

Tazewell County
Sexually
Transmitted
Infections Report

2023

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Table of Contents

Executive Summary.....	4
Key Findings	4
Chlamydia Infection	4
Table 1: Chlamydia – Number of Reported Cases and Incidence Rate (per 100,000), Tazewell County, Illinois, 2023.....	4
Figure 1. Chlamydia Incidence per 100,000 among Total Population, 2000-2023: Tazewell County, Illinois, and United States	5
Demographics	5
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, 2023.....	5
Table 3: Chlamydia – Number of Reported Cases and Incidence (per 100,000) in Females and Males, by Race and Age, Tazewell County, Illinois, 2023	6
Table 4: Chlamydia – Incidence Rates for Chlamydia over the past 21 years, Tazewell County, Illinois, and United States (2002-2023)	6
Table 5: Chlamydia – Number of Reported Cases and Incidence (per 100,000) by Gender in Tazewell County, Illinois for the past 4 years (2018-2023)	7
Figure 2. Chlamydia Incidence among Males and Females, 2018-2023: Tazewell County, Illinois.....	7
Gonorrhea Infection	8
Table 7: Gonorrhea – Number of Reported Cases and Incidence (per 100,000), Tazewell County, Illinois, 2023	8
Figure 3. Gonorrhea Incidence per 100,000 among Total Population, 2000-2023: Tazewell County, Illinois, and United States	8
Table 8: Gonorrhea – Incidence Rates over the past 20 Years, Tazewell County, Illinois, and United States (2002-2022).....	9
Demographics	9
Table 9. Gonorrhea – Number of Reported Cases and Incidence (per 100,000) in Specific Zip Codes and Remaining County by Age, Tazewell County, Illinois, 2023	10
Table 10. Gonorrhea – Number of Reported Cases and Incidence (per 100,000) in Females and Males, by Race and Age, Tazewell County, Illinois, 2023	10
Table 11: Gonorrhea – Number of Reported Cases and Incidence (per 100,000) by Gender in Tazewell County, Illinois for the past 5 Years (2019- 2023).....	11
Syphilis Infection.....	12
Table 12: Syphilis – Number of Reported Cases and Incidence (per 100,000), Tazewell County, Illinois, 2023	12

Demographic Information.....	12
Table 13. Syphilis – Number of Reported Cases and Incidence (per 100,000) by Age, Tazewell County, Illinois, 2023.....	12
Type	12
Figure 4. Syphilis Cases by Type – Tazewell County, IL 2023	13
Data Sources	13
Data Limitations	13
Contact Information.....	14
Appendix A.....	14
Demographic Data	14

Executive Summary

The purpose of the 2023 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 and gonorrhea incidence rates have increased from 2022.
- The rates of both chlamydia and gonorrhea are highest among individuals ages 20-24 years.
- 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 2.75 and 4 times, respectively, of what they were 20 years ago.
- Syphilis cases have increased by 33% compared to 2022; this follows the national trend of increased syphilis cases.
- Majority of Tazewell County syphilis cases are among individuals ages 35-44 years.

