

Peoria County
Sexually
Transmitted
Infection Report

2017

This report focuses on the rates of chlamydia and gonorrhea infections among Peoria County residents.



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2017 Peoria County Sexually Transmitted Infection Report

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Executive Summary

The purpose of the 2017 Sexually Transmitted Infection (STI) Report is to describe the trends of chlamydia and gonorrhea among Peoria County residents, specifically around gender, age, race and zip code. Within Peoria County, the high rates of STIs have been identified not only by data, but also community feedback, as a health priority and is included in the Peoria County 2017-2020 Community Health Improvement Plan.

Key Findings

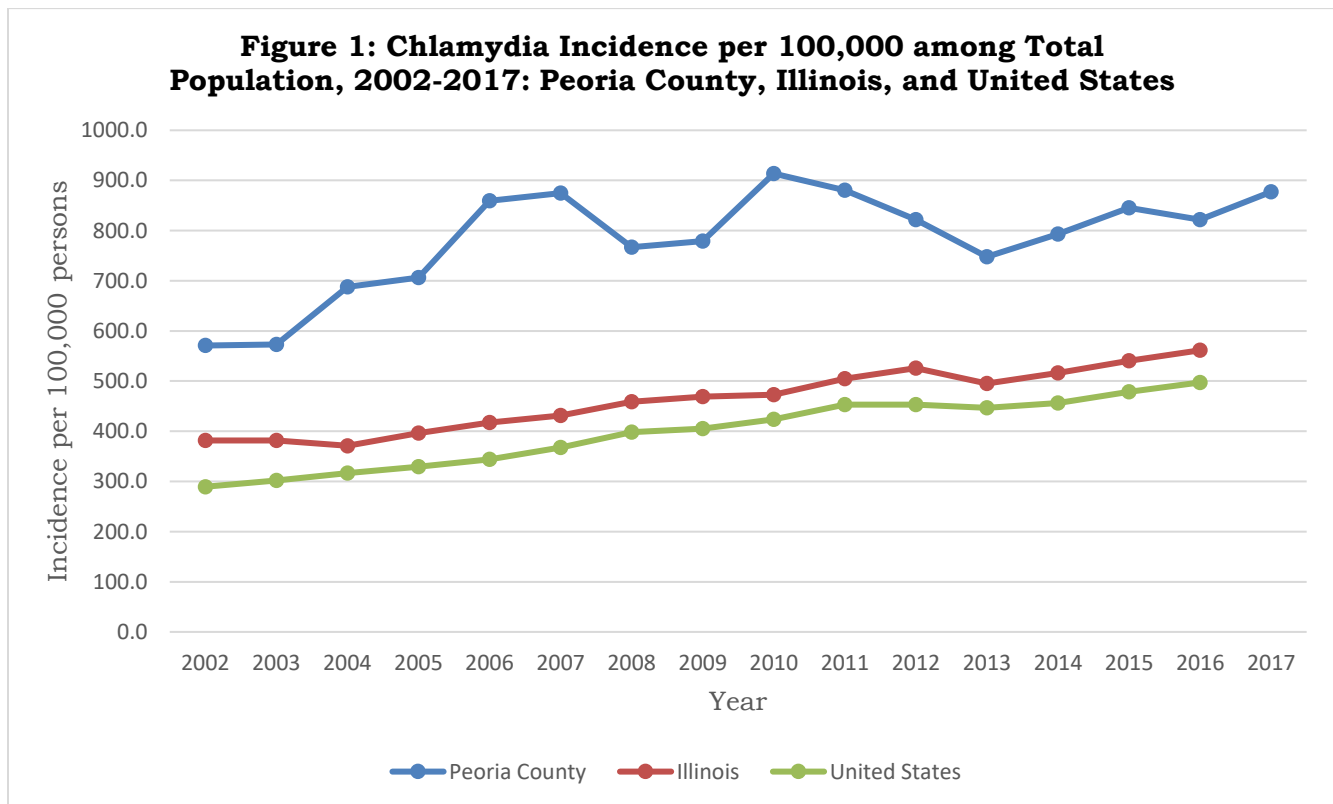
- The incidence of both Chlamydia and Gonorrhea within Peoria County continue to be 1.5 - 3 times that of the state and national values.
- The rates of both STIs are still greater among African American/Blacks compared to their White counterparts.
- The highest rates and number of cases are occurring in the 61603, 61604 and 61605 zip codes.
- Rates are highest among individuals between the ages of 15 and 29 years.
- Gonorrhea incidence rates significantly ($p < 0.01$) increased in Peoria County compared to the previous year, 2016.

