

Tazewell County
Sexually
Transmitted
Infections Report

2021

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Table of Contents

Executive Summary	3
Key Findings	3
Chlamydia Infection	4
Table 1: Chlamydia – Number of Reported Cases and Incidence Rate (per 100,000), Tazewell County, Illinois, 2021.....	4
Figure 1. Chlamydia Incidence per 100,000 among Total Population, 2000-2021: Tazewell County, Illinois, and United States	4
Demographics	4
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, 2021.	5
Table 3: Chlamydia – Number of Reported Cases and Incidence (per 100,000) in Females and Males, by Race and Age, Tazewell County, Illinois, 2021	5
Table 4: Chlamydia – Incidence Rates for Chlamydia over the past 21 years, Tazewell County, Illinois, and United States (2001-2021).....	6
Table 5: Chlamydia – Number of Reported Cases and Incidence (per 100,000) by Gender in Tazewell County, Illinois for the past 4 years (2018-2021)	6
Figure 2. Chlamydia Incidence among Males and Females Ages 15-44, 2018-2021: Tazewell County, Illinois.....	7
Gonorrhea Infection	8
Table 7: Gonorrhea – Number of Reported Cases and Incidence (per 100,000), Tazewell County, Illinois, 2021	8
Figure 3. Gonorrhea Incidence per 100,000 among Total Population, 2000-2021: Tazewell County, Illinois, and United States	8
Table 8: Gonorrhea – Incidence Rates for Chlamydia over the past 20 Years, Tazewell County, Illinois, and United States (2001-2021).....	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, 2021	9
Table 10. Gonorrhea – Number of Reported Cases and Incidence (per 100,000) in Females and Males, by Race and Age, Tazewell County, Illinois, 2021	10
Table 11: Gonorrhea – Number of Reported Cases and Incidence (per 100,000) by Gender in Tazewell County, Illinois for the past 4 Years (2018- 2021)	10
Syphilis.....	11
Table 12: Syphilis – Number of Reported Cases and Incidence (per 100,000), Tazewell County, Illinois, 2021.....	11
Demographics	11
Table 13. Syphilis – Number of Reported Cases and Incidence (per 100,000) by Age, Tazewell County, Illinois, 2021	11
Table 14. Syphilis – Number of Reported Cases and Incidence (per 100,000) by Zip Code, Tazewell County, Illinois, 2021.....	12
Syphilis by Stage of Disease	12
Figure 4. Syphilis – Percentage of Cases by Stage of Disease, Tazewell County, Illinois, 2021	12
Data Sources	13
Contact Information.....	13

Executive Summary

The purpose of the 2021 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 upward trend in STIs and will help identify where interventions are needed.

Key Findings

- The overall chlamydia and gonorrhea incidence rates decreased in 2021 compared to 2020.
- The rates of both chlamydia and gonorrhea are still greater among Black/African American residents compared to their White counterparts.
- The highest rates and number of cases are occurring in the 61554, 61571, and 61611 zip codes.
- Chlamydia rates are highest among individuals between the **ages of 15 and 29 years**.
- Gonorrhea rates are highest among individuals between the **ages of 20 and 34 years**.
- Chlamydia and gonorrhea incidence rates have **increased to 2.7 and 15 times**, respectively, what they were 20 years ago.
- In 2021, syphilis incidence rates were highest among individuals between the ages of 20 and 29 years; individuals between ages 40 and 44 also have high syphilis incidence rates.
- Of the stages of syphilis disease progression, late or unknown duration is the most prevalent stage in Tazewell County in 2021.