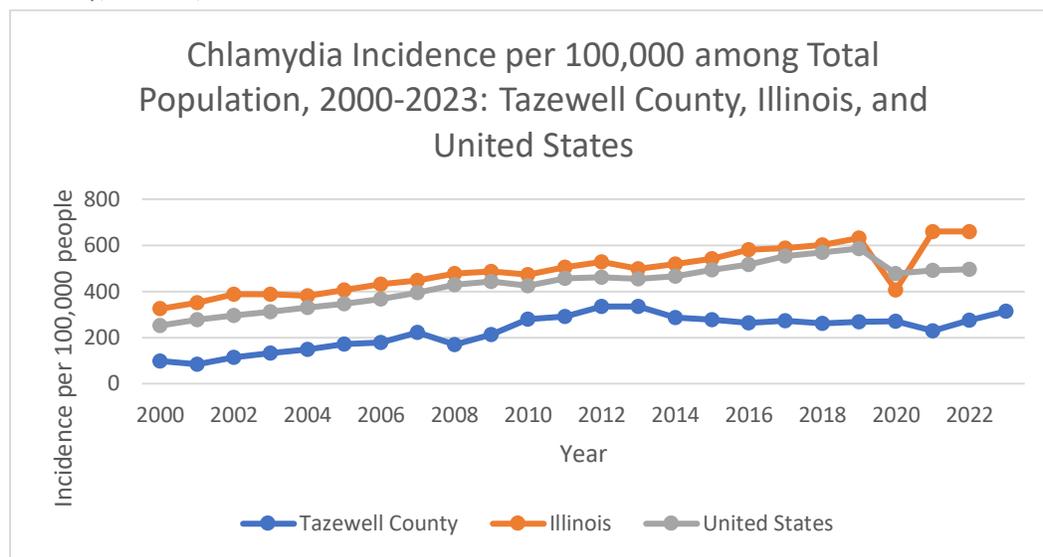
Chlamydia Infection

In 2023, 416 confirmed cases of chlamydia infection were reported to the Tazewell County Health Department, an overall incidence of 314.4 per 100,000 population. This is increased from a total case count and incidence rate of 360 and 274.1, respectively, in 2022. Females accounted for almost two-thirds (64.2%) of 2023 cases with 267 infections, while males comprised the other one-third (35.8%) with 149 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, 2023.

	COUNT	INCIDENCE RATE
TOTAL	416	314.4
<i>MALES</i>	149	223.7
<i>FEMALES</i>	267	388.2

Figure 1. Chlamydia Incidence per 100,000 among Total Population, 2000-2023: 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 67.1% 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 decrease compared to 2022 in which 74% 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, 2023.

	61554		61571		61611		REMAINING TAZEWELL COUNTY	
	Count	Incidence	Count	Incidence	Count	Incidence	Count	Incidence
OVERALL	119	713.0	54	227.7	94	387.7	177	444
15-19	22	113.6	4	219.3	21	1639	90	3753.1
20-24	62	288.1	30	2757.6	30	2274.5	61	3227.5
25-34	35	622.8	14	509.8	24	886.3	26	553.1

The incidence of chlamydia infections differs 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 ages 15-19 years old and males ages 25-34 years old (Table 3). For females, chlamydia incidence rates are also high among 25–34-year-olds; males also see a higher incidence rate in the age group of 15-19 years (Table 3). Compared to 2022, incidence rates in both males and females by age group follow an identical pattern. The highest incidence rates are among individuals ages 20-24 with the age groups of 15-19 years and 25-34 years also elevated.

Table 3: Chlamydia – Number of Reported Cases and Incidence (per 100,000) in Females and Males, by Race and Age, Tazewell County, Illinois, 2023

Race	Females		Males	
	Cases	Incidence	Cases	Incidence
<i>White</i>	250	382.0	123	198.7
<i>Black/AA</i>	13	78.3	20	137.8
<i>Other</i>	8	218.4	6	152.6
Age				
<i>15-19</i>	59	1569.6	13	301.5
<i>20-24</i>	123	3815.1	60	1719.2
<i>25-34</i>	55	733.4	42	507.7
<i>35-44</i>	24	279.5	30	336.2
<i>>45</i>	6	19.4	*	*

*Denotes data that is suppressed due to case numbers under 5 cases.

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 2.75 times what it was in 2002.

Table 4: Chlamydia – Incidence Rates for Chlamydia over the past 21 years, Tazewell County, Illinois, and United States (2002-2023)