Chlamydia Infection

In 2017, 1,639 confirmed cases of chlamydia infection were reported to the Peoria City/County Health Department, an overall incidence of 877.3 per 100,000 people. Females accounted for two-thirds (66.3%) of cases with 1,087 infections, while males comprised the other one-third (33.6%) with 550 cases (Table 1). The incidence rates for males and females for 2017 were 1129.4 and 607.2 per 100,000 respectively. The overall incidence rate in Peoria County remains between 1.5-2.0 times higher than that of Illinois and the United States (Figure 1).

Table 1: Chlamydia - Number of Reported Cases and Incidence (per 100,000), Peoria County, Illinois, 2017

	Cases	Incidence
Total	1639	877.3
<i>Males</i>	550	607.2
<i>Females</i>	1087	1129.4



Demographics

The highest concentration of chlamydia cases is still found within the 61603, 61604, and 61605 zip codes. These three zip codes accounted for 67.5% of chlamydia cases within Peoria county, however the combined population of these three zip codes only accounts for 34% of the total population of Peoria County (Table 2).

Table 2: Chlamydia - Number of Reported Cases and Incidence (per 100,000) in Specific Zip Codes and Remaining County, by Age, Peoria County, Illinois, 2017

	61603		61604		61605		Remaining Peoria County	
	Cases	Incidence	Cases	Incidence	Cases	Incidence	Cases	Incidence
<i>Overall</i>	366	2,205.6	370	1,183.8	371	2,284.1	532	433.5
<i>15-19</i>	124	11,071.4	146	8,523.1	132	10,467.9	170	2,116.3
<i>20-24</i>	130	8,819.5	125	6,596.3	130	11,786.0	194	2,270.3

The incidence of chlamydia infections differs greatly by age, gender and race within Peoria County. Females between the ages of 15-19 years had the highest incidence rate of Chlamydia with the next highest age group being females between the ages of 20-24 years old. For males in Peoria County, the highest incidence rate is found among those age 20-24 years old, followed by those age 15-19 years (Table 3). Peoria County rates among individuals age 15-19 years old are more than twice the rates of Illinois and the United States (Figure 2).

Among females, incidence rates of black/African American (AA) women were more than eight times that of their white counterparts. This disparity was also observed amongst males with incidence rates of black/AA males being more than 13 times that of their white counterparts (Table 3).

Table 3: Chlamydia - Number of Reported Cases and Incidence (per 100,000) in Females and Males, by Race and Age, Peoria County, Illinois, 2017

Race	Females		Males	
	Cases	Incidence	Cases	Incidence
<i>White</i>	308	435.2	128	192.2
<i>Black/AA</i>	660	3,852.2	397	2,578.3
<i>Other</i>	37	1,087.6	14	386.2
<i>Unknown</i>	73	--	8	--
Age				
<i>10-14</i>	17	283.9	1	16.3
<i>15-19</i>	447	7,161.2	130	2,143.4
<i>20-24</i>	386	5,781.9	197	3,106.8
<i>25-29</i>	148	2,196.5	116	1,762.1
<i>30-34</i>	48	759.1	52	810.9
<i>35-39</i>	20	349.5	29	460.2
<i>40-44</i>	11	189.9	11	230.2
<i>≥45</i>	10	24.6	13	37.2

Figure 2: Chlamydia Incidence among Females and Males Ages 15-19, 2002-2017: Peoria County, Illinois, and United States