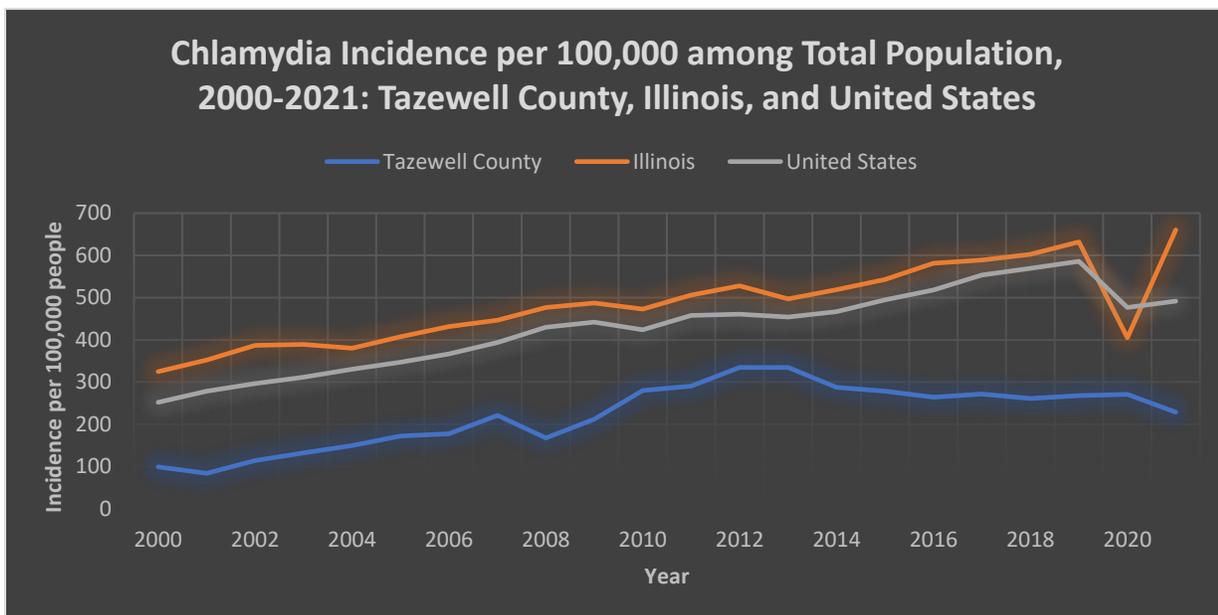
Chlamydia Infection

In 2021, 229 confirmed cases of chlamydia infection were reported to the Tazewell County Health Department, an overall incidence of 227.6 per 100,000 population. This decreased from a total case count and incidence rate of 354 and 261 respectively in 2020. Females accounted for two-thirds (65.9%) of 2021 cases with 197 infections, while male comprised the other one-third (34.1%) with 102 cases (Table 1). The incidence rates for females and males for 2021 were 297.6 and 156.6 per 100,000, respectively. The overall incidence rate in Tazewell County is 2.8 and 2.1 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, 2021.

	COUNT	INCIDENCE RATE
TOTAL	299	227.6
<i>MALES</i>	102	156.6
<i>FEMALES</i>	197	297.6

Figure 1. Chlamydia Incidence per 100,000 among Total Population, 2000-2021: Tazewell County, Illinois, and United States



Demographics

The highest concentrations of chlamydia cases in Tazewell County are found within the 61554, 61517, and 61611 zip codes. These three zip codes accounted for 75.3% 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). The percentage for these zip codes is an increase compared to 2020 in which 73% 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, 2021.

	61554		61571		61611		REMAINING TAZEWELL COUNTY	
	Count	Incidence	Count	Incidence	Count	Incidence	Count	Incidence
OVERALL	120	273.9	47	197.9	58	242.4	74	185.6
15-19	23	1188.6	4	219.2	12	935.3	13	442.3
20-24	48	2230.5	22	2022.1	21	1592.1	38	2010.6
25-29	32	1121.2	12	882.4	13	1012.5	11	898.4

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 males and females ages 25-29 years old (Table 3). For females, chlamydia incidence rates are also high among 15–19-year-olds; males also see a higher incidence rate in that age group (Table 3).

Among females, incidence rates of Black/African American (AA) women were ten times that of their White counterparts; this disparity was also observed in the incidence rates of Black/AA males being almost four times that of their White counterparts (Table 3). Additionally, both male and females who identified their race as Other (i.e.: two or more races), had incidence rates three and 1.7 times higher 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>	152	247.5	87	145.5
<i>Black/AA</i>	12	2494.8	7	546.4
<i>Other</i>	10	739.6	4	251.7
Age				
<i>15-19</i>	38	981.2	14	346.1
<i>20-24</i>	88	2686.2	41	1159.2
<i>25-29</i>	44	1141.1	24	622.4
<i>30-34</i>	15	389.0	7	180.2
<i>35-44</i>	7	83.3	7	80.8
<i>>45</i>	5	11.7	9	22.1

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 (2001-2021)