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		*	495
2023	314.4		*	*

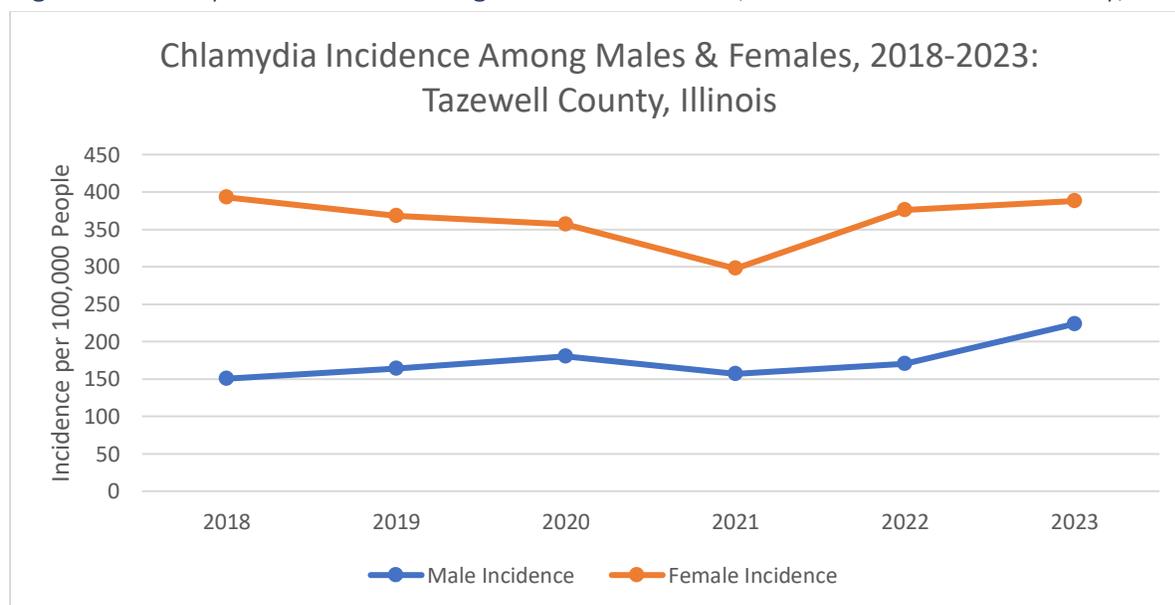
*2022 & 2023 chlamydia incidence rates for Illinois and the United States are not yet available. 2021 rates will be used in any comparisons.

Chlamydia rates for both males and females have followed the trends for the overall Tazewell County population. Table 5 compares the incidence rates for all males and females in Tazewell County. A potential explanation for the large increase in chlamydia incidence among females and males 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 (2018-2023)

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
2023	267	388.2	149	223.7	416	314.4

Figure 2. Chlamydia Incidence among Males and Females, 2018-2023: Tazewell County, Illinois



Gonorrhea Infection

In 2023, there were 123 cases of gonorrhea reported to the Tazewell County Health Department, an overall incidence of 93.2 per 100,000 people. This is a 13.4% increase in comparison to the previous year when there were 108 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 trend; 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 it was in 2002.

Table 7: Gonorrhea – Number of Reported Cases and Incidence (per 100,000), Tazewell County, Illinois, 2023

	Count	Incidence Rate
Total	123	93.2
Males	63	97.1
Females	60	92.2

Figure 3. Gonorrhea Incidence per 100,000 among Total Population, 2000-2023: Tazewell County, Illinois, and United States

