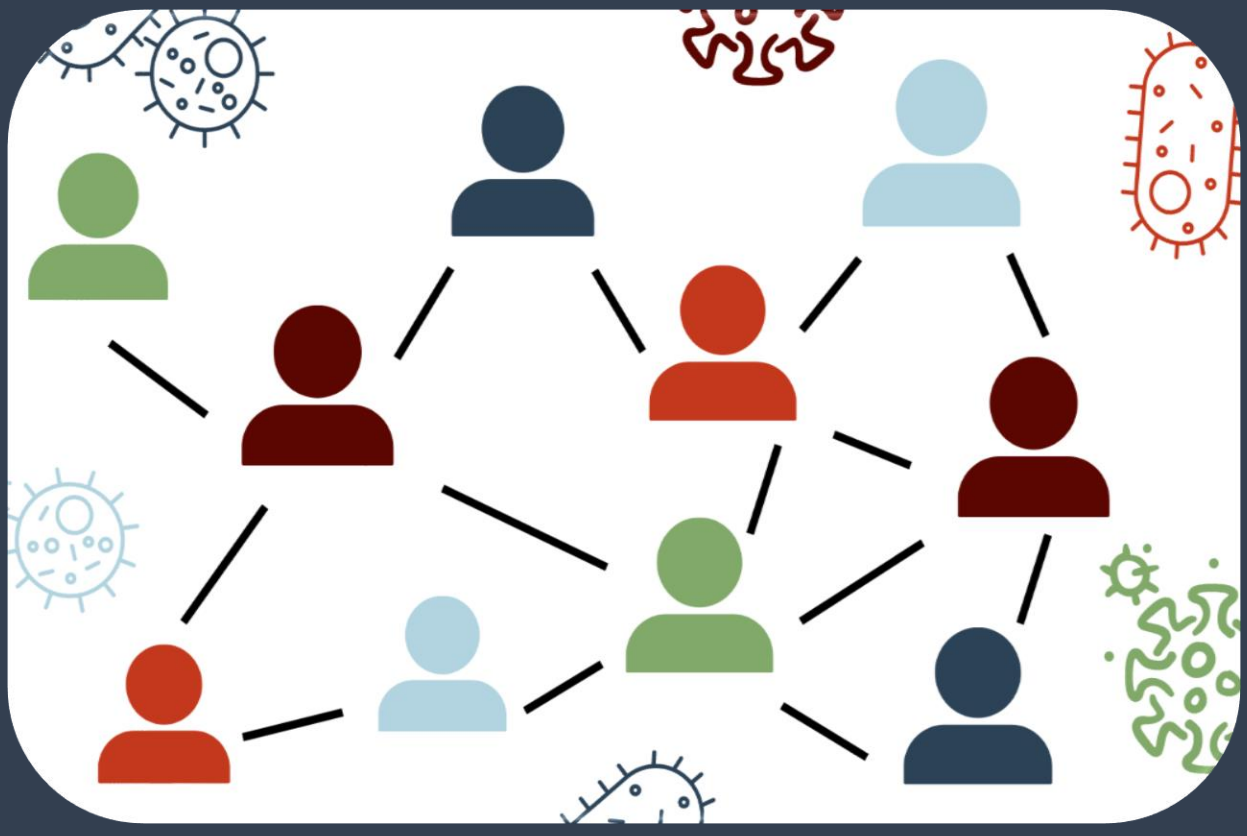
# 2016-2020

# Spotlight Disease Report for Health Department Jurisdictions in Stark County, Ohio

## Chlamydia & Gonorrhea



# Spotlight Disease Report for Stark County, Ohio

## Chlamydia & Gonorrhea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**Data provided by**

Ohio Disease Reporting System (ODRS)

Canton City Public Health Laboratory Data

National Center for HIV, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) AtlasPlus

United States Census Bureau


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# KEY FINDINGS

In 2020, the rate of chlamydial infection among Stark County residents was **7 times higher** among Black/African American individuals compared to White individuals.

**7x**

**14x**

In 2020, the rate of gonorrhea among Stark County residents was almost **14 times higher** among Black/African American individuals compared to White individuals.

The same racial disparity was observed regardless of health department jurisdiction. Targeted prevention efforts must be done to combat this issue.

**15.4%**

1,365 out of 8,879 (15.4%) total **chlamydial infections** in Stark County from 2016 to 2020 were due to **reinfections**

From 2016 to 2020, a majority of chlamydia and gonorrhea cases are among **young adults aged 15-24** among all health department jurisdictions in Stark County.

In Canton, most chlamydia and gonorrhea cases have been among the 15–19-year-old age group.

Massillon and Alliance residents had similar chlamydial infection rates among the younger age groups. However, the gonorrheal infection rates among these jurisdictions have gradually gotten higher among older age groups.

446 out of 3,206 (13.9%) total **gonorrheal infections** in Stark County from 2016 to 2020 were due to **reinfections**

**13.9%**

# EXECUTIVE SUMMARY

Sexually transmitted infections (STIs) remain a significant public health concern in the United States (US). According to the Centers for Disease Control and Prevention (CDC), 1.6 million chlamydia cases and 677,769 gonorrhea cases were reported in 2020.[1] Given the asymptomatic nature of these infections, the true disease burden is likely much higher. The Coronavirus disease 2019 (COVID-19) pandemic also affected STI surveillance in the US. Although the full impact of the pandemic of STIs is unclear, a combination of limited resources, social distancing measures, and reduced screening to keep up with COVID-19 cases and surveillance likely resulted in underreported STI infections and increased transmission.[2]

Chlamydia was the most reported STI in Stark County with a rate of 481.4 cases per 100,000 people in 2019. This number is lower than the state and national rate but has been steadily increasing over the past 10 years. Most chlamydia cases in Stark County were among young people aged 20-24. In 2020, the rate of chlamydia among women (644.2) was more than double compared to men (252.9) in Stark County. Black/African American individuals were disproportionately affected by chlamydia over the past five years, with a rate 7 times higher (1719.3) than White individuals (217.9) per 100,000 people in Stark County in 2020.

The rates of gonorrhea in Stark County have fluctuated over the past 10 years, with the highest rate in 2016 (178.3) compared to a rate of 145.2 cases per 100,000 people in 2019. The rates of gonorrhea from 2016 to 2020 have been slightly higher among females in Stark County, except for in 2017 when the gonorrhea rate among men (146.5) was higher than women (140.3). Gonorrhea rates have been the highest among 20–24-year-olds, but closely followed by gonorrhea rates among the 25–29-year-olds. Like chlamydia, Black/African American individuals continue to account for a much larger proportion of gonorrhea infections compared to White individuals in Stark County over the past five years.

Research has shown that risk assessment and prevention strategies lower the risk of transmitting or acquiring an STI. Identifying common risk factors and trends in Stark County is key for reducing the STI burden and increasing awareness. Additionally, acknowledging how the social determinants of health (the conditions in which people are born, grow, work, live, and age) impact the presence of health disparities is an important step in working towards a healthy community. To achieve health equity in a community, all public health work must be geared towards understanding what each individual or group needs to live their healthiest lives.

The purpose of this report is to provide an overview of chlamydial and gonorrheal infection trends over the past five years among four different health department jurisdictions in Stark County, Ohio. Through this report, we hope to share epidemiologic information, prevention strategies, and identify future improvements to STI-related programs to lower the STI disease burden in Stark County.

# CHLAMYDIA: BRIEF OVERVIEW

## DESCRIPTION & BACKGROUND

Chlamydia is a common STI caused by infection with *Chlamydia trachomatis*. The infection spreads through oral, vaginal, or anal sex with an infected person. This can cause cervicitis, urethritis, and proctitis.[3]

Chlamydia is the most common reportable bacterial sexually transmitted infection (STI) in the US.[3] Chlamydia is often difficult to detect due to a lack of noticeable symptoms. Therefore, many chlamydia cases go unreported and untreated.

## SIGNS & SYMPTOMS

For women, these infections can lead to chronic pelvic pain, ectopic pregnancy, tubal factor infertility, and pelvic inflammatory disease (PID). Chlamydial infection can also result in another type of sexually transmitted disease (STD) called lymphogranuloma venereum (LGV). LGV has been the common cause of proctitis outbreaks among men who have sex with men (MSM).[3] Untreated chlamydia can lead to PID, which occurs in 10-15% of women who do not seek treatment. Inflammation of the upper genital tract (subclinical PID) can also occur among women who do not get treated for chlamydial infection.[4,5] Long term damage to the fallopian tubes, uterus, and surrounding tissues due to acute or subclinical PID can occur. Pregnant individuals can give chlamydia to their child during childbirth, which can subsequently cause pre-term delivery, conjunctivitis, or pneumonia in infants.[3]

Unfortunately, the natural history of chlamydial infection remains unclear. Most infected individuals are asymptomatic; however, two modeling studies estimated that around 10% of men and 5-30% of women with confirmed chlamydial infection develop symptoms.[6,7]

## CHLAMYDIA SCREENING & TREATMENT

Screening is necessary to detect chlamydial infections given its asymptomatic nature. For more details on chlamydia screening and treatment options, visit the CDC's current STI Treatment Guidelines for chlamydia.[8]

# GONORRHEA: BRIEF OVERVIEW

## DESCRIPTION & BACKGROUND

Gonorrhea is a STI caused by a bacterial infection with *Neisseria gonorrhoeae*. *N. gonorrhoeae* infects the mucous membranes of the reproductive tract, mouth, throat, eyes, and rectum. Gonorrhea is spread via oral, vaginal, or anal sexual contact with an infected partner. It can also be spread perinatally from mother to child during childbirth.[9]

Gonorrhea is the second most reported bacterial STI in US. Many gonorrhea infections are asymptomatic. Therefore, data should be interpreted with caution as only a fraction of the true burden of disease is represented in the data.

## SIGNS & SYMPTOMS

Most men and women infected with gonorrhea are asymptomatic. For women, if symptoms do appear they are often mild and then mistaken for a bladder or vaginal infection. Initially, signs and symptoms that manifest in women include dysuria, vaginal discharge, or vaginal bleeding between periods. For men, signs and symptoms include urethral infection; yellow, white, or green urethral discharge that usually appears 1 to 14 days after initial infection. Rectal and pharyngeal infection for anyone is often asymptomatic. However, rectal infection may include discharge, itching, soreness, bleeding, or painful bowel movements. Pharyngeal infection may result in a sore throat.[9]

## ANTIBIOTIC RESISTANT GONORRHEA (ARG)

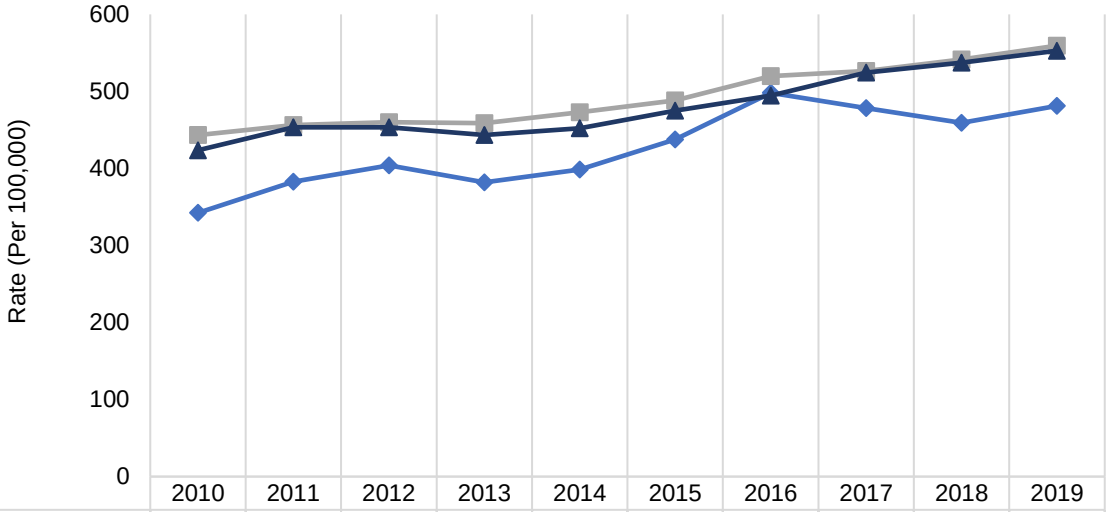
Antibiotic resistance has been defined as the ability of bacteria to resist the effects of drugs used to treat them; therefore, bacteria is no longer killed by a drug that has worked in the past.[10] Over time, gonorrhea has developed an antibiotic resistance to the drugs that are normally prescribed to treat the infection. Currently, only one class of antibiotics still works effectively to treat this infection, called cephalosporins.[10] There is an urgent need for the new development of and continued research on drugs that can be used to treat gonorrhea, as the bacteria is constantly evolving to resist current methods of treatment.