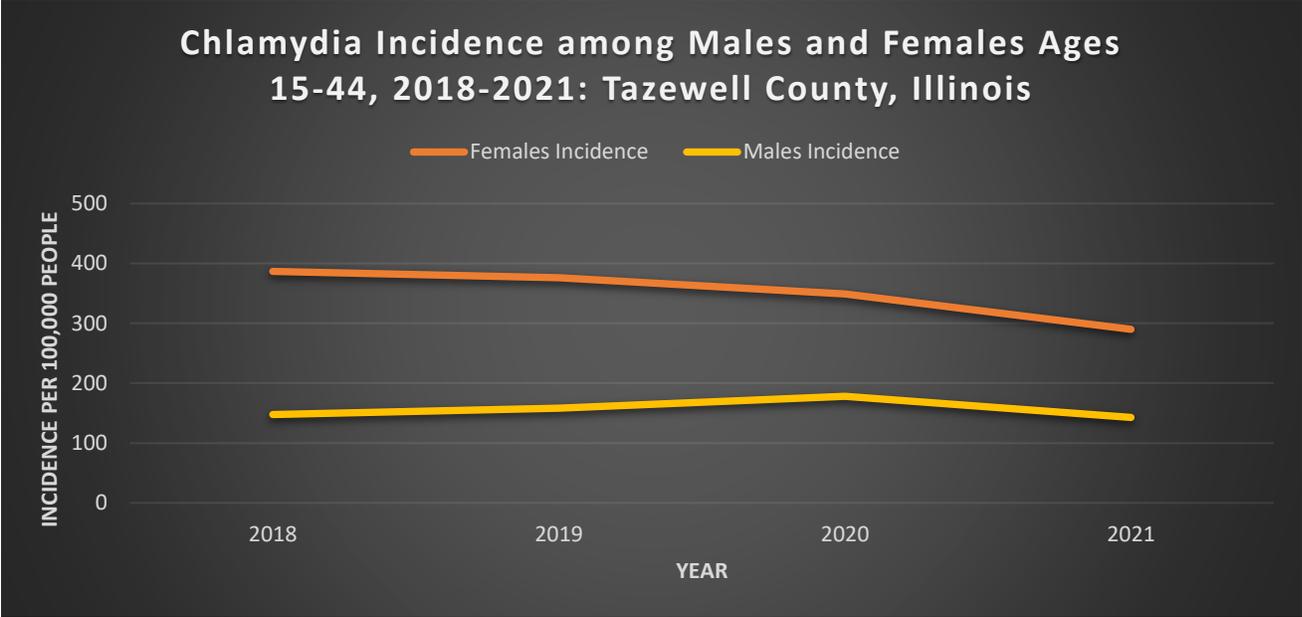
Year	Tazewell County	Illinois	United States	
2001	84.1		352.0	278.3
2002	114.4		387.3	296.5
2003	132.3		388.9	311.8
2004	149.4		379.9	330.3
2005	172.0		407.1	347.0
2006	177.5		431.5	366.3
2007	221.0		446.6	393.8
2008	168.1		476.4	430.1
2009	212.5		487.5	442.1
2010	279.9		472.9	423.6
2011	290.3		506.1	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

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. Notably, both male and female rates have decreased from 2018 to 2021 (Table 5, Figure 2). One potential insight into the downward trend in chlamydia infections is the interruption of healthcare services that occurred due to the COVID-19 pandemic in 2020-2021. This trend will need to be monitored in the coming years for an increase in infections as healthcare delivery services and utilization normalize.

Table 5: Chlamydia – Number of Reported Cases and Incidence (per 100,000) by Gender in Tazewell County, Illinois for the past 4 years (2018-2021)

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

Figure 2. Chlamydia Incidence among Males and Females Ages 15-44, 2018-2021: Tazewell County, Illinois.



Gonorrhea Infection

In 2021, there were 153 cases of gonorrhea reported to the Tazewell County Health Department, an overall incidence of 116.5 per 100,000 people. This is an 11% decrease in comparison to the previous year where there were 169 cases of gonorrhea in Tazewell County. Males accounted for 52% of cases with an incidence rate of 121.3 per 100,000, which females comprised the remaining 48% of cases with an incidence rate of 111.8 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 2021 could be due to the reduction in healthcare delivery services during the COVID-19 pandemic. In Tazewell County, the 2021 incidence rate of gonorrhea is 15 times more than what it was in 2000.