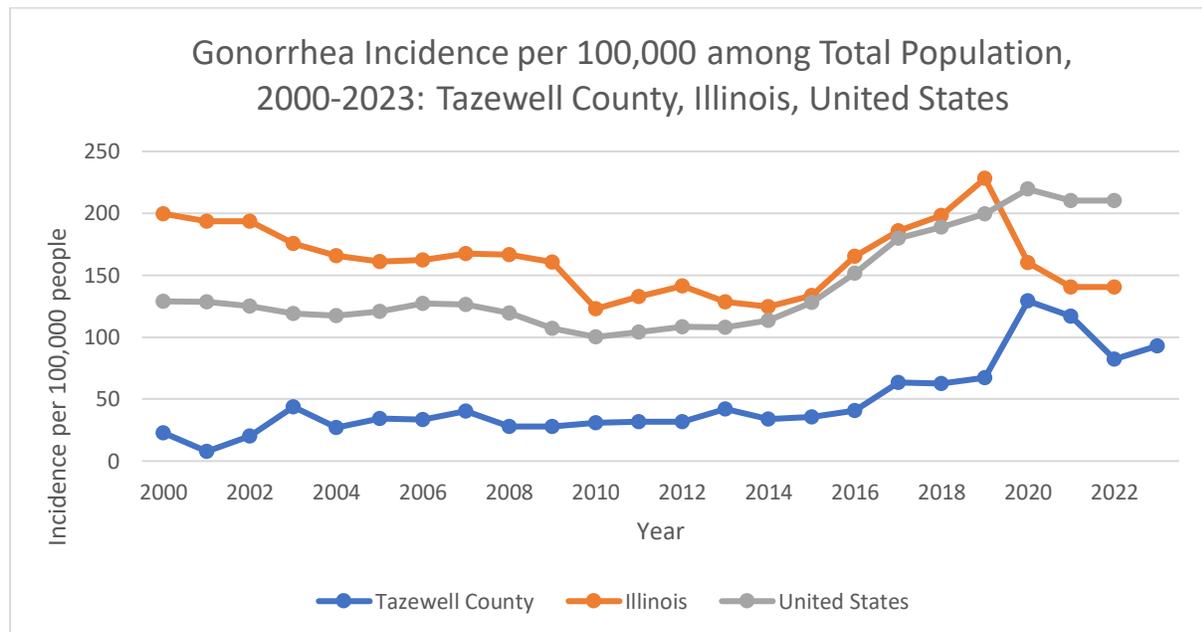


Table 8: Gonorrhea – Incidence Rates over the past 20 Years, Tazewell County, Illinois, and United States (2002-2022)

	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
2023	93.2	*	*

*2022 & 2023 chlamydia incidence rates for Illinois and the United States are not yet available. 2021 rates will be used in any comparisons.

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, and individuals residing in the 61554, 61571, and 61611 zip codes (Tables 9 and 10).

These three zip codes contained 71.5% 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 20-24 age group; in the 61611 zip code, incidence is highest among the 15-19 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, 2023

	61554		61571		61611		Remaining Tazewell County	
	Count	Incidence	Count	Incidence	Count	Incidence	Count	Incidence
<i>Overall</i>	51	125.1	10	40.5	27	115.2	31	73.2
<i>15-19</i>	*	*	*	*	5	355.6	5	197.9
<i>20-24</i>	14	590.2	*	*	*	*	9	458.7
<i>25-34</i>	15	283.1	*	*	7	258.5	13	276.5

*Denotes data that is suppressed due to case numbers under 5 cases.

Females between the ages of 20-24 had the highest incidence and case counts of gonorrhea, followed by females between the ages of 15-19. For males, the incidence rates and case counts of gonorrhea were also the highest among those between the ages of 20-24 and those ages 25-34 (Table 10). Additionally, the male incidence of gonorrhea is similar between white and black individuals (Table 10).

Table 10. Gonorrhea – Number of Reported Cases and Incidence (per 100,000) in Females and Males, by Race and Age, Tazewell County, Illinois, 2023

<i>Race</i>	Females		Males	
	Cases	Incidence	Cases	Incidence
White	53	81.0	48	77.5
Black/AA	*	*	11	75.8
Other	*	*	*	*
<i>Age</i>				
15-19	9	239.4	*	*
20-24	17	527.3	13	372.5
25-34	13	173.4	24	304.6
35-44	16	186.5	17	190.5
>45	5	16.1	6	21.3

*Denotes data that is suppressed due to case numbers under 5 cases.

Gonorrhea incidence remains higher among males in Tazewell County than females (Table 11). In 2023, 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- 2023)

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
2023	60	92.2	63	97.1	123	93.2

Syphilis Infection

In 2023, there were 12 new, confirmed cases of syphilis reported to the Tazewell County Health Department, an increase of 33% compared to 9 cases in 2022. The overall incidence rate was 9.09 per 100,000 population compared to 6.85 per 100,000 in 2022. Males accounted for 66.7% of cases with an incidence rate of 12.3 per 100,000, while females accounted for 33.3% of cases with an incidence rate of 6.14 per 100,000 (Table 12). Comparatively to 2022, syphilis is now more prevalent among males than females in Tazewell County.