## GONORRHEA SCREENING AND TREATMENT

Like chlamydia, screening is necessary to detect gonorrheal infections given its asymptomatic nature. For more details on gonorrhea screening and treatment options, visit the CDC's current STI Treatment Guidelines for gonorrhea.[11]

# STARK COUNTY (OVERALL) DATA

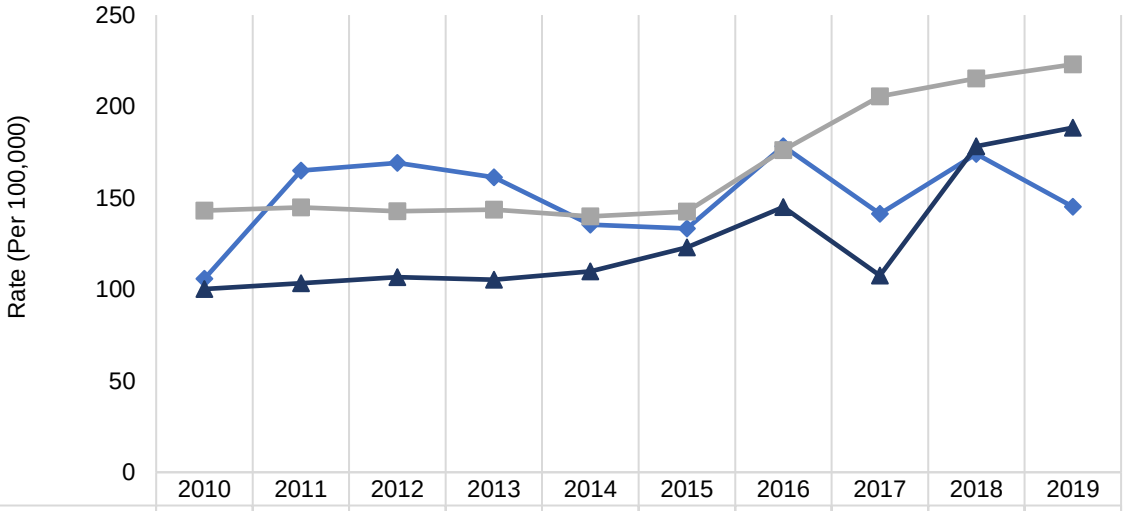
## Stark County, Ohio, and United States Chlamydia Rates by Year of Diagnosis, 2010-2019




| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|
| Stark County | 342.3 | 382.9 | 404.1 | 382 | 398.6 | 437.4 | 498.1 | 478.5 | 459.3 | 481.4 |
| Ohio | 443.3 | 456.1 | 460.1 | 458.9 | 472.8 | 488.3 | 520 | 526.5 | 541.4 | 559.4 |
| United States | 423.6 | 453.4 | 453.4 | 443.5 | 452.2 | 475 | 494.7 | 524.6 | 537.5 | 552.8 |

Year

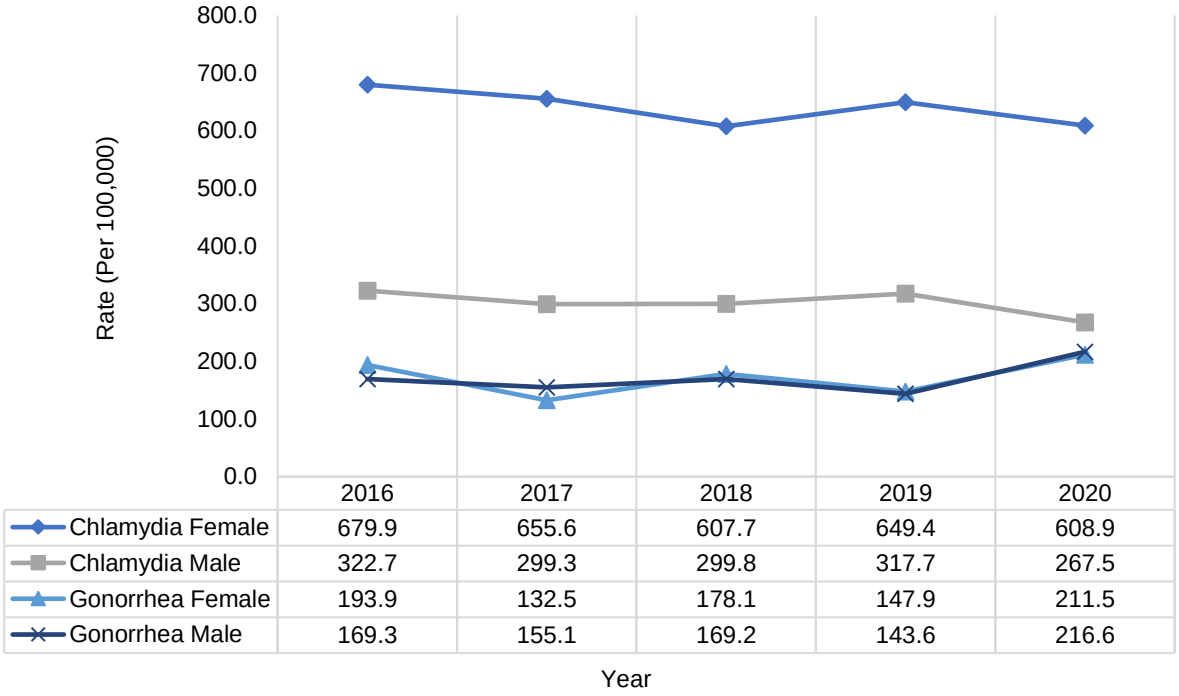
## Stark County, Ohio, and United States Gonorrhea Rates by Year of Diagnosis, 2010-2019



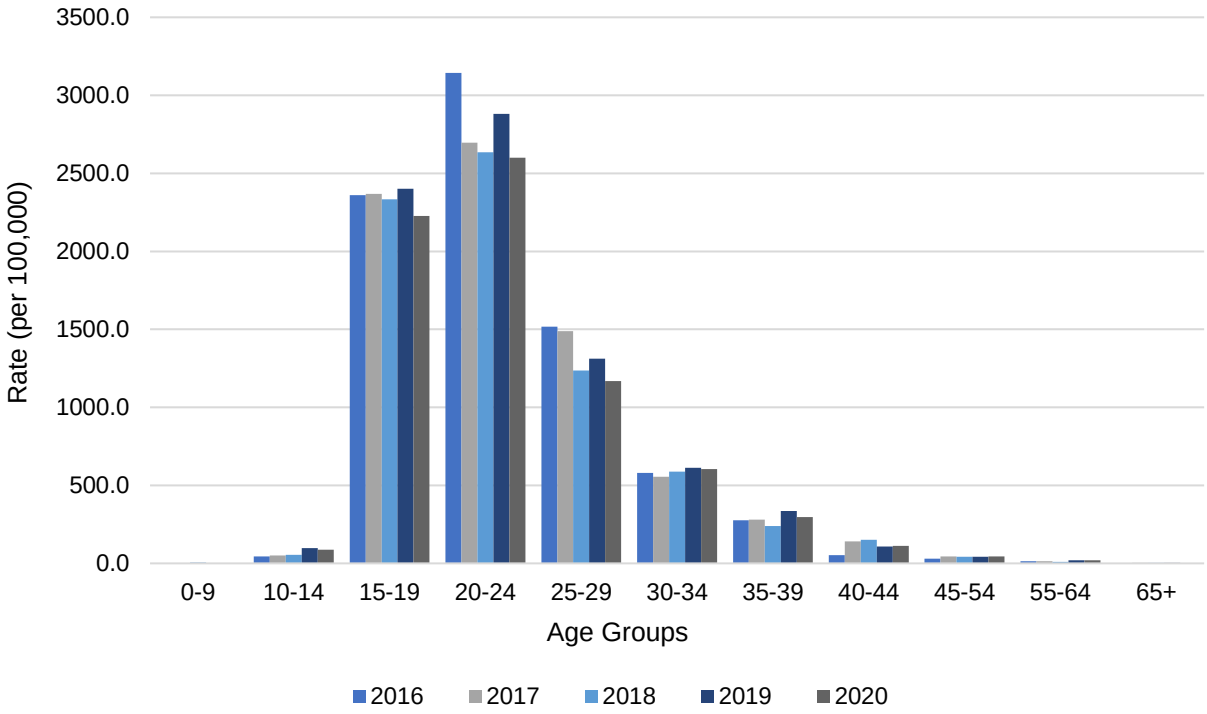

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|
| Stark County | 105.8 | 165 | 169.1 | 161.3 | 135.3 | 133.2 | 178.3 | 141.4 | 174 | 145.2 |
| Ohio | 143 | 144.9 | 142.8 | 143.6 | 139.9 | 142.6 | 176.1 | 205.6 | 215.4 | 223 |
| United States | 100.2 | 103.3 | 106.7 | 105.3 | 109.8 | 123 | 145 | 107.6 | 178.3 | 188.4 |

Year

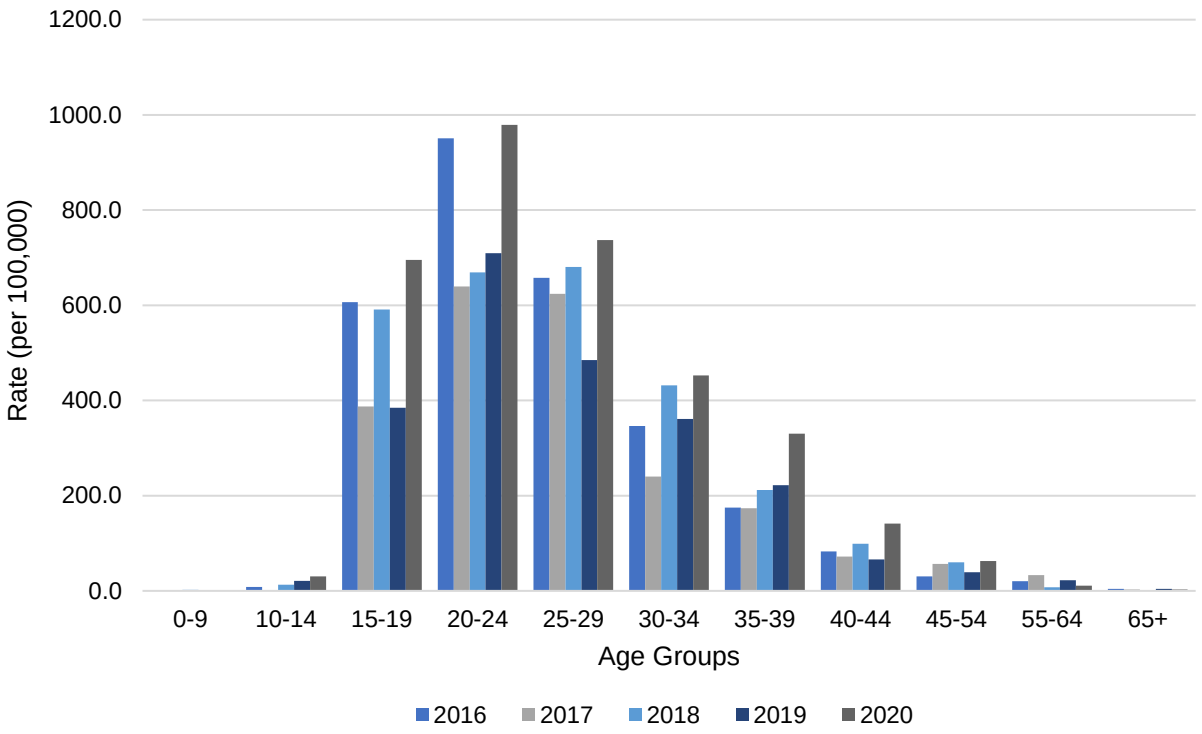
## Stark County (overall) Chlamydia and Gonorrhea Rates by Sex and Year of Diagnosis 2016-2020




## Stark County (overall) Chlamydia Rates by Age Group and Year of Diagnosis 2016-2020



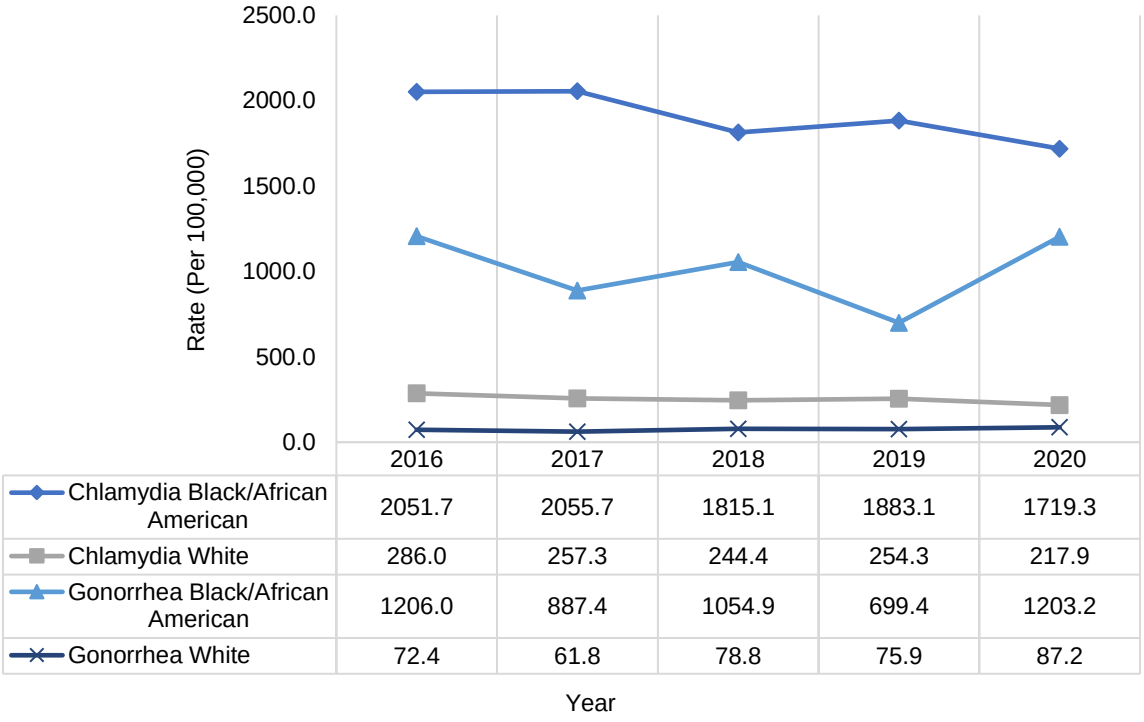
## Stark County (overall) Gonorrhea Rates by Age Group and Year of Diagnosis 2016-2020




## Stark County (overall) Chlamydia and Gonorrhea Case Counts by Race and Year of Diagnosis, 2016-2020

| | Chlamydia | | | | | | Gonorrhea | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Race** | 2016 | 2017 | 2018 | 2019 | 2020 | % Change | 2016 | 2017 | 2018 | 2019 | 2020 | % Change |
| American Indian/Alaskan Native | 3 | 0 | 3 | 5 | 5 | 66.7 | 2 | 1 | 1 | 2 | 4 | 100.0 |
| Asian/Pacific Islander | 3 | 2 | 6 | 6 | 4 | 33.3 | 2 | 2 | 6 | 2 | 1 | -50.0 |
| Black/African American | 558 | 549 | 499 | 525 | 473 | -15.2 | 328 | 237 | 290 | 195 | 331 | 0.9 |
| White | 948 | 850 | 803 | 831 | 705 | -26.3 | 240 | 204 | 259 | 248 | 282 | 17.5 |
| Other* | 174 | 155 | 181 | 215 | 189 | 8.6 | 63 | 47 | 61 | 55 | 92 | 46.0 |
| Unspecified | 212 | 250 | 219 | 236 | 270 | 27.4 | 47 | 46 | 32 | 41 | 85 | 80.9 |

## Stark County (overall) Chlamydia and Gonorrhea Rates by Race and Year of Diagnosis, 2016-2020




| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Chlamydia Black/African American | 2051.7 | 2055.7 | 1815.1 | 1883.1 | 1719.3 |
| Chlamydia White | 286.0 | 257.3 | 244.4 | 254.3 | 217.9 |
| Gonorrhea Black/African American | 1206.0 | 887.4 | 1054.9 | 699.4 | 1203.2 |
| Gonorrhea White | 72.4 | 61.8 | 78.8 | 75.9 | 87.2 |

## Stark County (total) Chlamydia and Gonorrhea Infection Rates* by Ethnicity and Year of Diagnosis, 2016-2020

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| **Chlamydia** | | | | | |
| *Hispanic* | 518.8 | 513.7 | 640.6 | 556.1 | 453.7 |
| *Non-Hispanic* | 355.3 | 342.2 | 355.5 | 379.8 | 314.9 |
| **Gonorrhea** | | | | | |
| *Hispanic* | 129.7 | 138.9 | 106.8 | 168.1 | 214.3 |
| *Non-Hispanic* | 135.9 | 108.7 | 168.1 | 122.3 | 163.9 |