Table 7: Gonorrhea – Number of Reported Cases and Incidence (per 100,000), Tazewell County, Illinois, 2021

	Count	Incidence Rate
Total	153	116.5
Males	79	121.3
Females	74	111.8

Figure 3. Gonorrhea Incidence per 100,000 among Total Population, 2000-2021: Tazewell County, Illinois, and United States

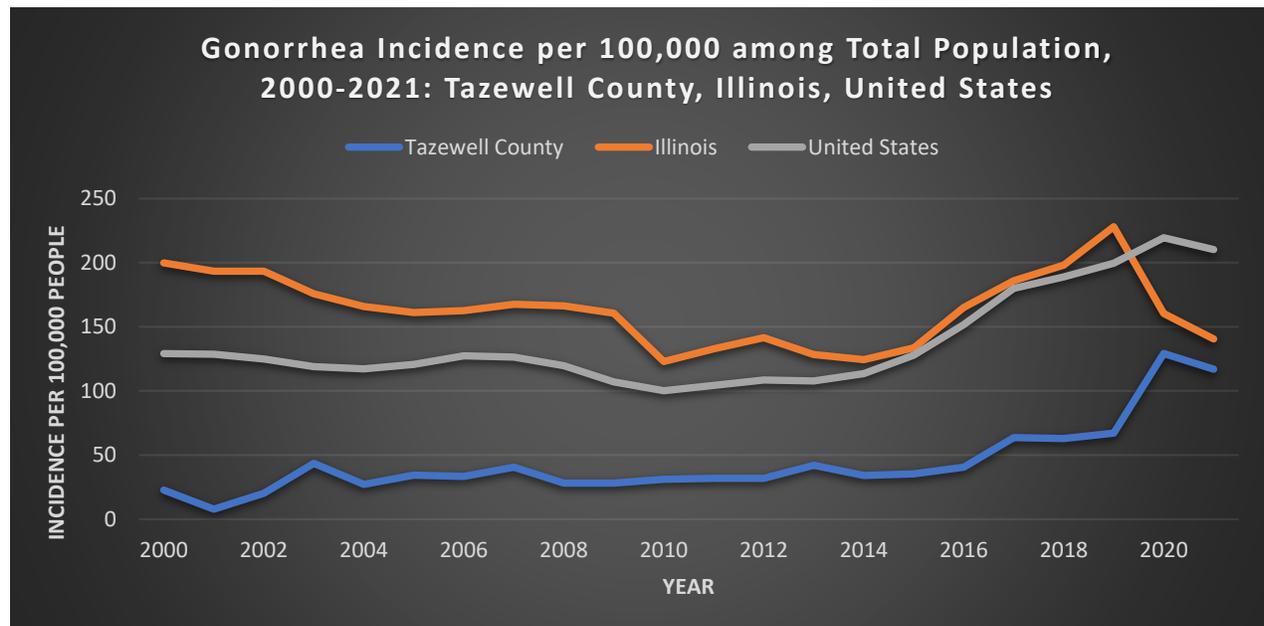


Table 8: Gonorrhea – Incidence Rates for Chlamydia over the past 20 Years, Tazewell County, Illinois, and United States (2001-2021)

Year	Tazewell County	Illinois	United States
2001	7.8	193.4	128.5
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

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 80% of all gonorrhea cases in Tazewell County. The overall incidence rates within the 61554, 61571, and 61611 zip codes range from 1 to 2.3 times that of the incidence rate in the remaining areas 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, 2021

	61554		61571		61611		Remaining Tazewell County	
	Count	Incidence	Count	Incidence	Count	Incidence	Count	Incidence
<i>Overall</i>	76	173.5	19	80	28	117	30	75.3
<i>15-19</i>	3	155	2	109.6	3	233.8	4	136.1
<i>20-24</i>	14	650.6	8	735.3	7	530.7	8	423.3
<i>25-29</i>	17	595.7	6	441.2	6	467.3	8	449.2
<i>30-34</i>	14	481.8	2	136.3	4	277.6	2	90.7

Females between the ages of 20-24 had the highest incidence and case counts of gonorrhea, followed by females between the ages of 25-29 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 and those ages 25-29 (Table 10).

There is a drastic difference in the gonorrhea incidence rates between Whites and Blacks/AAs in Tazewell County. The incidence rate for Black/AA females was 17 times greater than that of White females. The incidence rate for Black/AA males was 7 times higher than that of White males (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, 2021

Race	Females		Males	
	Cases	Incidence	Cases	Incidence
White	65	105.8	63	105.3
Black/AA	6	1871.1	9	702.6
Other	3	221.9	3	188.8
Age				
15-19	8	206.6	4	98.9
20-24	21	641	16	452.4
25-29	22	570.5	15	377
30-34	11	283.2	11	266.6
35-44	4	47.6	14	161.6
>45	8	18.6	12	29.4

Gonorrhea incidence remains higher among males in Tazewell County than females (Table 11). In 2021, male incidence was 1.4 times higher than female incidence. However, female incidence of gonorrhea has doubled from 2018-2021 (Table 11).