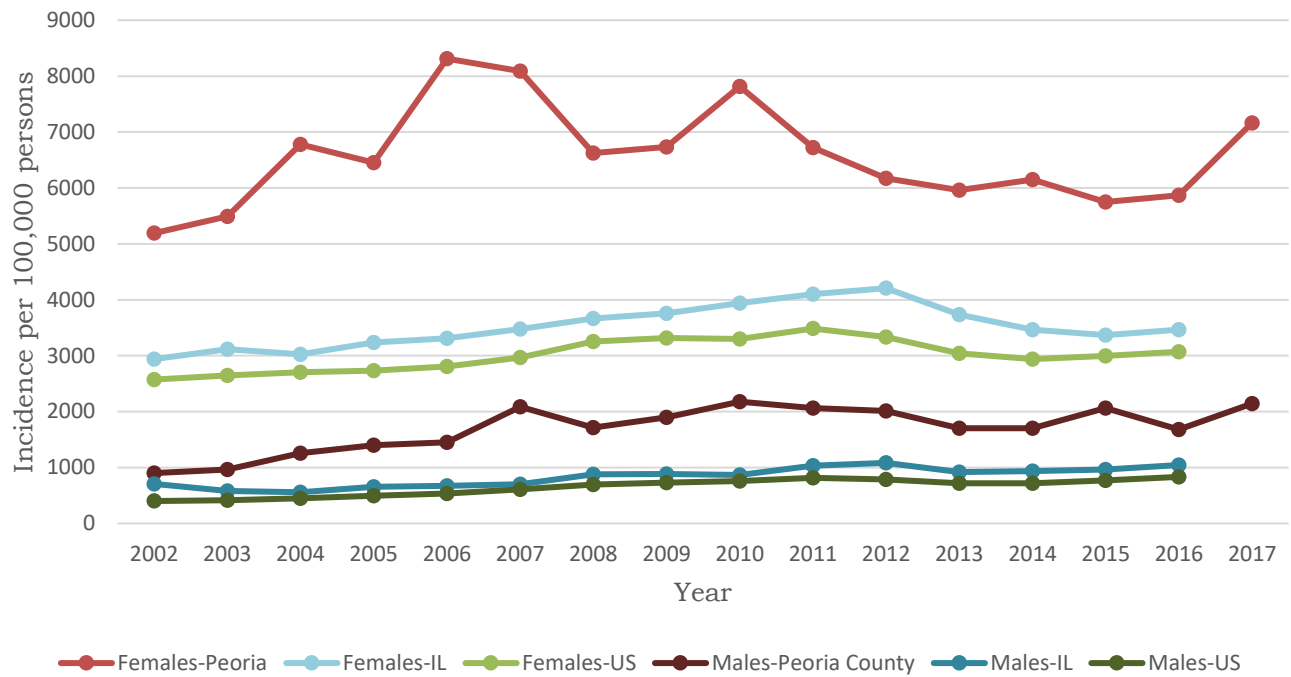
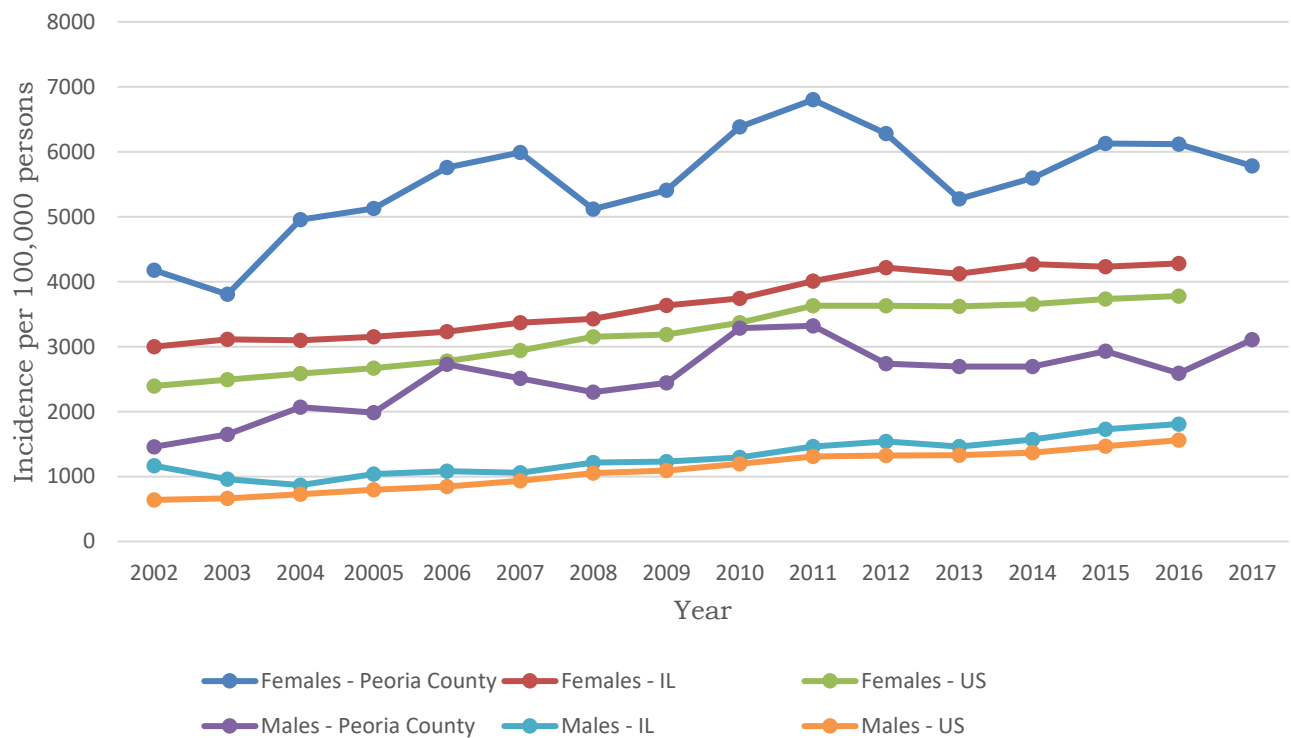