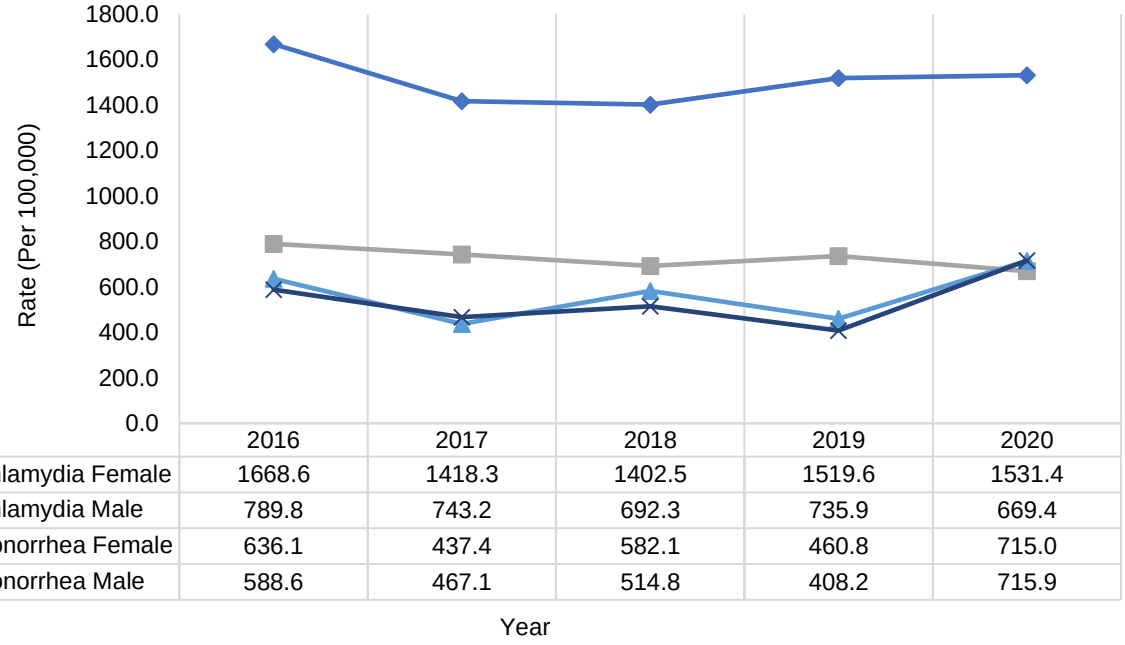
**Incidence per 100,000 population*

## Stark County (total) Chlamydia and Gonorrhea Infection Case Counts by Ethnicity and Year of Diagnosis, 2016-2020

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| **Chlamydia** | | | | | |
| *Hispanic* | 36 | 37 | 48 | 43 | 36 |
| *Non-Hispanic* | 1307 | 1256 | 1301 | 1385 | 1145 |
| **Gonorrhea** | | | | | |
| *Hispanic* | 9 | 10 | 8 | 13 | 17 |
| *Non-Hispanic* | 500 | 399 | 559 | 446 | 596 |

# CANTON CITY DATA

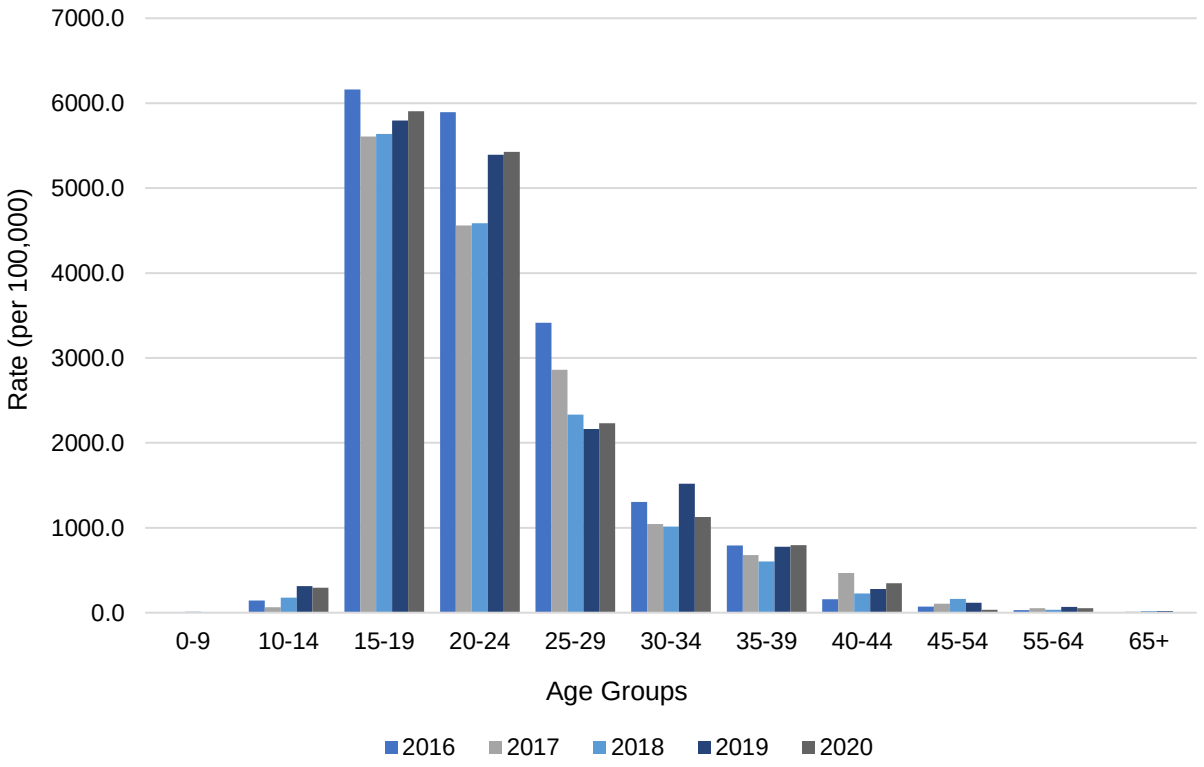
## Canton City Chlamydia and Gonorrhea Rates by Sex and Year of Diagnosis, 2016-2020



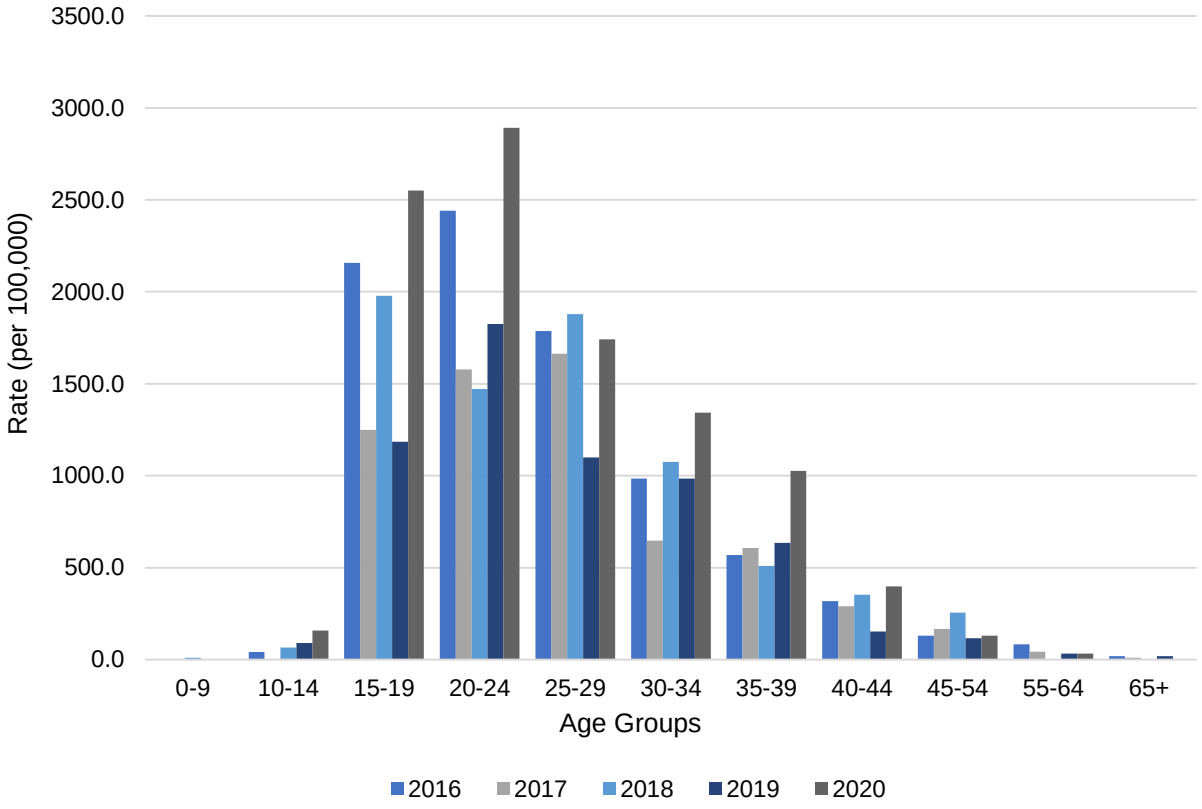

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Chlamydia Female | 1668.6 | 1418.3 | 1402.5 | 1519.6 | 1531.4 |
| Chlamydia Male | 789.8 | 743.2 | 692.3 | 735.9 | 669.4 |
| Gonorrhea Female | 636.1 | 437.4 | 582.1 | 460.8 | 715.0 |
| Gonorrhea Male | 588.6 | 467.1 | 514.8 | 408.2 | 715.9 |

Year

## Canton City Chlamydia Rates by Age Group and Year of Diagnosis, 2016-2020



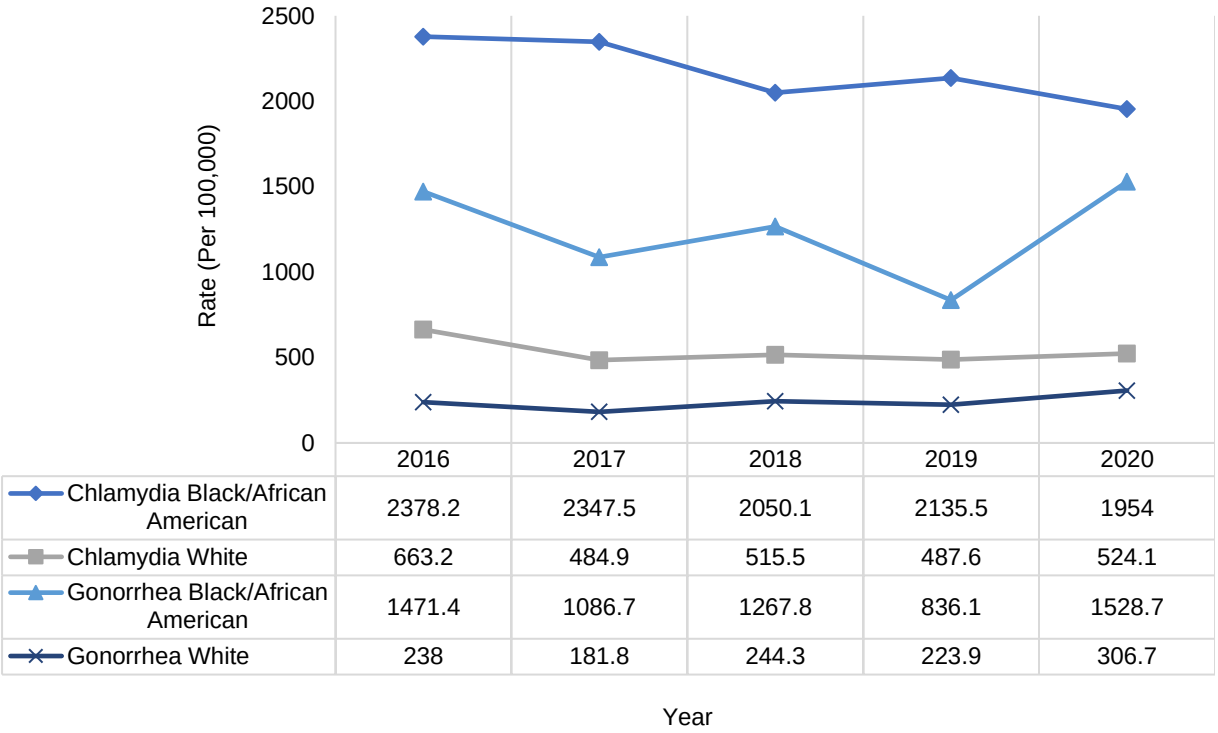
## Canton City Gonorrhea Rates by Age Group and Year of Diagnosis, 2016-2020




## Canton City Chlamydia and Gonorrhea Case Counts by Race and Year of Diagnosis, 2016-2020

| | Chlamydia | | | | | | Gonorrhea | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Race** | 2016 | 2017 | 2018 | 2019 | 2020 | % Change | 2016 | 2017 | 2018 | 2019 | 2020 | % Change |
| American Indian/Alaskan Native | 1 | 0 | 1 | 1 | 4 | 300.0 | 1 | 0 | 0 | 1 | 2 | 100.0 |
| Asian/Pacific Islander | 1 | 2 | 4 | 2 | 4 | 300.0 | 0 | 2 | 3 | 1 | 1 | 100.0 |
| Black/African American | 417 | 391 | 359 | 378 | 340 | -18.5 | 258 | 181 | 222 | 148 | 266 | 3.1 |
| White | 326 | 240 | 249 | 233 | 241 | -26.0 | 117 | 90 | 118 | 107 | 141 | 20.5 |
| Other* | 116 | 93 | 98 | 128 | 112 | -3.4 | 48 | 35 | 41 | 35 | 58 | 20.8 |
| Unspecified | 46 | 62 | 45 | 68 | 88 | 91.3 | 19 | 16 | 8 | 18 | 39 | 105.3 |

## Canton City Chlamydia and Gonorrhea Infection Rates by Race and Year of Diagnosis, 2016-2020




| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Chlamydia Black/African American | 2378.2 | 2347.5 | 2050.1 | 2135.5 | 1954 |
| Chlamydia White | 663.2 | 484.9 | 515.5 | 487.6 | 524.1 |
| Gonorrhea Black/African American | 1471.4 | 1086.7 | 1267.8 | 836.1 | 1528.7 |
| Gonorrhea White | 238 | 181.8 | 244.3 | 223.9 | 306.7 |