Table 11: Gonorrhea – Number of Reported Cases and Incidence (per 100,000) by Gender in Tazewell County, Illinois for the past 4 Years (2018- 2021)

Year	Females		Males		Total	
	Cases	Incidence	Cases	Incidence	Cases	Incidence
2018	38	55.2	47	150.4	85	62.8
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

Syphilis

In 2021, there were 19 confirmed cases of Syphilis reported to the Tazewell County Health Department, an increase (46%) compared to 13 cases in 2020. The overall incidence rate was 14.5 per 100,000 population compared to 9.9 per 100,000 in 2020. Males accounted for 78.9% of cases with an incidence rate of 23.0 per 100,000, while females represent the remaining 21.1% with an incidence rate of 6.0 per 100,000 (Table 12).

Table 12: Syphilis – Number of Reported Cases and Incidence (per 100,000), Tazewell County, Illinois, 2021

	Count	Incidence Rate
Total	19	14.5
Males	15	23.0
Females	4	6.0

Demographics

Syphilis rates also differ by age, race, and region in Tazewell County, with incidence rates highest among individuals between the ages of 20 to 24, followed by those between the ages of 25-29 (Table 13).

Individuals between the ages of 40 to 44 also had high incidence of syphilis. In Tazewell County, syphilis incidence rates for 2021 are the highest among those reporting White race and Non-Hispanic ethnicity, and individuals residing in the 61554 and 61571 zip codes.

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, 2021

Age	Total Cases	
	Cases	Incidence
20-24	6	90.2
25-29	4	54.9
30-34	2	24.9
35-39	1	12.5
40-44	4	41.6
>45	2	2.4

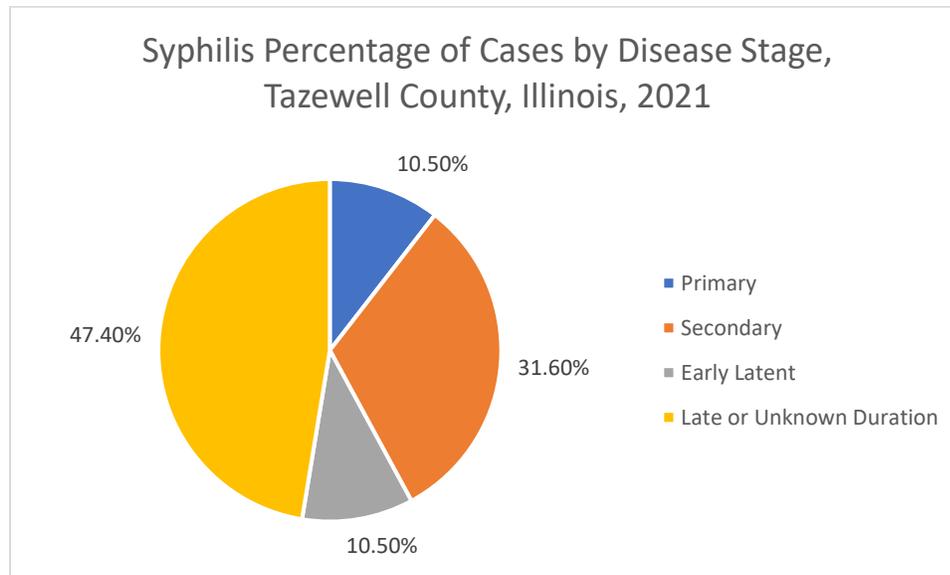
Table 14. Syphilis – Number of Reported Cases and Incidence (per 100,000) by Zip Code, Tazewell County, Illinois, 2021.

Zip Code	Total Cases	
	Cases	Incidence
61550	3	17.5
61554	8	18.3
61571	4	16.8
61610	1	20.2
61611	2	8.4

Syphilis by Stage of Disease

Primary and secondary syphilis accounted for 8 cases or 42.1% of Tazewell County syphilis cases in 2021. Early latent, (non-primary, non-secondary) accounted for 2 cases (10.5%). Late or unknown duration accounted for 9 cases (47.4%) and is the most prevalent stage of syphilis in Tazewell County in 2021.

Figure 4. Syphilis – Percentage of Cases by Stage of Disease, Tazewell County, Illinois, 2021



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 2021; 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