Figure 3: Chlamydia Incidence among Females and Males Ages 20-24, 2002-2017: Peoria County, Illinois, and United States



Over the past 15 years, chlamydia rates among males in Peoria have been steadily rising to a rate that is now twice what it was in 2002. Rates among females have fluctuated over the past 15 years, but overall risen 1.3 times that of the rate in 2002 (Table 4).

Table 4: Chlamydia - Number of Reported Cases and Incidence (per 100,000) by Gender in Peoria County, Illinois for the past 15 years (2002-2017)

Year	Males		Females		Total	
	Cases	Incidence	Cases	Incidence	Cases	Incidence
2002	246	280.0	797	840.4	1043	570.9
2003	270	308.1	775	818.3	1045	573.1
2004	310	352.9	946	998.2	1256	687.8
2005	334	379.5	958	1010.0	1292	706.5
2006	402	453.9	1175	1238.4	1577	859.7
2007	463	520.7	1147	1205.8	1610	874.6
2008	392	438.3	1025	1074.9	1417	766.8
2009	428	472.2	1028	1067.7	1456	778.9
2010	500	554.0	1204	1250.9	1704	913.7
2011	492	543.9	1152	1197.0	1644	880.5
2012	462	508.8	1077	1116.5	1539	821.9
2013	438	479.5	967	996.1	1409	747.8
2014	453	499.9	1029	1066.4	1485	792.8
2015	496	547.2	1074	1112.3	1583	845.6
2016	495	546.1	1040	1078.1	1538	822.0
2017	550	607.2	1087	1129.4	1639	877.3

The trends for individuals between the ages of 15-44 are similar to the overall population, however incidence rates are much higher during these major years of reproduction (Table 5 and Figure 4).

Table 5: Chlamydia - Number of Reported Cases and Incidence (per 100,000) among Males and Females Ages 15-44, Peoria County, Illinois, 2002-2017

Year	Males		Females		Total	
	Cases	Incidence	Cases	Incidence	Cases	Incidence
2002	242	651.8	766	1993.8	1008	1334.3
2003	261	710.9	752	1981.6	1013	1356.8
2004	304	834.1	917	2421.1	1221	1638.4
2005	322	883.0	935	2478.5	1257	1694.3
2006	384	1046.4	1145	3055.8	1529	2061.6
2007	457	1236.3	1118	2980.6	1575	2122.6
2008	379	1030.1	986	2631.8	1365	1838.2
2009	416	1116.8	1010	2656.5	1426	1894.6
2010	491	1333.4	1169	3089.4	1660	2223.4
2011	484	1313.4	1123	2566.2	1607	2155.6
2012	453	1240.5	1050	2785.4	1503	2013.0
2013	427	1159.1	950	2508.6	1381	1835.2
2014	437	1186.2	1008	2661.8	1447	1922.9
2015	481	1389.2	1050	2595.2	1544	2051.7
2016	484	1315.1	1021	2720.9	1502	2022.0
2017	535	1466.4	1060	2840.8	1595	2161.3