## Canton City Chlamydia and Gonorrhea Infection Rates* by Ethnicity and Year of Diagnosis, 2016-2020

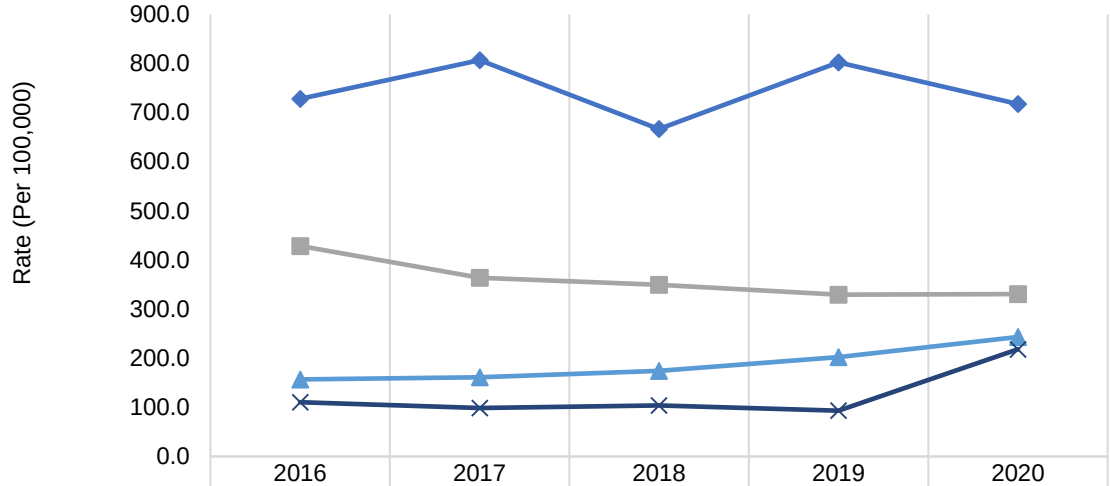
| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| **Chlamydia** | | | | | |
| *Hispanic* | 1034.5 | 741.0 | 816.9 | 851.1 | 556.4 |
| *Non-Hispanic* | 981.5 | 904.6 | 953.6 | 1000.7 | 873.3 |
| **Gonorrhea** | | | | | |
| *Hispanic* | 301.7 | 312.0 | 238.3 | 364.7 | 146.4 |
| *Non-Hispanic* | 490.8 | 367.1 | 530.9 | 398.8 | 588.6 |

**Incidence per 100,000 population*

## Canton City Chlamydia and Gonorrhea Infection Case Counts by Ethnicity and Year of Diagnosis, 2016-2020

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| **Chlamydia** | | | | | |
| *Hispanic* | 24 | 19 | 24 | 28 | 19 |
| *Non-Hispanic* | 682 | 626 | 652 | 680 | 589 |
| **Gonorrhea** | | | | | |
| *Hispanic* | 7 | 8 | 7 | 12 | 5 |
| *Non-Hispanic* | 341 | 254 | 363 | 271 | 397 |

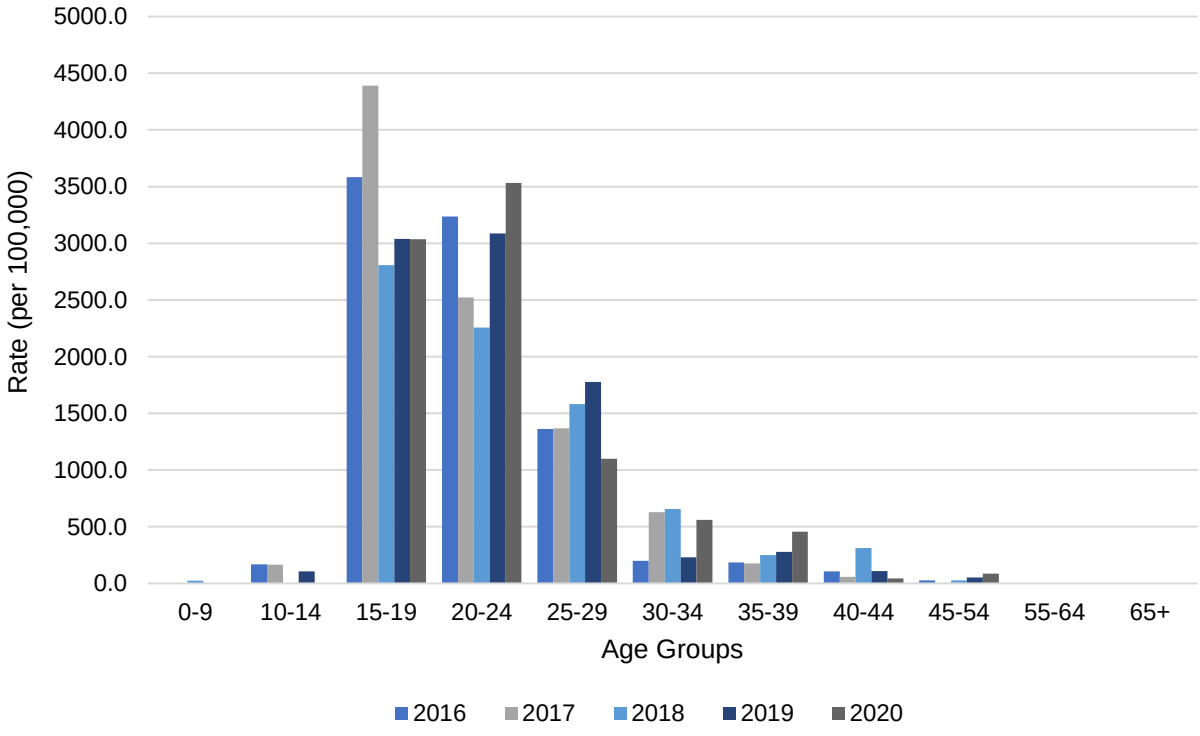
## Massillon City Chlamydia and Gonorrhea Rates by Sex and Year of Diagnosis 2016-2020



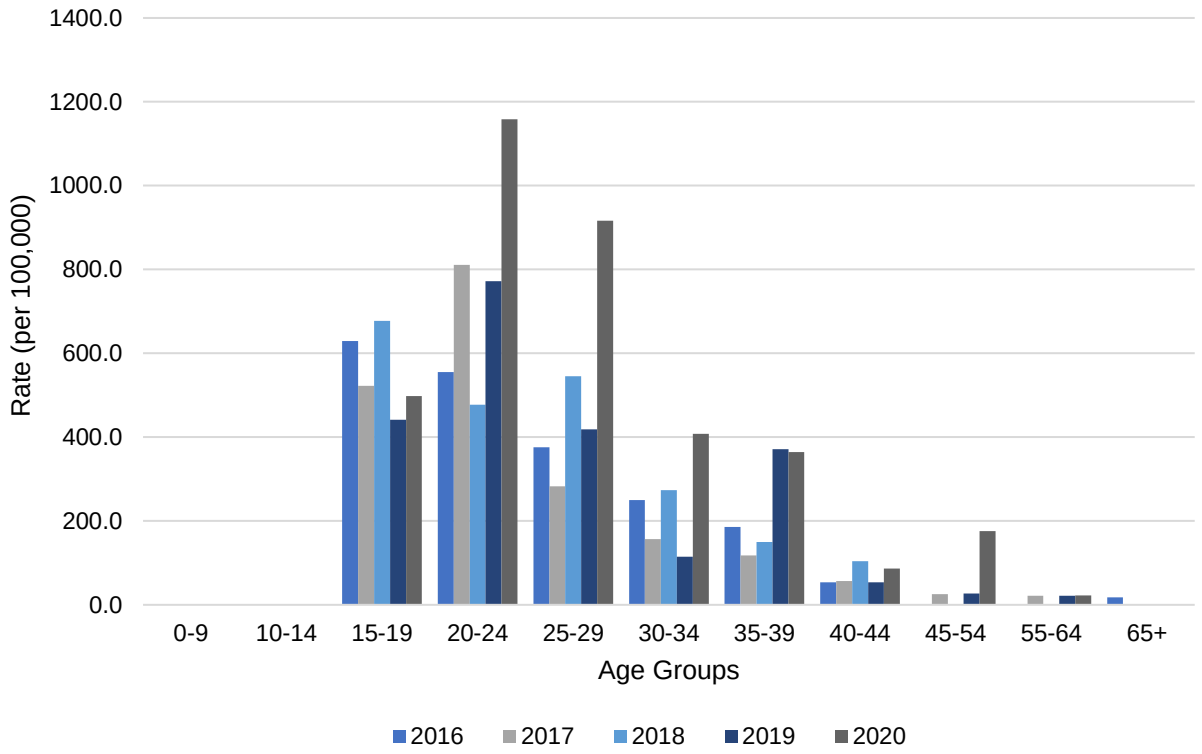

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Chlamydia Female | 728.0 | 806.8 | 666.6 | 802.5 | 717.5 |
| Chlamydia Male | 428.6 | 364.0 | 349.4 | 329.4 | 330.4 |
| Gonorrhea Female | 156.9 | 161.4 | 174.4 | 202.2 | 243.2 |
| Gonorrhea Male | 110.2 | 98.7 | 104.2 | 93.2 | 218.2 |

Year

## Massillon City Chlamydia Rates by Age Group and Year of Diagnosis 2016-2020



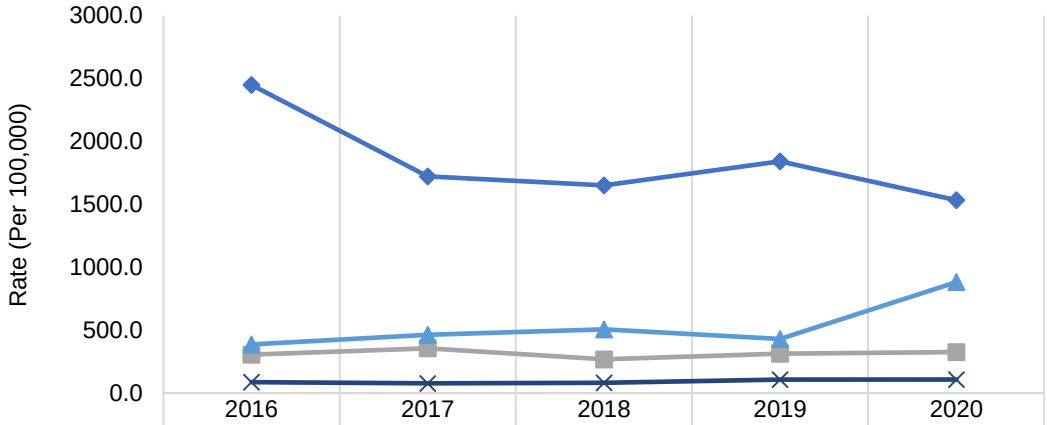
## Massillon City Gonorrhea Rates by Age Group and Year of Diagnosis 2016-2020




## Massillon City Chlamydia and Gonorrhea Case Counts by Race and Year of Diagnosis, 2016-2020

| | Chlamydia | | | | | | Gonorrhea | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Race** | 2016 | 2017 | 2018 | 2019 | 2020 | % Change | 2016 | 2017 | 2018 | 2019 | 2020 | % Change |
| American Indian/Alaskan Native | 0 | 0 | 0 | 0 | 0 | -- | 0 | 0 | 0 | 0 | 0 | -- |
| Asian/Pacific Islander | 1 | 0 | 1 | 0 | 0 | -100.0 | 0 | 0 | 0 | 0 | 0 | -- |
| Black/African American | 57 | 41 | 39 | 47 | 40 | -29.8 | 9 | 11 | 12 | 11 | 23 | 155.5 |
| White | 88 | 101 | 75 | 88 | 91 | 3.4 | 25 | 22 | 23 | 30 | 30 | 20.0 |
| Other* | 16 | 20 | 25 | 17 | 17 | 6.3 | 5 | 5 | 5 | 4 | 9 | 80.0 |
| Unspecified | 24 | 27 | 24 | 32 | 23 | -4.2 | 4 | 4 | 5 | 3 | 13 | 225.0 |

## Massillon City Chlamydia and Gonorrhea Infection Rates by Race and Year of Diagnosis, 2016-2020




| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Chlamydia Black/African American | 2449.5 | 1722.7 | 1650.4 | 1843.1 | 1533.7 |
| Chlamydia White | 305.1 | 355.7 | 268.7 | 313.1 | 326.4 |
| Gonorrhea Black/African American | 386.8 | 462.2 | 507.8 | 431.4 | 881.9 |
| Gonorrhea White | 86.7 | 77.5 | 82.4 | 106.7 | 107.6 |

## Massillon City Chlamydia and Gonorrhea Infection Rates* by Ethnicity and Year of Diagnosis, 2016-2020

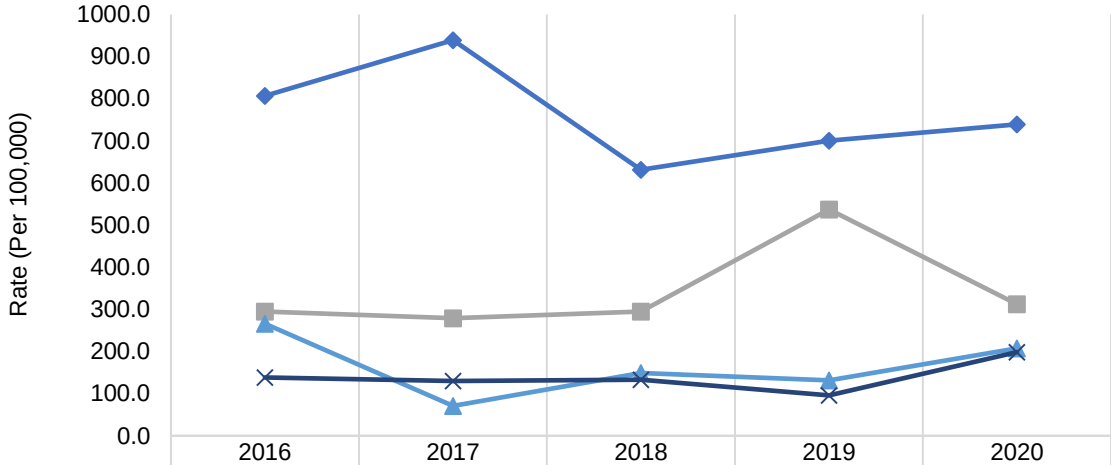
| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| **Chlamydia** | | | | | |
| *Hispanic* | 436.2 | 821.9 | 1018.9 | 1212.1 | 746.3 |
| *Non-Hispanic* | 417.8 | 405.2 | 369.3 | 448.0 | 409.7 |
| **Gonorrhea** | | | | | |
| *Hispanic* | -- | 137.0 | -- | -- | 1119.4 |
| *Non-Hispanic* | 76.6 | 101.3 | 113.6 | 125.3 | 170.7 |

