***Massachusetts Department of Public Health, Bureau of Infectious Disease and Laboratory Sciences***

**Summary for Plymouth County, Massachusetts, 2021**

Plymouth County is a county in the Commonwealth of Massachusetts, established in 1685. Its county seats are Plymouth and Brockton. In 2020, the population was 530,819 (U.S. Census Bureau, 2020\*).

**Chlamydia**

Chlamydia is the most frequently reported sexually transmitted infection (STI) both in the Commonwealth and nationally.

**Since 2011, there has been an overall increase in chlamydia cases statewide and in Plymouth County with the exception of 2020 due to COVID-19.** In 2021, the county rate was 359.8 per 100,000, while the statewide rate was 382.8 per 100,000. These can be compared to the national rate of 495.5 per 100,000.\*\*

**The county incidence rate among women remained higher** compared to men. In 2021, the incidence rate of chlamydia among women in Plymouth County was 457.1 per 100,000 while men had a rate of 256.0 per 100,000.



Data are current as of 10/24/2022 and are subject to change.

Population denominators: Strate S, et al. Small Area Population Estimates for 2011 through 2020 report, Oct 2016.

Data source: Massachusetts Department of Public Health/Bureau of Infectious Disease and Laboratory Sciences/Division of STD Prevention.

**The chlamydia statewide and county incidence rate is highest among young adults**. In 2021, the incidence rate of chlamydia was highest among 20 to 24-year-olds in Plymouth County (2,300.2 per 100,000).

**Gonorrhea**

Gonorrhea is the second most frequently reported STI both in the Commonwealth and nationally.

**Since 2011, there has been an overall increase in gonorrhea cases statewide and in Plymouth County.** In 2021, the county rate was 91.9 per 100,000, while the overall state rate was 115.2 per 100,000. These can be compared to the national rate of 214.0 per 100,000.\*\*

**The county incidence rate among men remained higher** compared to women. In 2021, men accounted for 58.9% of all gonorrhea cases in Plymouth County with a rate of 111.3 per 100,000 while women had a rate of 73.2 per 100,000.

Since 2015, the gonorrhea incidence rate of men in Plymouth County has surpassed the overall statewide incidence rate, except in 2019 and 2021.



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Population denominators: Strate S, et al. Small Area Population Estimates for 2011 through 2020 report, Oct 2016.

Data source: Massachusetts Department of Public Health/Bureau of Infectious Disease and Laboratory Sciences/Division of STD Prevention.

**The gonorrhea statewide and county incidence rate is highest among young adults**. In 2021, the number of cases and the incidence rate of gonorrhea in Plymouth County was highest among 20 to 24-year-olds (409.7 per 100,000).



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Population denominators: Strate S, et al. Small Area Population Estimates for 2011 through 2020 report, Oct 2016.

Data source: Massachusetts Department of Public Health/Bureau of Infectious Disease and Laboratory Sciences/Division of STD Prevention

**Early Syphilis◊**

Early syphilis has been on the rise in the Commonwealth and nationally since the early 2000s.‡

**Since 2011, the statewide and county rates of reported syphilis has continued to increase.** In 2021, the county rate was 14.9 per 100,000, while the statewide rate was 19.2 per 100,000. These can be compared to the national rate of 31.8 per 100,000.\*\*

**The county early syphilis rate among men was much higher** compared to the rate among women. In 2021, men accounted for 83.5% of all early syphilis cases in Plymouth County with a rate of 25.6 per 100,000 while women had a rate of 4.8 per 100,000.

![Incidence rate of early syphilis cases per 100,000 population by gender, Plymouth County, MA, 2011-2021.  Graph above depicts syphilis rates (per 100,000) in MA and Plymouth County by gender between 2011 and 2021. There are four lines: (1) MA rates begins at 7.6 and finishes ]at 19.2; (2) Plymouth County rates begins at 3.0 and finishes at 14.9; (3) Plymouth women rates begin at 1.2 and finishes at 4.8; (4) Plymouth men rates begin at 4.9 and finish at 25.6.]()

Data are current as of 10/24/2022 and are subject to change.

Population denominators: Strate S, et al. Small Area Population Estimates for 2011 through 2020 report, Oct 2016.

Data source: Massachusetts Department of Public Health/Bureau of Infectious Disease and Laboratory Sciences/Division of STD Prevention.

**In 2021, the highest incidence rate of early syphilis in Plymouth County was reported among 30 to 34-year-olds** (46.7 per 100,000).



Data are current as of 10/24/2022 and are subject to change.

Population denominators: Strate S, et al. Small Area Population Estimates for 2011 through 2020 report, Oct 2016.

Data source: Massachusetts Department of Public Health/Bureau of Infectious Disease and Laboratory Sciences/Division of STD Prevention

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\* 2020 population estimates were used to calculate 2021 disease rates throughout this report because 2021 population estimates had not been released at the time this report was published.

‡ Source: CDC: Sexually Transmitted Disease Surveillance, 2021.

◊ Early syphilis is defined as primary, secondary and early syphilis not diagnosed in the primary or secondary stages within one year of infection.

§ Please note the impact of the COVID-19 pandemic on infectious disease screening, treatment, and surveillance in the interpretation of 2020 and 2021 data.

**2021 Statewide Massachusetts**

Chlamydia cases have increased by 38% from 2011 to 2019 and decreased by 22% in 2020 before increasing by 9% in 2021. This is possibly due to factors such as increased service utilization after health care clinics re-opened following the end of the COVID-19 public health emergency.

Gonorrhea cases have increased 245% from 2011 to 2021 and was reported primarily among men.

Early syphilis cases have increased 170% from 2011 to 2021. From 2016 to 2021, a range of 31% to 39% of early syphilis cases were co-infected with HIV. In 2019, 2020, and 2021 congenital syphilis cases numbered 9, 10, and 9, respectively, after remaining between 0 and 4 from 2011 to 2018.