

**Tazewell
County
Sexually
Transmitted
Infections
Report**

2022

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Executive Summary

The purpose of the 2022 Sexually Transmitted Infections (STI) Report is to describe the trends of chlamydia, gonorrhea, and syphilis among Tazewell County residents, specifically around gender, age, race, and zip code. Within Tazewell County, there is a continued burden of STIs, and this report will help identify where interventions are needed.

Key Findings

- The overall chlamydia incidence rates have increased, and gonorrhea incidence rates have decreased compared to 2021.
- The rates of both chlamydia and gonorrhea are still greater among Black/African American residents and other racial/ethnic groups compared to their White counterparts.
- The highest rates and number of cases occur in the 61554, 61571, and 61611 zip codes.
- Chlamydia rates are highest among individuals between the ages of 20 and 24 years.
- Gonorrhea rates are highest among males between ages 20-24 years and females between ages 25-29 years.
- Chlamydia and gonorrhea incidence rates have increased to 2.7 and 4 times, respectively, of what they were 20 years ago.
- In 2022, syphilis cases decreased by 53% to 9 new confirmed cases compared to 19 new cases in 2021.
- Congenital syphilis cases increased nationally in 2022, Tazewell County had one case of congenital syphilis in 2022.

Chlamydia Infection

In 2022, 360 confirmed cases of chlamydia infection were reported to the Tazewell County Health Department, an overall incidence of 274.1 per 100,000 population. This is increased from a total case count and incidence rate of 299 and 227.6, respectively, in 2021. Females accounted for over two-thirds (69.2%) of 2022 cases with 249 infections, while males comprised the other one-third (30.8%) with 111 cases (Table 1). The incidence rates for females and males for 2022 were 376.1 and 170 per 100,000, respectively. The 2022 Tazewell County chlamydia incidence rates will be compared to Illinois and the United States’ 2021 incidence rates, as the 2022 rates are not yet available. The correct rates will be updated when they become available. The overall incidence rate in Tazewell County is 2.4 and 1.8 times lower than that of Illinois and the United States, respectively (Figure 1).

Table 1: Chlamydia – Number of Reported Cases and Incidence Rate (per 100,000), Tazewell County, Illinois, 2022.

	COUNT	INCIDENCE RATE
TOTAL	360	274.1
<i>MALES</i>	111	170
<i>FEMALES</i>	249	376.1

Figure 1. Chlamydia Incidence per 100,000 among Total Population, 2000-2022: Tazewell County, Illinois, and United States

Demographics

The highest concentrations of chlamydia cases in Tazewell County are found within the 61554, 61571, and 61611 zip codes. These three zip codes accounted for 74.2% of chlamydia cases within Tazewell County, while the combined population of these three zip codes accounts for 69.9% of the total population of Tazewell County (Table 2). This percentage is a slight decrease compared to 2021 in which 75.3% of all chlamydia cases were among residents of these three zip codes.

Table 2: Chlamydia – Number of Reported Cases and incidence Rate (per 100,000) in Specific Zip Codes and Remaining County, by Age, Tazewell County, Illinois, 2022.

	61554		61571		61611		REMAINING TAZEWELL COUNTY	
	Count	Incidence	Count	Incidence	Count	Incidence	Count	Incidence
OVERALL	142	324.1	50	210.6	75	309.3	93	233.3
15-19	34	1757.1	8	438.4	19	1481.9	22	748.6
20-24	49	2277	22	2022.1	25	1895.4	43	2275.1
25-29	32	1121.2	6	441.2	13	1012.4	11	617.6

The incidence of chlamydia infections differs greatly by age, gender, and race within Tazewell County. For both males and females, the highest rate of chlamydia occurs between the ages of 20-24 years. The next highest age group is females and males ages 15-19 years old (Table 3). For females, chlamydia incidence rates are also high among 25–29-year-olds; males also see a higher incidence rate in that age group (Table 3). Compared to 2021, incidence rates in both males and females are also higher in the 30-34 age group; rates in that age group have increased by 1.5 times in females and doubled in males in a year.

Among females, incidence rates of Black/African American (AA) women are 9.7 times that of their White counterparts; this disparity was also observed in the incidence rates of Black/AA males being almost 5 times that of their White counterparts (Table 3). Additionally, both females and males who identified their race as Other (i.e.: two or more races), had incidence rates 5 and 4.7 times higher, respectively, than their White counterparts. Culturally competent care and education on safe sexual practices among Tazewell County’s different racial groups would be beneficial in reducing the identified disparities.