**Figure 4: Chlamydia Incidence among Males and Females
Ages 15-44, 2002-2017: Peoria County, Illinois**

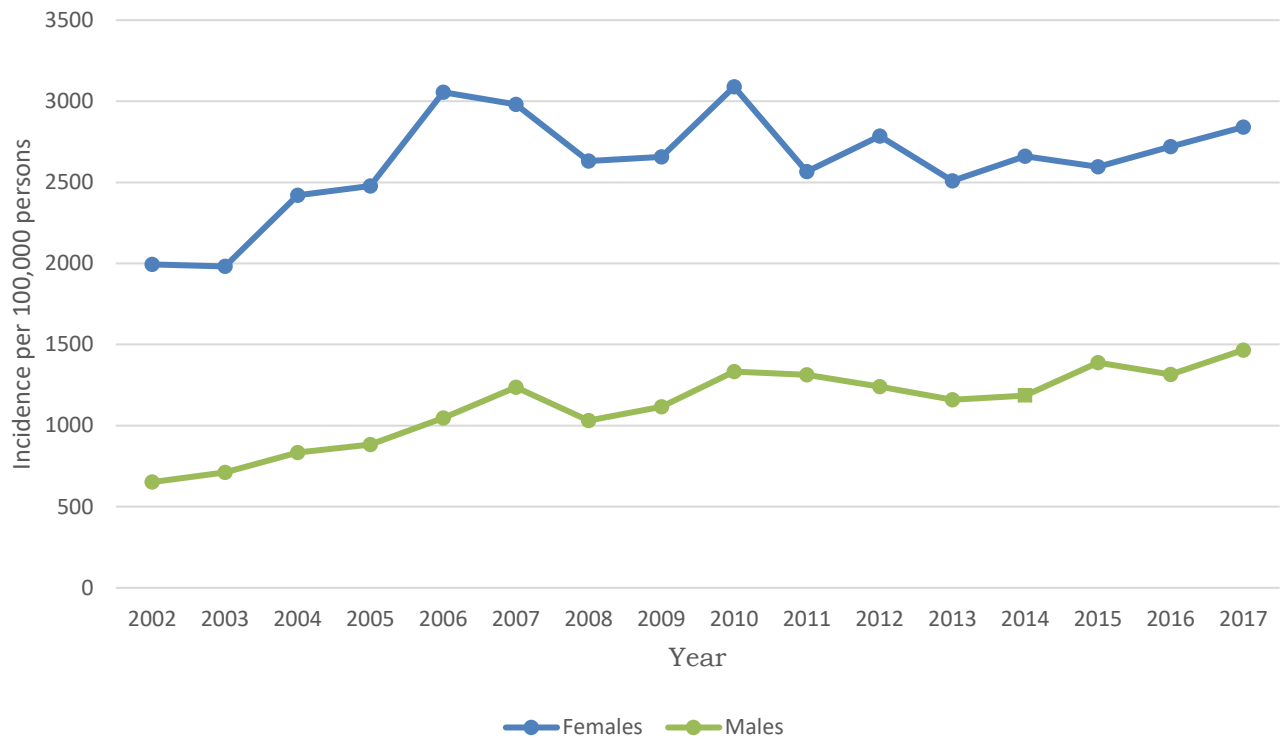


Table 6: Chlamydia - Number of Reported Cases and Incidence (per 100,000) among Males and Females Ages 15-24, Peoria County, Illinois, 2002-2017

Year	Males		Females		Total	
	Cases	Incidence	Cases	Incidence	Cases	Incidence
2002	155	1175.4	630	4668.7	785	2942.2
2003	171	1303.4	619	4621.1	790	2979.4
2004	217	1657.5	777	5855.8	994	3770.7
2005	221	1689.2	772	5781.9	993	3756.4
2006	276	2092.2	929	7013.4	1205	4557.8
2007	303	2296.5	938	7018.9	1241	4672.8
2008	263	1999.4	789	5865.7	1052	3754.1
2009	288	2164.6	831	6063.9	1119	4143.1
2010	358	2720.4	971	7092.8	1329	4949.7
2011	350	2691.1	911	6761.7	1261	4762.3
2012	310	2378.2	830	6229.8	1140	4325.1
2013	286	2208.5	737	5598.2	1027	3932.6
2014	286	2208.5	771	5856.4	1059	4055.1
2015	322	2501.9	792	5943.7	1123	4285.0
2016	274	2143.6	781	5997.1	1057	4123.4
2017	327	2635.8	833	6539.5	1160	4613.4

Gonorrhea Infection

In 2017, there were 871 confirmed cases of gonorrhea reported to the Peoria City/County Health Department, an overall incidence of 466.2 per 100,000. Males accounted for 50.3% of cases with an incidence rate of 483.6 per 100,00, while females comprised the remaining 49.7 % of cases with an incidence rate of 449.9 per 100,000 (Table 7). The total gonorrhea incidence for Peoria County continues to rise and is 50% higher than it was the previous year in 2016. Additionally, the incidence rate in 2016 was noted to be 28.8% higher than it was in 2015.