**Incidence per 100,000 population*

## Massillon City Chlamydia and Gonorrhea Infection Case Counts by Ethnicity and Year of Diagnosis, 2016-2020

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| **Chlamydia** | | | | | |
| *Hispanic* | 4 | 6 | 7 | 6 | 2 |
| *Non-Hispanic* | 131 | 128 | 117 | 143 | 132 |
| **Gonorrhea** | | | | | |
| *Hispanic* | 0 | 1 | 0 | 0 | 3 |
| *Non-Hispanic* | 24 | 32 | 36 | 40 | 55 |

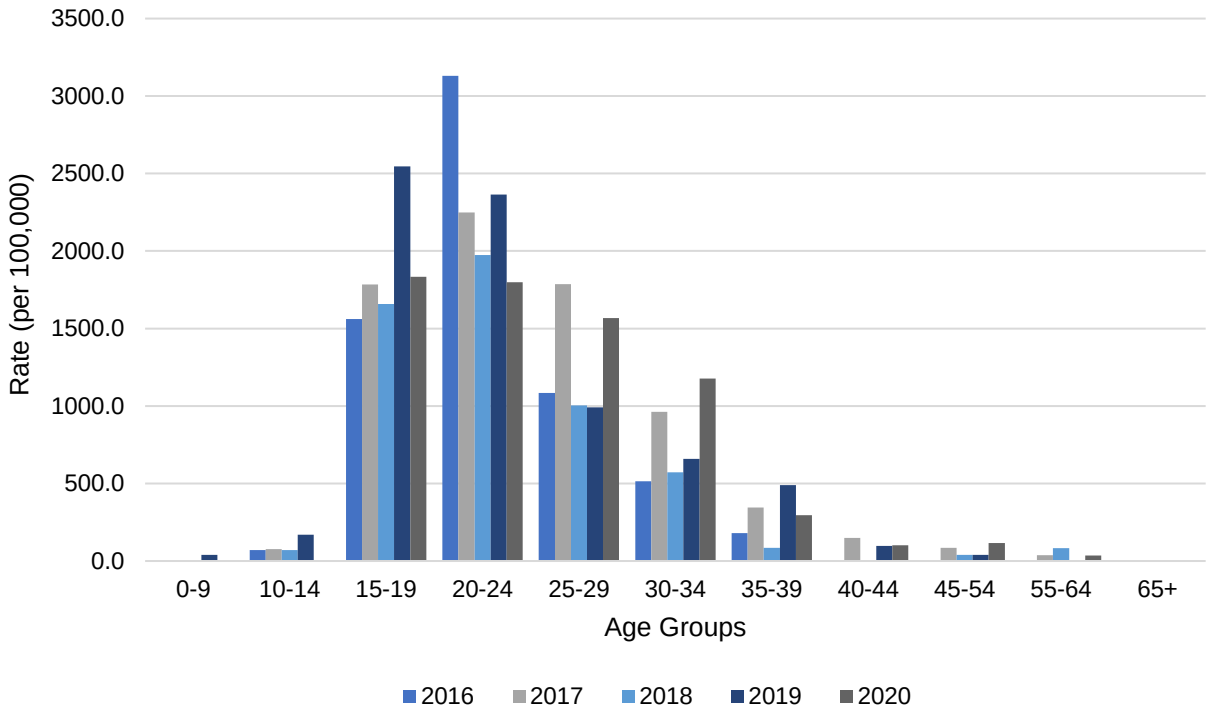
## Alliance City Chlamydia and Gonorrhea Rates by Sex and Year of Diagnosis 2016-2020



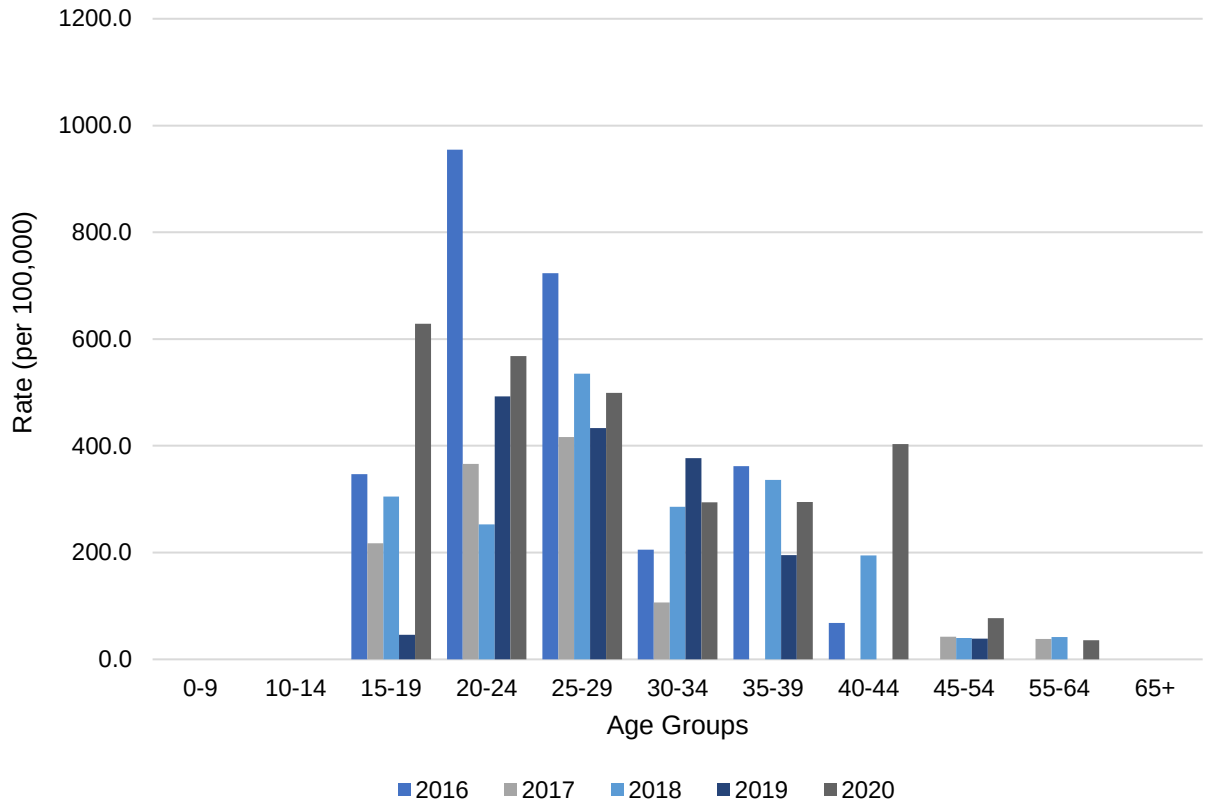

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Chlamydia Female | 806.8 | 939.2 | 631.5 | 700.6 | 738.9 |
| Chlamydia Male | 295.1 | 279.1 | 294.5 | 537.2 | 312.1 |
| Gonorrhea Female | 266.0 | 70.9 | 149.1 | 131.4 | 207.3 |
| Gonorrhea Male | 138.4 | 130.2 | 133.0 | 95.9 | 198.6 |

Year

## Alliance City Chlamydia Rates by Age Group and Year of Diagnosis 2016-2020



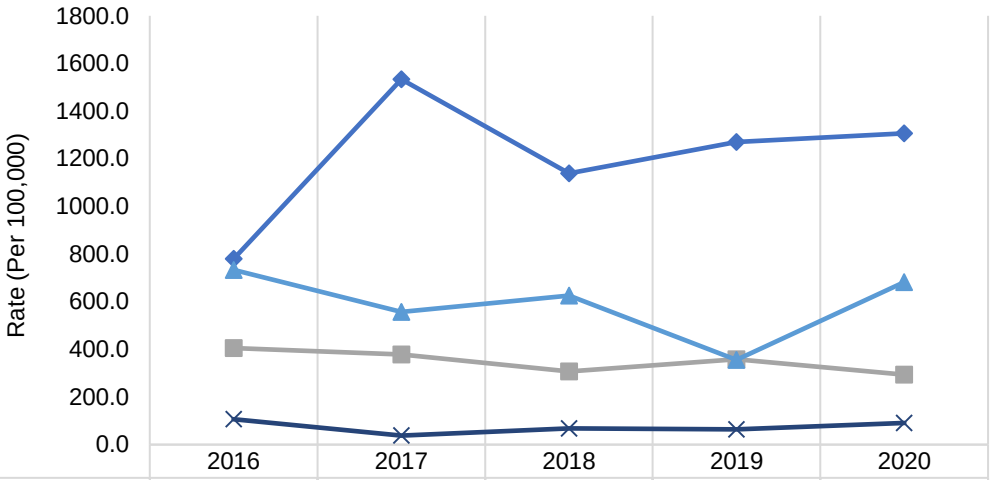
## Alliance City Gonorrhea Rates by Age Group and Year of Diagnosis 2016-2020




## Alliance City Chlamydia and Gonorrhea Case Counts by Race and Year of Diagnosis, 2016-2020

| | Chlamydia | | | | | | Gonorrhea | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Race** | 2016 | 2017 | 2018 | 2019 | 2020 | % Change | 2016 | 2017 | 2018 | 2019 | 2020 | % Change |
| American Indian/Alaskan Native | 0 | 0 | 1 | 2 | 0 | -- | 0 | 1 | 0 | 0 | 0 | -- |
| Asian/Pacific Islander | 0 | 0 | 0 | 0 | 0 | -- | 0 | 0 | 0 | 0 | 0 | -- |
| Black/African American | 17 | 33 | 20 | 25 | 23 | 35.3 | 16 | 12 | 11 | 7 | 12 | -25.0 |
| White | 76 | 70 | 58 | 67 | 55 | -27.6 | 20 | 7 | 13 | 12 | 17 | -15.0 |
| Other* | 14 | 9 | 10 | 19 | 13 | -7.1 | 3 | 1 | 3 | 4 | 6 | 100.0 |
| Unspecified | 16 | 24 | 14 | 23 | 24 | 50.0 | 6 | 1 | 4 | 2 | 9 | 50.0 |

## Alliance City Chlamydia and Gonorrhea Infection Rates by Race and Year of Diagnosis, 2016-2020




| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Chlamydia Black/African American | 779.5 | 1533.5 | 1138.3 | 1270.3 | 1306.1 |
| Chlamydia White | 405.3 | 379.0 | 306.7 | 358.7 | 293.7 |
| Gonorrhea Black/African American | 733.6 | 557.6 | 626.1 | 355.7 | 681.4 |
| Gonorrhea White | 106.6 | 37.9 | 68.7 | 64.3 | 90.8 |

## Alliance City Chlamydia and Gonorrhea Infection Rates* by Ethnicity and Year of Diagnosis, 2016-2020

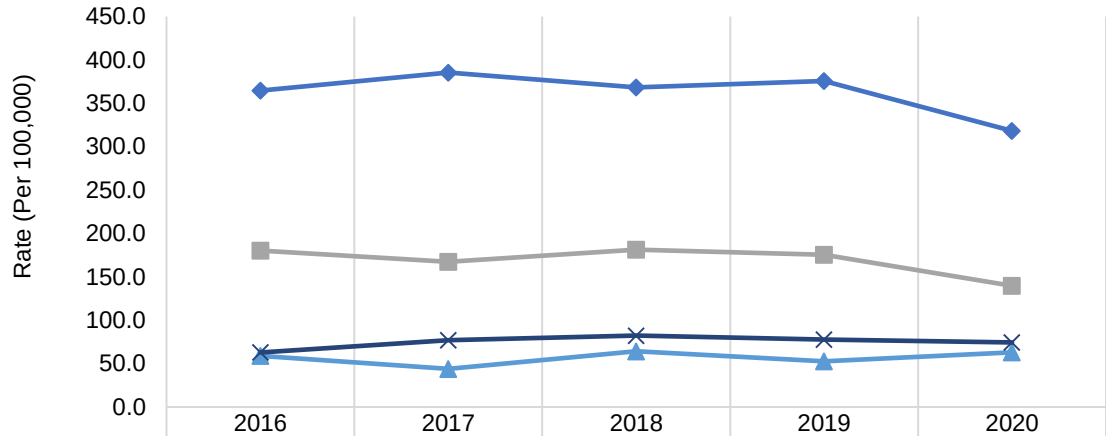
| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| **Chlamydia** | | | | | |
| *Hispanic* | 139.5 | 137.6 | 443.5 | -- | 369.0 |
| *Non-Hispanic* | 397.1 | 478.7 | 400.4 | 479.5 | 383.2 |
| **Gonorrhea** | | | | | |
| *Hispanic* | -- | -- | -- | -- | 738.0 |
| *Non-Hispanic* | 144.8 | 93.9 | 116.4 | 93.1 | 126.2 |

**Incidence per 100,000 population*

## Alliance City Chlamydia and Gonorrhea Infection Case Counts by Ethnicity and Year of Diagnosis, 2016-2020

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| **Chlamydia** | | | | | |
| *Hispanic* | 1 | 1 | 2 | 0 | 1 |
| *Non-Hispanic* | 85 | 102 | 86 | 103 | 82 |
| **Gonorrhea** | | | | | |
| *Hispanic* | 0 | 0 | 0 | 0 | 2 |
| *Non-Hispanic* | 31 | 20 | 25 | 20 | 27 |

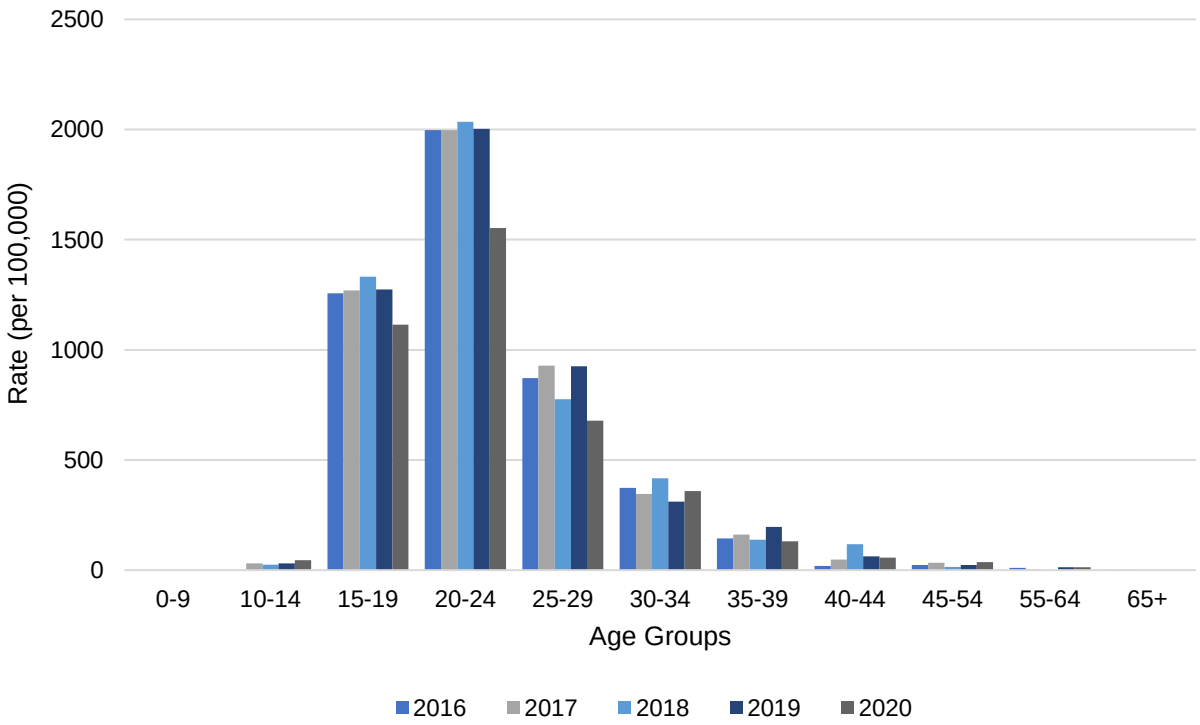
## Stark County (remaining) Chlamydia and Gonorrhea Rates by Sex and Year of Diagnosis 2016-2020