Table 3: Chlamydia – Number of Reported Cases and Incidence (per 100,000) in Females and Males, by Race and Age, Tazewell County, Illinois, 2021

Race	Females		Males	
	Cases	Incidence	Cases	Incidence
<i>White</i>	210	341.9	89	148.8
<i>Black/AA</i>	16	3326.4	11	858.7
<i>Other</i>	23	1701.2	11	692.2
Age				
<i>15-19</i>	63	1626.6	20	494.4
<i>20-24</i>	97	2960.9	42	1038.3
<i>25-29</i>	44	1141.1	18	452.4
<i>30-34</i>	24	617.9	15	363.5
<i>35-44</i>	12	142.8	12	138.5
<i>>45</i>	7	16.31	4	0.98

Over the past 20 years, chlamydia rates have increased in Tazewell County as they have in both the state of Illinois and the United States as a whole (Table 4). Tazewell County’s chlamydia incidence rate is 2.7 times what it was in 2001.

Table 4: Chlamydia – Incidence Rates for Chlamydia over the past 21 years, Tazewell County, Illinois, and United States (2002-2022)

Year	Tazewell County	Illinois	United States
2002	114.4	387.3	296.5
2003	132.3	388.9	311.8
2004	149.4	379.9	330.3
2005	172.0	407.1	347.0
2006	177.5	431.5	366.3
2007	221.0	446.6	393.8
2008	168.1	476.4	430.1
2009	212.5	487.5	442.1
2010	279.9	472.9	423.6
2011	290.3	506.1	457.6
2012	334.6	527.7	460.9
2013	334.6	497.1	454.1
2014	287.3	519.1	467.0
2015	278.4	542.6	494.5
2016	264.4	581.2	517.7
2017	271.8	588.6	553.4
2018	261.5	602.7	569.6
2019	268.1	631.4	585.8
2020	270.7	405.4	476.7
2021	228.6	660.2	491.3
2022	274.1	*	*

*2022 chlamydia incidence rates for Illinois and the United States are not yet available. 2021 rates will be used in any comparisons.

Chlamydia rates for both males and females have followed the trends for the overall Tazewell County population; however, rates for females ages 15-44 remain higher than males (Figure 2). Table 5 compares the incidence rates for all males and females in Tazewell County, whereas Figure 2 highlights just those between ages 15-44. A potential explanation for the large increase in chlamydia incidence among females and males ages 15-44 from 2021 to 2022 could be the return to normal health care delivery and utilization after the initial waves of the COVID-19 pandemic (Figure 2).

Table 5: Chlamydia – Number of Reported Cases and Incidence (per 100,000) by Gender in Tazewell County, Illinois for the past 4 years (2018-2022)

Year	Females		Males		Total	
	Cases	Incidence	Cases	Incidence	Cases	Incidence
2018	260	392.8	98	150.4	358	272.6
2019	253	368	109	164	363	268.1
2020	236	356.5	120	180	356	271
2021	197	297.6	102	156.6	299	227.6
2022	249	376.1	111	170.4	360	274.1

Figure 2. Chlamydia Incidence among Males and Females Ages 15-44, 2018-2022: Tazewell County, Illinois

Gonorrhea Infection

In 2022, there were 108 cases of gonorrhea reported to the Tazewell County Health Department, an overall incidence of per 100,000 people. This is a 29% decrease in comparison to the previous year where there were 153 cases of gonorrhea in Tazewell County. Males accounted for 52% of cases with an incidence rate of 86.0 per 100,000, which females comprised the remaining 48% of cases with an incidence rate of 78.6 per 100,000 (Table 7). The overall incidence of gonorrhea in Tazewell County follows the national trends; incidence of gonorrhea has increased steadily over the past 20 years with the highest incidence being in 2020 (Figure 3, Table 8). The slight decrease in incidence from 2020 to 2022 could be due to the reduction in healthcare delivery services during the COVID-19 pandemic. In Tazewell County, the 2022 incidence rate of gonorrhea is 4 times more than what it was in 2002.