Table 7: Gonorrhea - Number of Reported Cases and Incidence (per 100,000), Peoria County, Illinois, 2017

	Cases	Incidence per 100,000
Total	871	466.2
<i>Males</i>	438	483.6
<i>Females</i>	433	449.9

Demographics

Gonorrhea infection rates continue to differ greatly by age, race, and region in Peoria County, with incidence rates being highest among individuals between the ages of 15 and 29, individuals reporting black/AA race, and individuals residing in the 61603, 61604, and 61605 zip codes (Tables 8 & 9).

These three zip codes contained 75% of all gonorrhea cases in Peoria County, while only representing 34% of the total population of Peoria County. The incidence rates within the 61603, 61604, and 61605 zip codes are more than 3-8 times that of the incidence rate in the remaining area of Peoria County despite this incidence rate for the remainder of Peoria County nearly doubling over the past year.

Table 8: Gonorrhea - Number of Reported Cases and Incidence (per 100,000) in Specific Zip Codes and Remaining County by Age, Peoria County, Illinois, 2017

	61603		61604		61605		Remaining Peoria County	
	Cases	Incidence	Cases	Incidence	Cases	Incidence	Cases	Incidence
<i>Overall</i>	235	1416.2	187	598.3	235	1446.8	214	174.4
<i>15-19</i>	54	4821.1	52	3035.6	50	3965.1	43	535.3
<i>20-24</i>	66	4477.6	58	3060.7	62	5621.0	62	725.6

While females between the ages of 15-19 and 20-24 had the same number of cases of gonorrhea, the incidence rate is highest for those between the ages of 15-19. In males, the incidence rate was highest for those between the ages of 20-24 (Table 9).

There is a drastic difference between incidence rates for whites and blacks/AAs in Peoria County. The incidence rate for black/AA females was more than 14 times greater than that of white females, while the incidence rate for black/AA males was 22.5 times higher than that of white males (Table 9).

Table 9: Gonorrhea - Number of Reported Cases and Incidence (per 100,000) in Females and Males, by Race and Age, Peoria County, Illinois, 2017

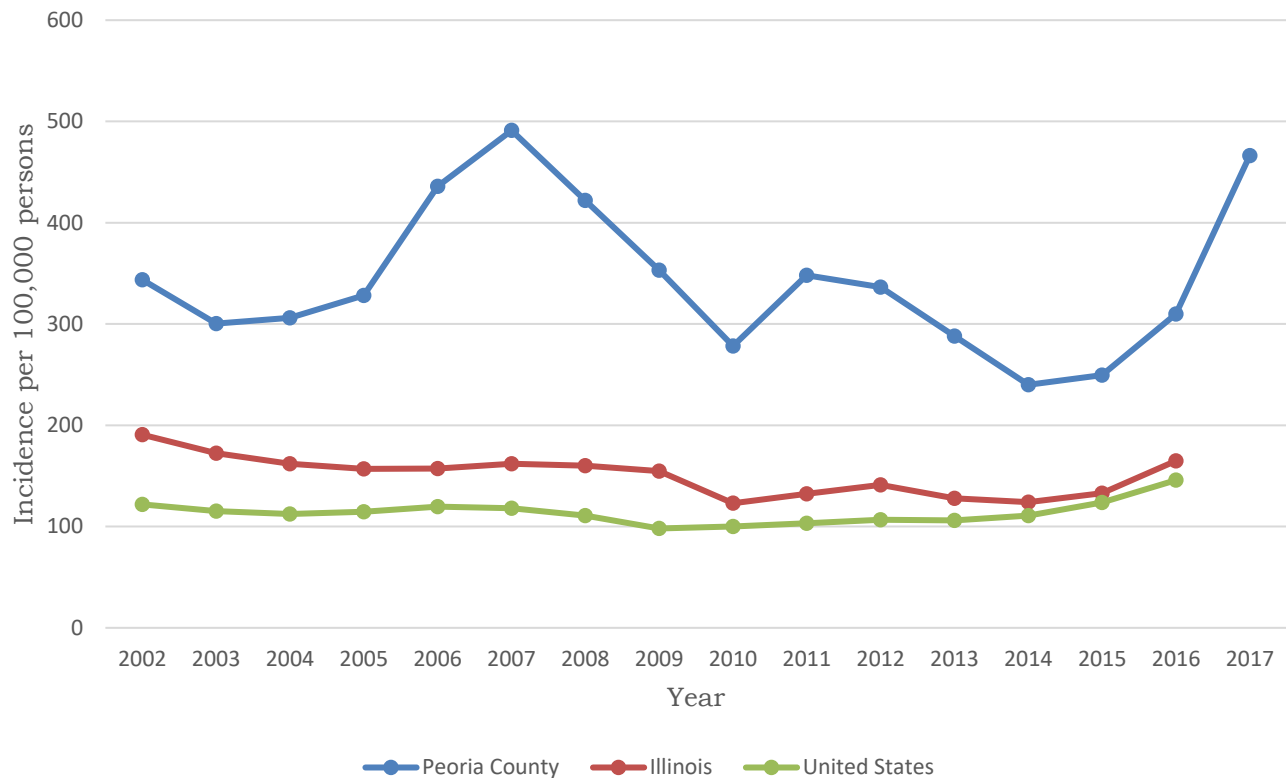
Race	Females		Males	
	Cases	Incidence	Cases	Incidence
<i>White</i>	91	128.6	68	102.1
<i>Black/AA</i>	315	1838.6	354	2299.0
<i>Other</i>	6	176.4	8	220.7
<i>Unknown</i>	21	--	8	--
Age				
<i>10-14</i>	11	183.7	2	32.7
<i>15-19</i>	134	2210.5	65	1071.7
<i>20-24</i>	134	2007.2	114	1797.8
<i>25-29</i>	81	1202.1	96	1458.3
<i>30-34</i>	37	585.2	64	998.0
<i>35-39</i>	12	209.7	32	507.8
<i>40-44</i>	13	224.4	21	439.4
<i>≥45</i>	11	27.1	44	126.0