Table 12: Syphilis – Number of Reported Cases and Incidence (per 100,000), Tazewell County, Illinois, 2023

	Count	Incidence Rate
Total	12	9.09
Males	8	12.3
Females	*	6.14

*Denotes data that is suppressed due to case numbers under 5 cases.

Demographic Information

Syphilis rates also differ by age in Tazewell County, with incidence rates highest among individuals between the ages of 35-44, followed by those between the ages of 25-34 (Table 13).

Table 13. Syphilis – Number of Reported Cases and Incidence (per 100,000) by Age, Tazewell County, Illinois, 2023

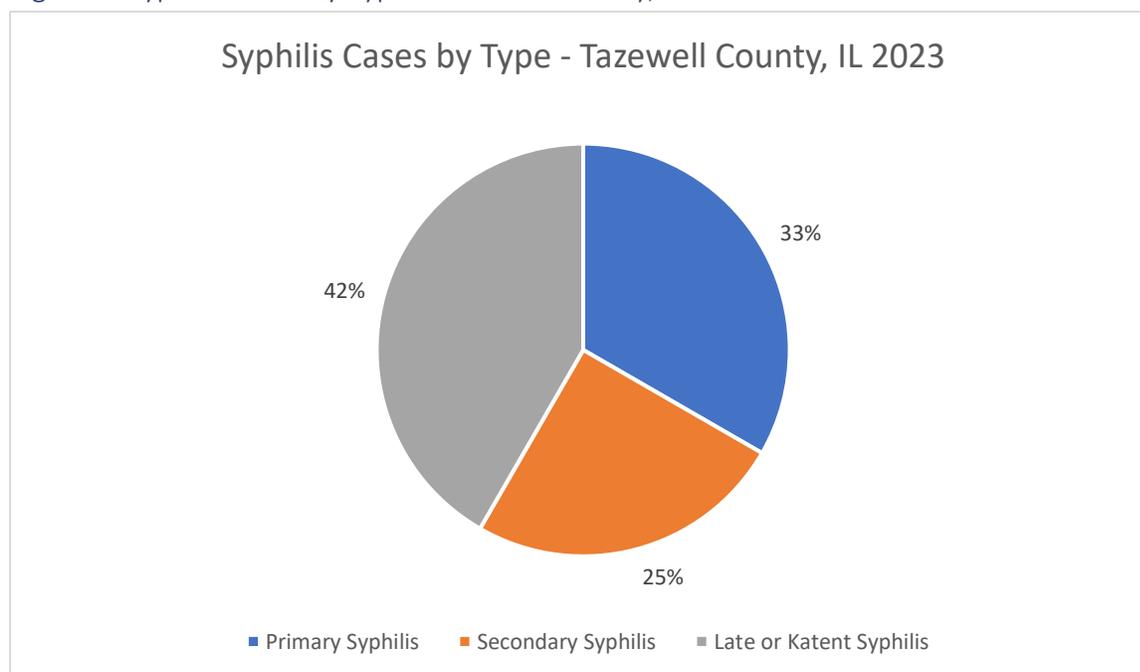
Age	Total Cases	
	Cases	Incidence
0-14	0	0
15-24	0	0
25-34	*	19.4
35-44	7	40.7
>45	*	3.36

*Denotes data that is suppressed due to case numbers under 5 cases

Type

Syphilis is typed into three stages, primary syphilis, secondary syphilis, and late or latent stages, based on the clinical presentation. In 2023, 33% of syphilis cases were primary syphilis, 25% secondary syphilis, and 41.7% late or latent syphilis. The high number of cases in Late or Latent staging (41.7%) 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.

Figure 4. Syphilis Cases by Type – Tazewell County, IL 2023



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 2023; 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