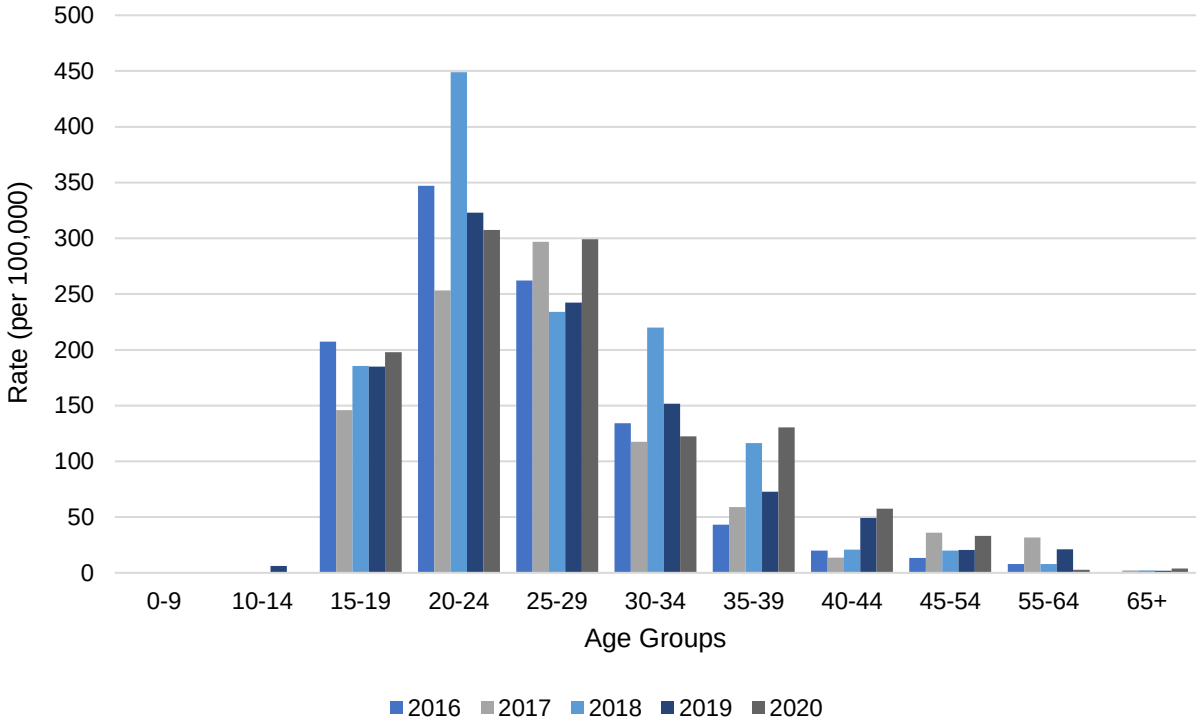

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Chlamydia Female | 364.6 | 385.5 | 368.2 | 375.8 | 318.3 |
| Chlamydia Male | 180.2 | 167.3 | 181.3 | 175.4 | 139.7 |
| Gonorrhea Female | 58.9 | 44.0 | 64.2 | 52.7 | 63.0 |
| Gonorrhea Male | 62.8 | 77.0 | 82.3 | 77.7 | 74.4 |

Year

## Stark County (remaining) Chlamydia Rates by Age Group and Year of Diagnosis 2016-2020



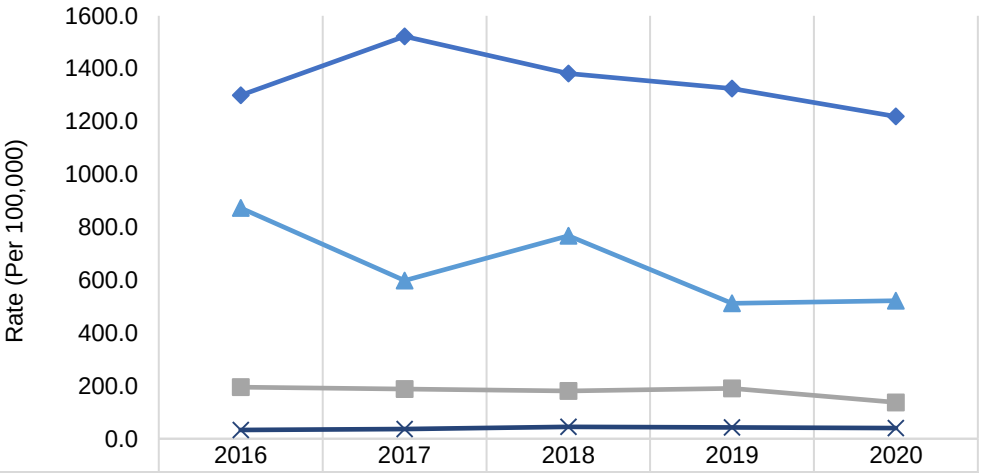
## Stark County (remaining) Gonorrhea Rates by Age Group and Year of Diagnosis 2016-2020




## Stark County (remaining) Chlamydia and Gonorrhea Case Counts by Race and Year of Diagnosis, 2016-2020

| | Chlamydia | | | | | | Gonorrhea | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Race** | 2016 | 2017 | 2018 | 2019 | 2020 | % Change | 2016 | 2017 | 2018 | 2019 | 2020 | % Change |
| American Indian/Alaskan Native | 2 | 0 | 1 | 2 | 1 | 50.0 | 1 | 0 | 1 | 1 | 2 | 100.0 |
| Asian/Pacific Islander | 1 | 0 | 1 | 4 | 0 | -100.0 | 2 | 0 | 3 | 1 | 0 | -100.0 |
| Black/African American | 67 | 84 | 81 | 75 | 70 | 4.5 | 45 | 33 | 45 | 29 | 30 | -33.3 |
| White | 458 | 439 | 421 | 443 | 318 | -30.6 | 78 | 85 | 105 | 99 | 94 | 20.5 |
| Other* | 28 | 33 | 48 | 51 | 47 | 67.9 | 7 | 6 | 12 | 12 | 19 | 171.4 |
| Unspecified | 126 | 137 | 136 | 113 | 135 | 7.1 | 18 | 25 | 15 | 18 | 24 | 33.3 |

## Stark County (remaining) Chlamydia and Gonorrhea Infection Rates by Race and Year of Diagnosis, 2016-2020




| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Chlamydia Black/African American | 1299.7 | 1522.3 | 1382.0 | 1324.9 | 1219.1 |
| Chlamydia White | 195.1 | 187.7 | 180.4 | 190.8 | 137.7 |
| Gonorrhea Black/African American | 872.9 | 598.0 | 767.8 | 512.3 | 522.5 |
| Gonorrhea White | 33.2 | 36.3 | 45.0 | 42.6 | 40.7 |

## Stark County (remaining) Chlamydia and Gonorrhea Infection Rates* by Ethnicity and Year of Diagnosis, 2016-2020

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| **Chlamydia** | | | | | |
| *Hispanic* | 234.5 | 345.8 | 439.0 | 251.1 | 351.8 |
| *Non-Hispanic* | 166.5 | 163.3 | 182.4 | 188.6 | 141.0 |
| **Gonorrhea** | | | | | |
| *Hispanic* | 67.0 | 31.4 | 29.3 | 27.9 | 175.9 |
| *Non-Hispanic* | 42.3 | 38.0 | 55.2 | 47.3 | 48.2 |

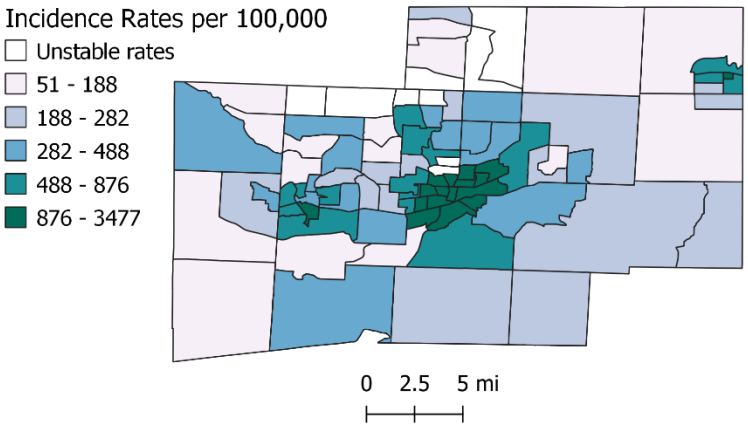
**Incidence per 100,000 population*

## Stark County (remaining) Chlamydia and Gonorrhea Infection Case Counts by Ethnicity and Year of Diagnosis, 2016-2020

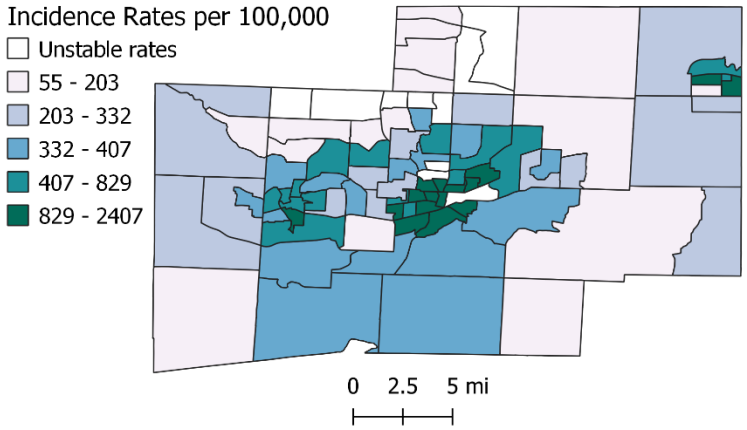
| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| **Chlamydia** | | | | | |
| *Hispanic* | 7 | 11 | 15 | 9 | 14 |
| *Non-Hispanic* | 409 | 400 | 446 | 459 | 342 |
| **Gonorrhea** | | | | | |
| *Hispanic* | 2 | 1 | 1 | 1 | 7 |
| *Non-Hispanic* | 104 | 93 | 135 | 115 | 117 |