After decreasing to a 15-year-low in 2014, the incidence rates have rapidly climbed to just below the highest rate for Peoria County within the past 15 years (Table 10). In comparison to the state of Illinois and the United States as a whole, incidence rates in Peoria County are nearly 3 times, and just over 3 times higher respectively (Figure 5).

Table 10: Gonorrhea - Number of Reported Cases and Incidence (per 100,000) among Females and Males, Peoria County, Illinois, 2002-2017

Year	Females		Males		Total	
	Case	Incidence	Case	Incidence	Case	Incidence
2002	348	366.9	280	318.7	628	343.8
2003	312	329.4	236	269.3	548	300.5
2004	313	330.3	246	280.1	559	306.1
2005	335	353.2	265	301.1	600	328.1
2006	487	513.3	313	353.4	800	436.1
2007	533	560.3	371	417.2	904	491.1
2008	456	478.2	324	362.2	780	422.1
2009	383	397.8	277	305.6	660	353.1
2010	299	310.7	220	243.8	519	278.3
2011	414	430.2	236	260.9	650	348.1
2012	385	399.1	245	269.8	630	336.4
2013	317	326.6	226	247.4	543	288.2
2014	267	276.7	181	199.7	449	240.0
2015	240	248.5	224	247.1	467	249.5
2016	296	306.8	282	311.1	580	310.0
2017	433	449.9	438	483.6	871	466.2