Table 7: Gonorrhea – Number of Reported Cases and Incidence (per 100,000), Tazewell County, Illinois, 2022

	Count	Incidence Rate
Total	108	82.2
Males	56	86.0
Females	52	78.6

Figure 3. Gonorrhea Incidence per 100,000 among Total Population, 2000-2022: Tazewell County, Illinois, and United States

Table 8: Gonorrhea – Incidence Rates for Chlamydia over the past 20 Years, Tazewell County, Illinois, and United States (2002-2022)

	Tazewell County	Illinois	United States
2002	20.2	193.5	125.0
2003	43.6	175.7	119.1
2004	27.2	165.8	117.3
2005	34.2	161.2	120.7
2006	33.5	162.5	127.3
2007	40.5	167.6	126.5
2008	28.0	166.5	119.7
2009	28.0	160.7	107.0
2010	31.0	123.0	100.2
2011	31.8	132.8	104.2
2012	31.8	141.5	108.4
2013	42.1	128.3	107.9
2014	34.0	124.5	113.4
2015	35.5	133.5	128.0
2016	40.6	165.2	151.7
2017	63.5	186.0	180.0
2018	62.8	198.1	189.0
2019	67.2	228.1	199.6
2020	129.2	160.3	219.5
2021	117	140.5	210.2
2022	82.2	140.5	210.2

Demographics

Gonorrhea infections rates continue to differ greatly by age, race, and region in Tazewell County, with incidence rates being highest among individuals between the ages of 20 and 34, individuals reporting Black/AA race, and individuals residing in the 61554, 61571, and 61611 zip codes (Tables 9 and 10).

These three zip codes contained 71% of all gonorrhea cases in Tazewell County. The age group with the highest gonorrhea incidence fluctuates by zip code. In the 61554 zip code and the remaining portion of Tazewell County, gonorrhea incidence is highest among the 25-29 age group; in the 61611 zip code, incidence is highest among the 30-34 age group. The 61571 zip code has the lowest burden of disease compared to other portions of Tazewell County.

Table 9. Gonorrhea – Number of Reported Cases and Incidence (per 100,000) in Specific Zip Codes and Remaining County by Age, Tazewell County, Illinois, 2022

	61554		61571		61611		Remaining Tazewell County	
	Count	Incidence	Count	Incidence	Count	Incidence	Count	Incidence
<i>Overall</i>	48	116.9	11	44.4	18	75.2	31	74.5
15-19	2	103.4	1	54.8	1	77.9	3	102.1
20-24	8	371.7	2	183.8	5	379.1	5	264.6
25-29	12	420.5	1	73.5	1	77.9	10	561.8
30-34	6	206.5	1	68.2	7	485.8	7	317.5

Females between the ages of 25-29 had the highest incidence and case counts of gonorrhea, followed by females between the ages of 20-24 and females ages 30-34. For males, the incidence rates and case counts of gonorrhea were also the highest among those between the ages of 20-24, those ages 25-29, and those ages 30-34 (Table 10).

There is a drastic difference in the gonorrhea incidence rates between Whites and the racial minorities in Tazewell County. The incidence rate for Black/AA females was 11 times greater than that of White females. The Other category includes all races and ethnicities outside of white and black/AA. Gonorrhea incidence for females of other races 6 times greater than their white counterparts. The incidence rate for Black/AA males was 7 times higher than that of White males (Table 10). Disparities are present in Tazewell County among individuals of non-white racial and ethnic backgrounds; thus, illustrating the need for further outreach and research on how to reduce STIs among those populations.

Table 10. Gonorrhea – Number of Reported Cases and Incidence (per 100,000) in Females and Males, by Race and Age, Tazewell County, Illinois, 2022

Race	Females		Males	
	Cases	Incidence	Cases	Incidence
White	45	73.3	41	68.6
Black/AA	4	831.6	8	624.5
Other	3	460.8	7	107.5
Age				
15-19	5	129.9	2	49.4
20-24	10	305.3	10	282.7
25-29	14	363.1	10	251.3
30-34	10	257.5	11	266.6
35-44	10	119.0	14	161.6
>45	3	7.0	9	22.1

Gonorrhea incidence remains higher among males in Tazewell County than females (Table 11). In 2022, male incidence was higher than female incidence. However, it is worth noting that gonorrhea incidence overall has stabilized after large increase in cases in 2020-2021.