## Number of Reported Chlamydia Cases in Stark County by Census Tract 2016-2020

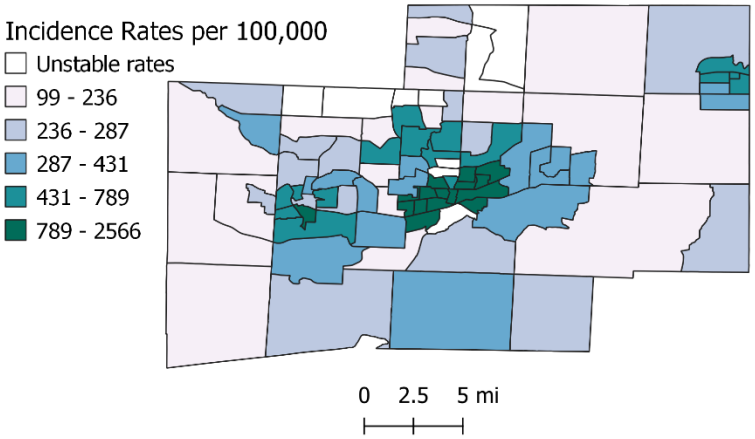
### 2016



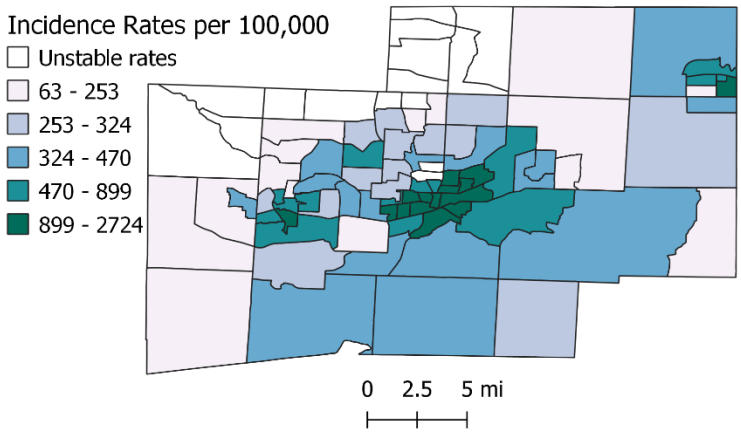

### 2017



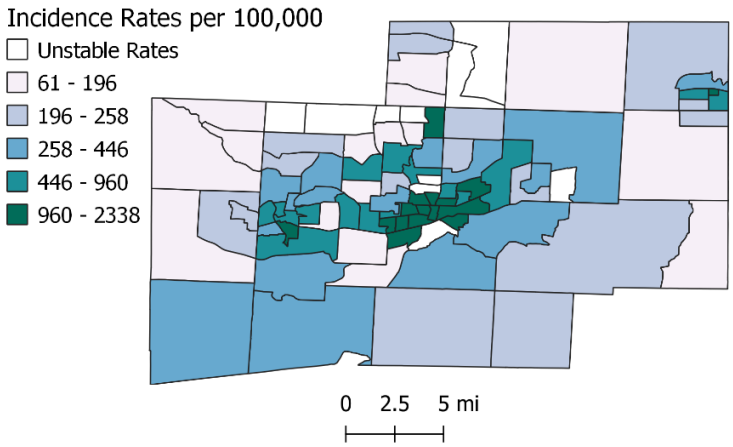

### 2018



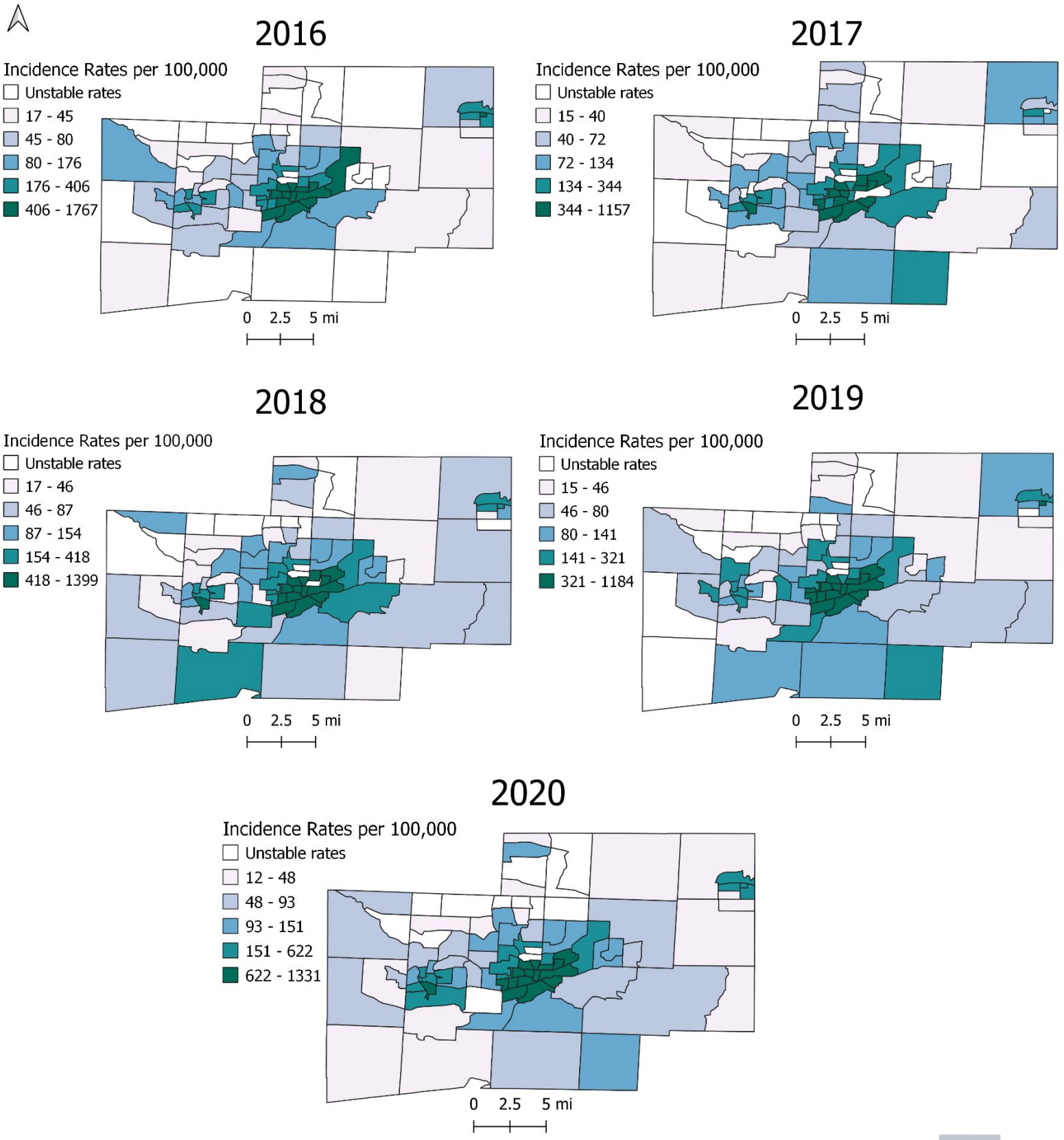

### 2019




### 2020



## Number of Reported Gonorrhea Cases in Stark County by Census Tract 2016-2020



## PREVENTION

STIs can easily be prevented, diagnosed, and treated. If you are sexually active, it is important to ask your doctor to test for STIs. **Knowing your STI status is critical to stopping transmission.** Other ways you can protect yourself from STIs are by reducing your number of sexual partners, mutual monogamy, talking with sexual partner(s) about staying safe before sex, and the correct and consistent use of condoms.[12]

Both Canton City Public Health (CCPH) and the Massillon City Health Department (MCHD) have adopted “Brown Bag Programs” aimed at addressing barriers to sexual healthcare, such as cost of services, lack of transportation, and lack of knowledge. This program provides free condoms for anyone who comes into the health department and asks for them - no matter if they are there for other services or not. By asking for a “brown bag” and handing them out in a literal brown paper bag, there is some discretion to the exchange.

### CCPH Brown Bag Program Flyers



MCHD Safe Sex Tips Handout

Massillon
City of Champions
Health Department

# Safe Sex Tips

**Use Condoms**

Correct and consistent use of the male latex condom is highly effective in reducing STD transmission. Use a condom every time you have anal, vaginal, or oral sex.

**Reduce # of Sex Partners**

Reducing your number of sex partners can decrease your risk for STDs. It is still important that you and your partner get tested, and that you share your test results with one another.

**Vaccinations**

Vaccines are safe, effective, and recommended ways to prevent hepatitis B and HPV. HPV vaccines for males and females can protect against some of the most common types of HPV. However, HPV vaccines are recommended for all teen girls and women through age 26 and all teen boys and men through age 21, who did not get all three doses of the vaccine when they were younger.

You should also get vaccinated for hepatitis B if you were not vaccinated when you were younger.

**STD/HIV testing:** Available at *Canton City Public Health*

Tuesday&Friday 8:00 AM - 10:30 AM Walk-in clinic, no appointment needed. Arrive early, as the clinic may fill up.

**HIV Testing Only:** Wednesday, 1:30 PM - 3:00 PM;

2nd Thursday of every month, 4:00 PM - 6:45 PM

Or by appointment: Call 330-489-3322 and ask to speak to a HIV prevention team member.

**Resource:** https://www.cdc.gov/std/prevention/default.htm

## Chlamydia Screening – Sexual Health Clinics by Canton City Public Health, OH, regardless of residency status, 2016-2020

| Year | YTD Samples Tested | YTD Samples Positive | % Positivity |
|---|---|---|---|
| **2016** | 797 | 78 | **9.8%** |
| **2017** | 700 | 54 | **7.7%** |
| **2018** | 654 | 55 | **8.4%** |
| **2019** | 717 | 67 | **9.3%** |
| **2020** | 391 | 35 | **8.9%** |

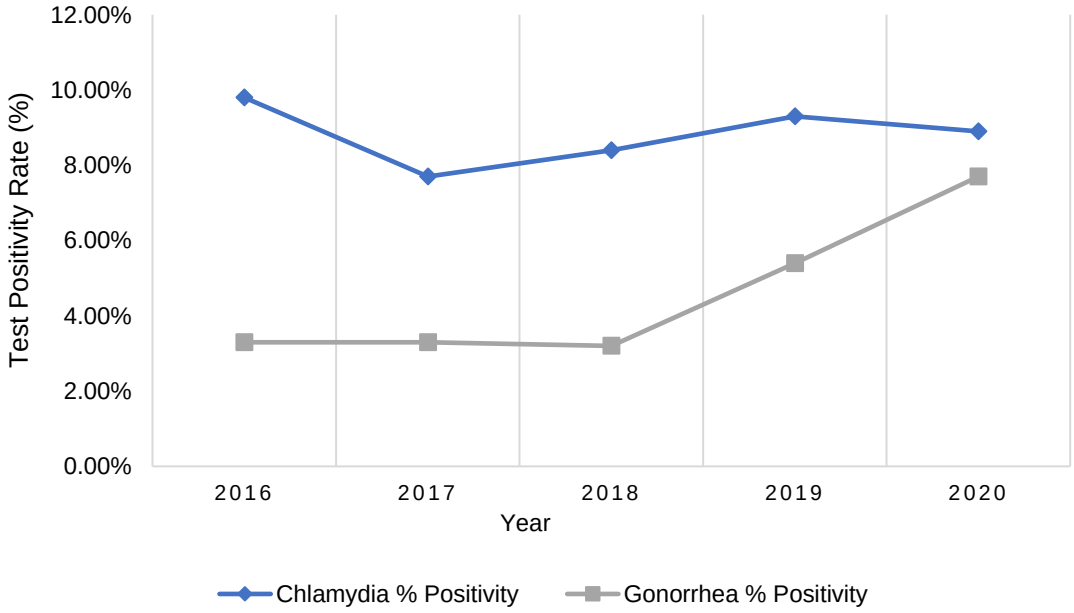
Note: The screening results above may be skewed because the number of individual tests were reported, not the number of patients. So, there may be multiple test results for one person.

## Gonorrhea Screening – Sexual Health Clinics by Canton City Public Health, OH, regardless of residency status, 2016-2020

| Year | YTD Samples Tested | YTD Samples Positive | % Positivity |
|---|---|---|---|
| **2016** | 797 | 26 | **3.3%** |
| **2017** | 700 | 23 | **3.3%** |
| **2018** | 654 | 21 | **3.2%** |
| **2019** | 717 | 39 | **5.4%** |
| **2020** | 391 | 30 | **7.7%** |

Note: The screening results above may be skewed because the number of individual tests were reported, not the number of patients. So, there may be multiple test results for one person.

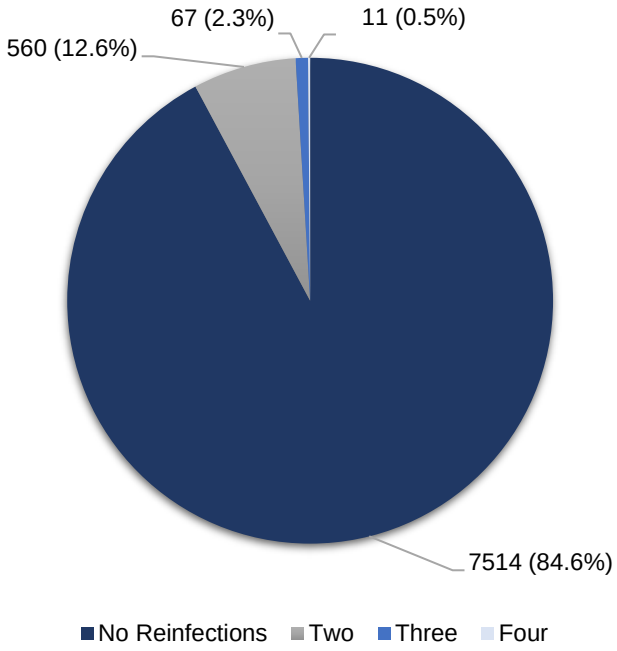
## Chlamydia and Gonorrhea Test Positivity Rate performed by Canton City Public Health 2016-2020



## REINFECTION

For this report, reinfection has been defined as **one person** having two or more infections within a calendar year.

**Number of People with Chlamydia Reinfections and Percent Caseload in Stark County, 2016-2020**



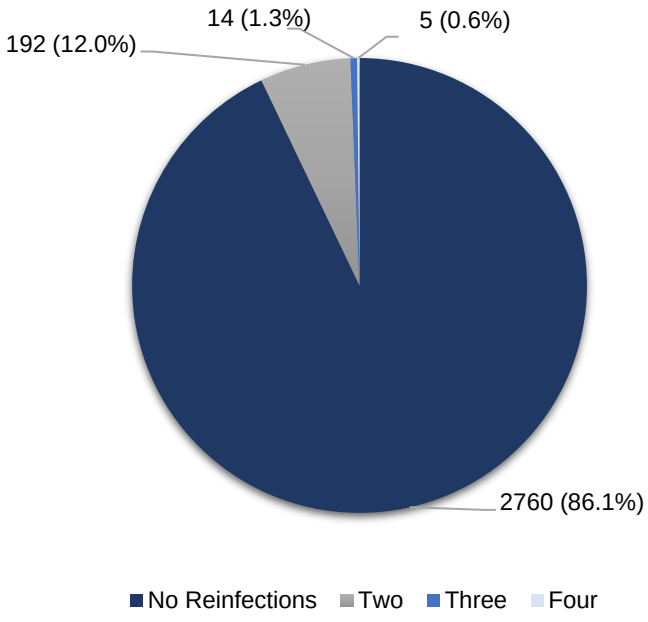

Out of **8,879** total chlamydia cases in Stark County from 2016 to 2020:

560 people made up 1,120 cases
**12.6% of case load**

67 people made up 201 cases
**2.3% of case load**

11 people made up 44 cases
**0.5% of case load**

**Number of People with Gonorrhea Reinfections and Percent Caseload in Stark County, 2016-2020**




Out of **3,206** total gonorrhea cases in Stark County from 2016 to 2020:

192 people made up 384 cases
**12.0% of case load**

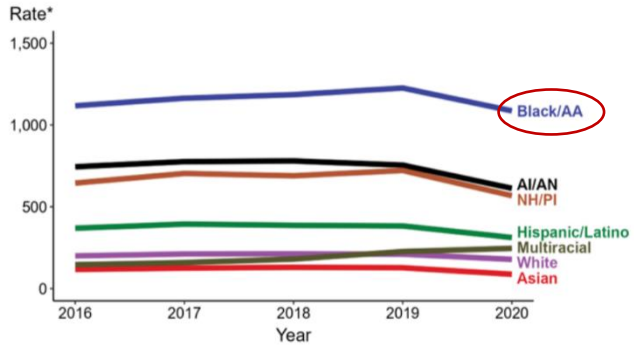
14 people made up 42 cases
**1.3% of case load**

5 people made up 20 cases
**0.6% of case load**

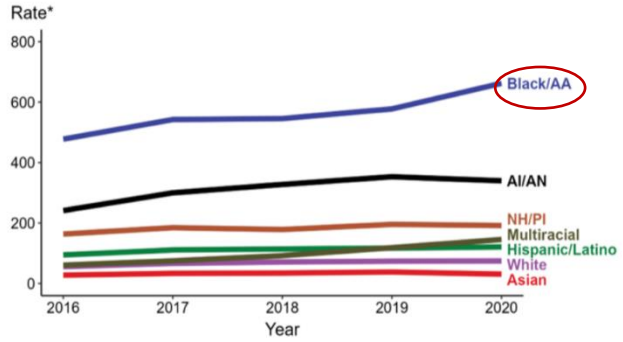
# HEALTH EQUITY

The data in this report showed disproportionately higher rates of chlamydial and gonorrheal infections among Black/African American individuals compared to White individuals in Stark County. This disparity is not just among Stark County residents; the national rates of chlamydia and gonorrhea over the past five years have also been significantly higher among Black/African American individuals compared to White individuals.[15]

**Chlamydia — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2016–2020**




**Gonorrhea — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2016–2020**




Understanding the underlying factors such as where individuals are born, live, work, play, and worship that contribute to this racial disparity is necessary to ensure health equity regardless of sex, race, age, and socioeconomic status. To embody the missions, values, and vision of healthy communities in Stark County, affirmative action towards combatting these racial health disparities needs to be a top priority.


https://betterbikeshare.org/2019/10/24/equi

**Stark County** is the 11th largest county in Ohio by land area and the 8th most populated county in Ohio. In 2020, approximately 371,516 people resided in Stark County, Ohio.[14]

## Stark County (total)

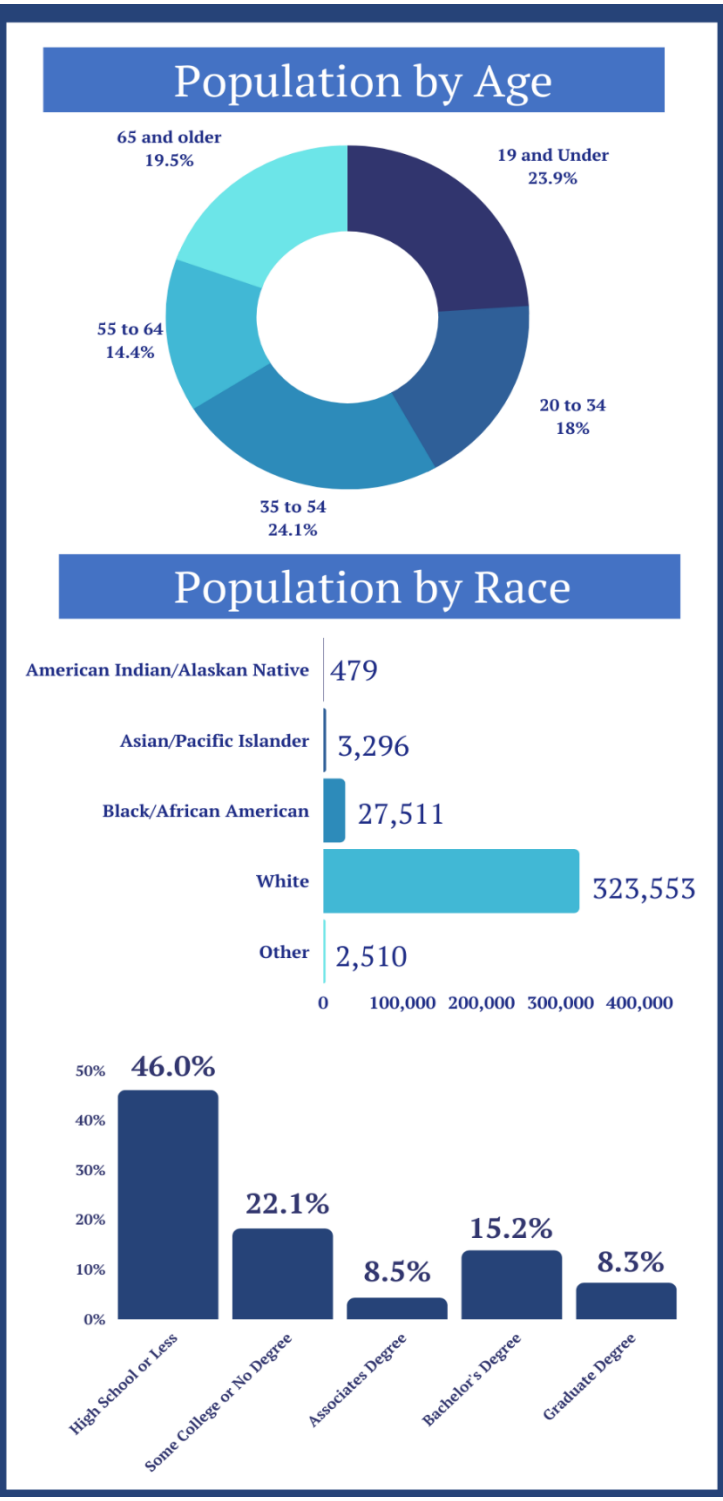
371,516
Stark County Population

42.1
Median Age

55,045
Median Household Income

2.91
Average Family Size

166,799
Total Housing Units



The most populated city/township in Stark County is **Canton City**, with a population estimate of 70,863, accounting for 19.1% of all Stark County residents in 2020.[14]

## Canton City (2020)

**70,863**
Canton City Population

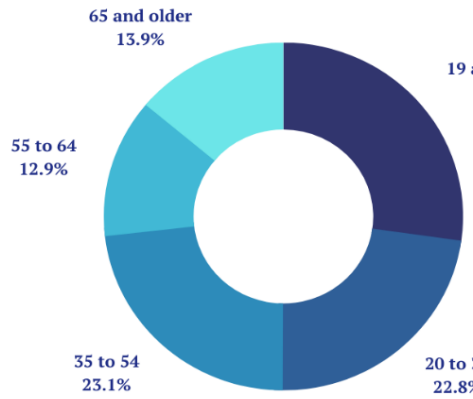
**34.9**
Median Age

**32,725**
Median Household Income

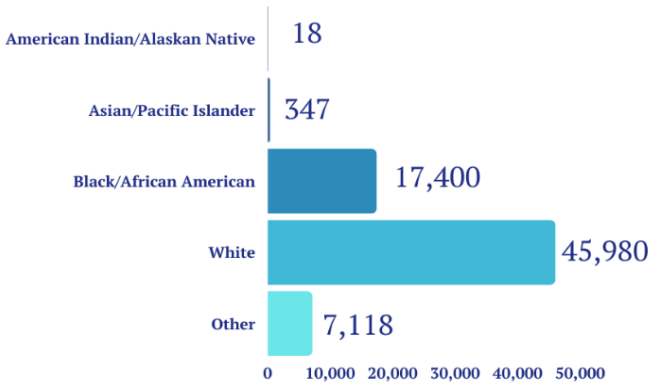
**3.04**
Average Family Size

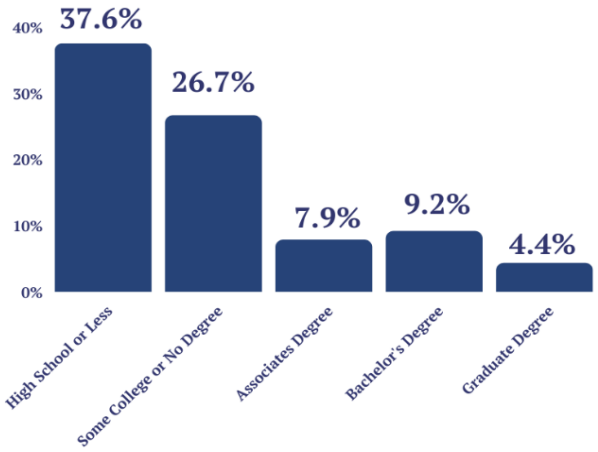
**33,587**
Total Housing Units

### Population by Age



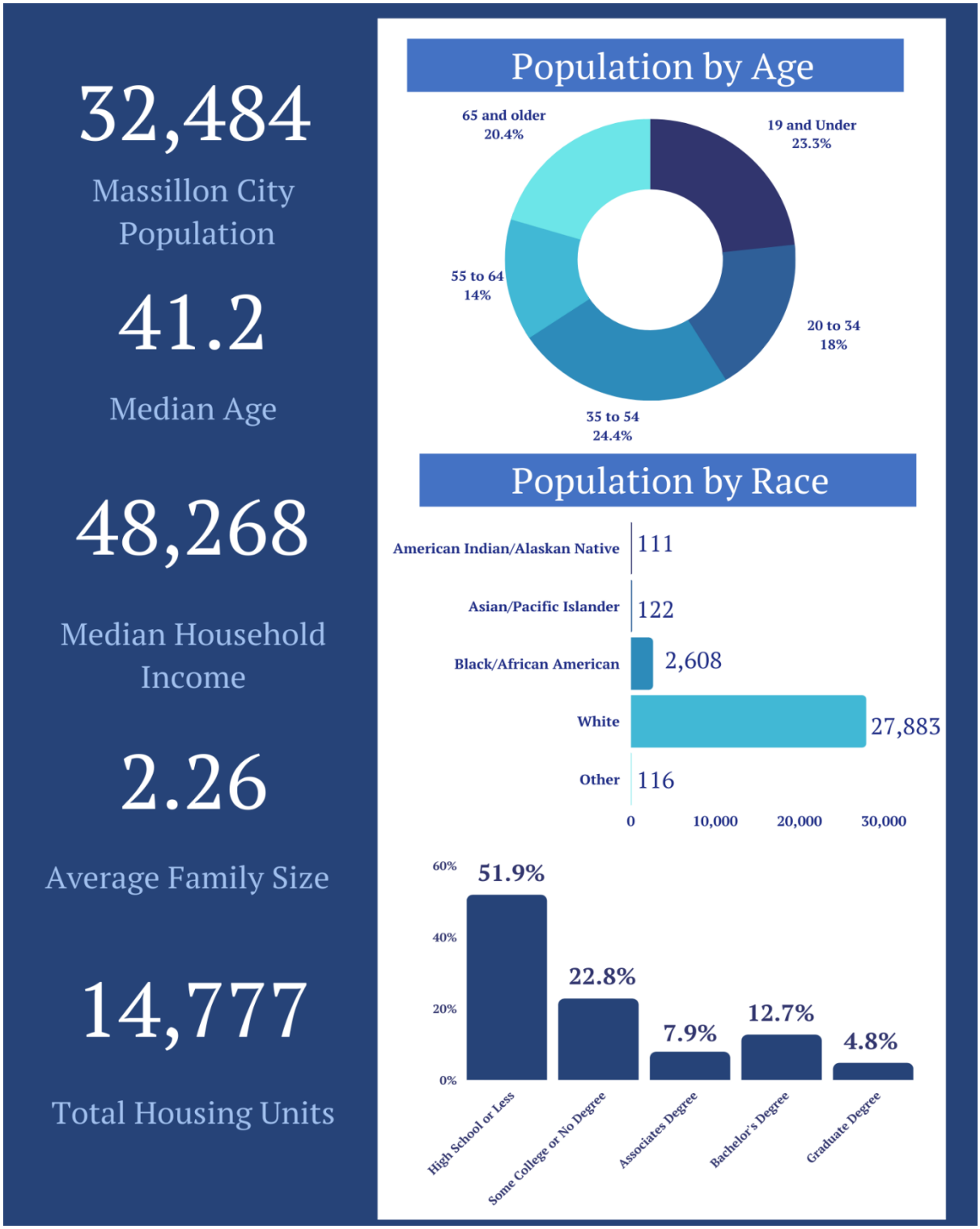

### Population by Race



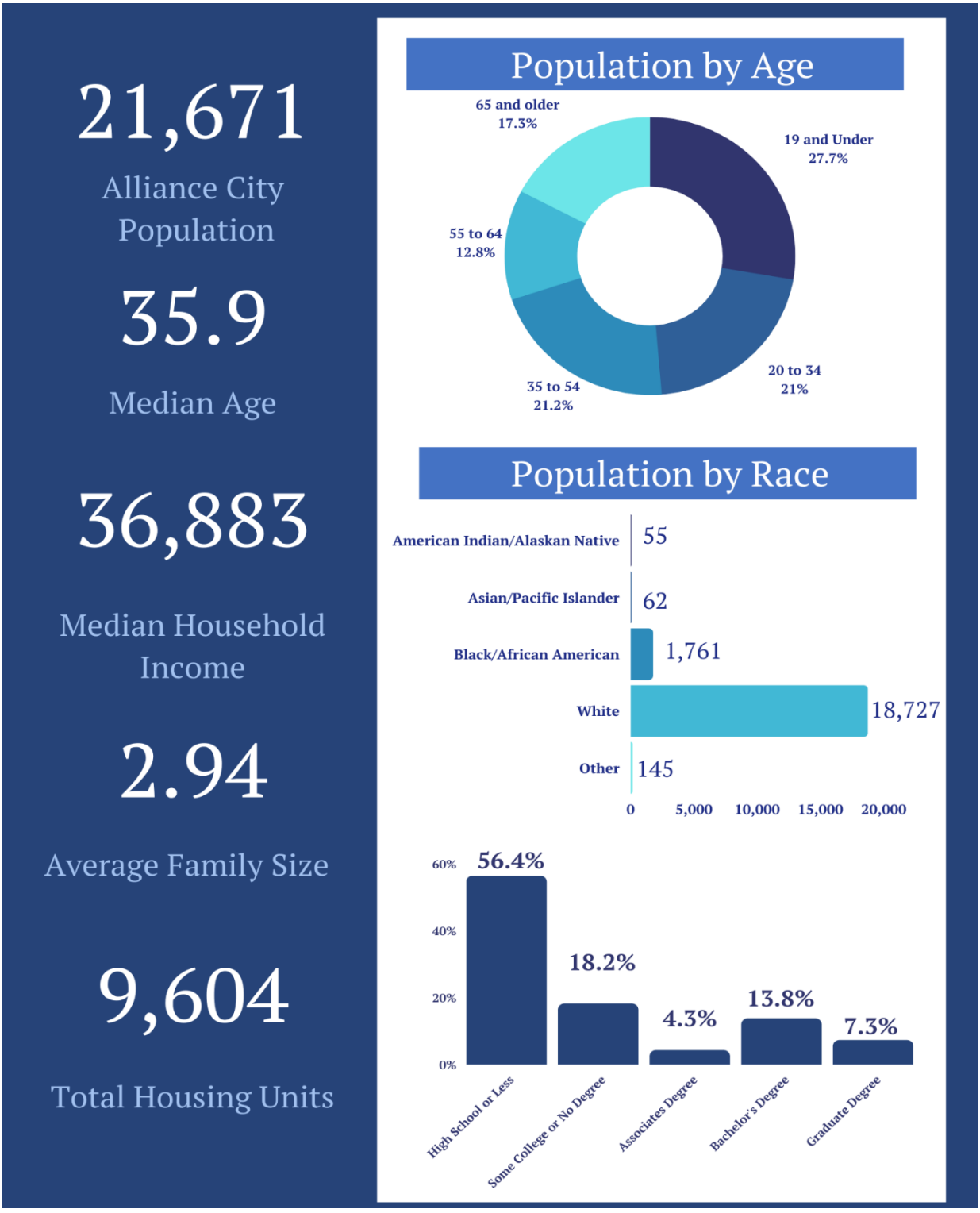
The 2020 population estimate for **Massillon City** was 32,484 people, accounting for approximately 8% of all Stark County residents in 2020.[14]

## Massillon City (2020)



The 2020 population estimate for **Alliance City** was 21,671 people, accounting for approximately 6% of all Stark County residents in 2020.[14]

## Alliance City (2020)



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