Table 11: Gonorrhea – Number of Reported Cases and Incidence (per 100,000) by Gender in Tazewell County, Illinois for the past 5 Years (2019- 2022)

Year	Females		Males		Total	
	Cases	Incidence	Cases	Incidence	Cases	Incidence
2019	53	77.1	40	164	93	67.2
2020	95	138	74	180	169	129.2
2021	74	111.8	79	156.6	153	117
2022	52	78.6	56	86.0	108	82.2

Syphilis

In 2022, there were 9 new confirmed cases of syphilis reported to the Tazewell County Health Department, a decrease of 53% compared to 19 cases in 2021. The overall incidence rate was 6.85 per 100,000 population compared to 14.5 per 100,000 in 2021. Males accounted for 44.4% of cases with an incidence rate of 6.19 per 100,000, while females accounted for 55.6% of cases with an incidence rate of 7.37 per 100,000 (Table 12). Comparatively to 2021, syphilis is now more prevalent among females than males in Tazewell County.

Table 12: Syphilis – Number of Reported Cases and Incidence (per 100,000), Tazewell County, Illinois, 2022

	Count	Incidence Rate
Total	9	6.85
Males	4	6.19
Females	5	7.37

Demographic Information

Syphilis rates also differ by age, race, and region in Tazewell County, with incidence rates highest among individuals between the ages of 35-44, followed by those between the ages of 15-24 (Table 13). In Tazewell County, syphilis incidence rates for 2022 are the highest among those reporting Black/African American race with an incidence rate 113.5 per 100,000 compared to their white counterparts at 4.95 per 100,000 of the population.

The 61554 and 61571 zip codes account for 70.5% of all syphilis cases in Tazewell County. However, 61610, 61554, and 61550 zip codes have the highest incidence rates at 20.2, 18.3, and 17.5 per 100,000 of population, respectively (Table 14).

Table 13. Syphilis – Number of Reported Cases and Incidence (per 100,000) by Age, Tazewell County, Illinois, 2022

Age	Total Cases	
	Cases	Incidence
0-14	1	4.03
15-24	1	6.75
25-34	1	6.45
35-44	3	17.3
>45	3	4.99

Type

Syphilis is typed into three stages, primary syphilis, secondary syphilis, and late or latent stages, based on the clinical presentation. In 2022, Tazewell County had 2 confirmed cases of primary syphilis, 6 cases of late or latent syphilis, and one case of congenital syphilis. The high number of cases in Late or Latent staging (66.7%) suggests the continued need to increase awareness among both patients and providers of the presentation of syphilis, the importance of early detection and treatment, and how the infection should be staged. Additionally, congenital syphilis, or babies that are born with syphilis, is increasing in the United States. Congenital syphilis is a public health concern given that it increases the risk of stillbirth or miscarriage and can lead to increased morbidity and mortality in a baby who is born with it.

Data Sources

State and National Data

State and national data used for comparison were obtained from the State of Illinois Stat Portal and the Centers for Disease Control and Prevention, respectively.

Tazewell County Data

This report presents information on the cases and rates of Chlamydia infection, Gonorrhea infection, and Syphilis infection within Tazewell County. These diseases are notifiable reportable diseases in Illinois. By law, both private and public facilities must report confirmed cases to the local public health jurisdiction. The Tazewell County Health Department investigates and conducts follow-up for treatment of Chlamydia, gonorrhea, and syphilis before submission to the Illinois Department of Public Health. The case values utilized in this report are for the year 2022; this information has been finalized by the Illinois Department of Public Health.

Population Data

Incidence rates were calculated using the population estimates from the U.S. Census American Community Survey 5-year estimates. Information includes estimates on total population, gender, race, and age groups for Tazewell County, Illinois, United States, and specific zip codes.

Data Limitations

It is important to note that cases are reported only for positive tests; thus, rates are under-reported and not all physicians necessarily test. In addition, rates among females are higher than males as standard

screening and testing practices comply with national recommendations that are available for females. Due to the small sample sizes for individuals who identified their race as American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, for analysis purposes these data were aggregated to make the “Other Race” category.

Contact Information

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Appendix A

Demographic Data

	61554	61571	61611	Tazewell County	Illinois	United States
<u>Median Age</u>	42.6	39	42.8	41.7	39	38.8
<u>Race</u>						
% Black/AA	2.50%	2.06%	0.81%	1.28%	14.11%	12.40%
% White	96.50%	96.04%	95.70%	92.18%	61.40%	61.63%
<u>Education</u>						
% High School Graduate or higher	64.20%	69.25%	68.98%	67.27%	64.30%	64.70%
<u>Income</u>						
% Living below poverty line	13.20%	4.31%	11.10%	9.30%	12.10%	12.80%
<u>Total Population</u>	43,810	23,744	23,925	131,343	12,812,508	331,449,281