**Figure 5: Gonorrhea Incidence among Total Population, 2002-2017:
Peoria County, Illinois and United States**

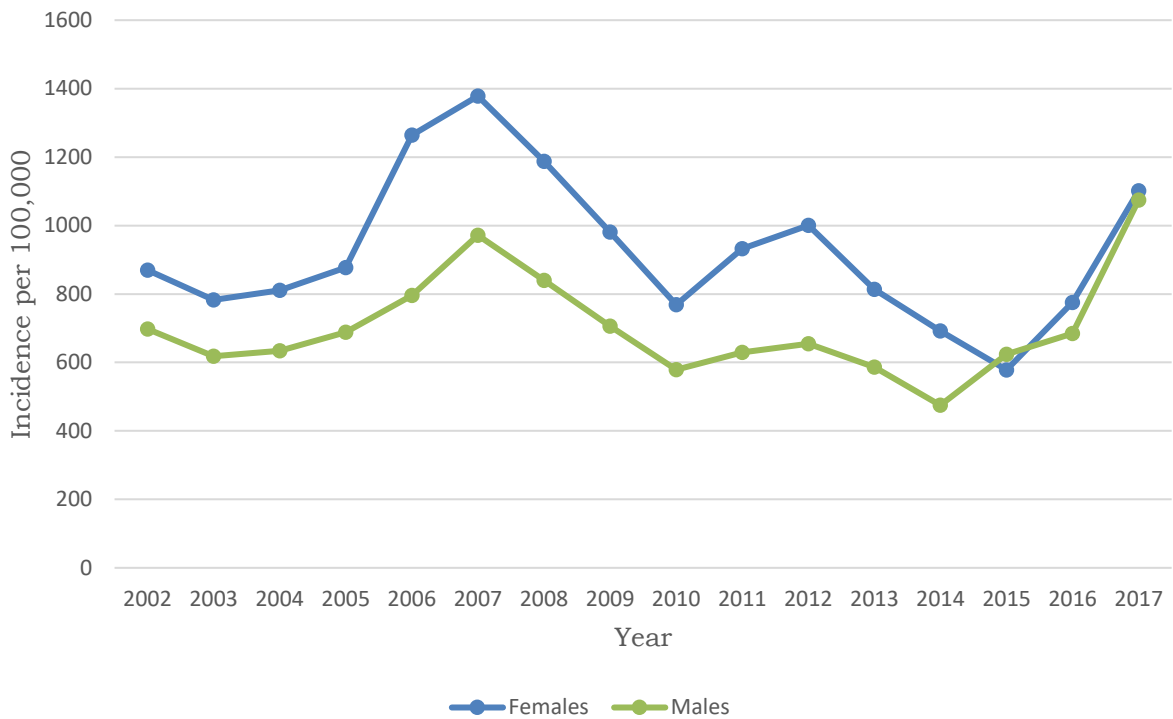


The following table (Table 11) focuses on the highest reproductive ages of 15-44 years. The historical trend for both females and males can also be found in Figure 6.

Table 11: Gonorrhea - Number of Reported Cases and Incidence (per 100,000) among Females and Males Ages 15-44, Peoria County, Illinois, 2002-2017

Year	Females		Males		Total	
	Case	Incidence	Case	Incidence	Case	Incidence
2002	334	869.4	259	697.6	593	784.9
2003	297	782.6	227	618.3	524	701.8
2004	307	810.6	231	633.8	538	721.9
2005	331	877.4	251	688.3	582	784.5
2006	474	1264.0	292	795.7	766	1032.8
2007	517	1378.3	359	971.2	876	1180.5
2008	445	1187.8	309	839.9	754	1015.4
2009	373	981.1	263	706.1	636	845.0
2010	291	769.0	213	578.5	504	675.1
2011	408	932.3	232	629.6	640	858.5
2012	377	1000.1	239	654.5	616	825.0
2013	308	813.3	216	586.3	524	696.4
2014	262	691.9	175	475.0	438	582.1
2015	234	578.4	216	623.9	453	786.0
2016	291	775.5	252	684.7	545	733.7
2017	411	1101.5	392	1074.5	803	1088.1

**Figure 6: Gonorrhea Incidence among Females and Males
Ages 15-44, 2002-2017: Peoria County**



As noted in Table 9, the highest incidence for both women and men were found among those between the ages of 15 and 24 years. The trends for this specific age group over the past 15 years can be viewed in Table 12. Peoria County rates among those 15-24 years old are more than double those of the nation and the state (Figure 7 & 8).

Table 12: Gonorrhea - Number of Reported Cases and Incidence (per 100,000) among Females and Males Ages 15-24, Peoria County, Illinois, 2002-2017

Year	Females		Males		Total	
	Case	Incidence	Case	Incidence	Case	Incidence
2002	246	1823.0	151	1145.1	397	1488.0
2003	240	1791.7	144	1097.6	384	1448.2
2004	229	1725.8	127	970.1	356	1350.5
2005	252	1887.4	149	1138.9	401	1516.9
2006	363	2740.4	173	1311.4	536	2027.4
2007	392	2933.3	207	1568.9	599	2255.4
2008	327	2431.0	205	1558.5	532	1999.6
2009	277	2021.3	164	1232.6	441	1632.8
2010	224	1636.2	121	919.5	345	1284.9
2011	292	2167.3	147	1130.2	439	1657.9
2012	283	2124.1	145	1112.4	428	1623.8
2013	217	1648.3	127	980.7	344	1317.3
2014	195	1481.2	100	772.2	296	1133.4
2015	170	1275.8	101	784.8	274	1045.5
2016	197	1512.7	117	915.3	315	1228.8
2017	268	2103.9	179	1442.9	447	1777.8

Figure 7: Gonorrhea Incidence among Females and Males Ages 15-19, 2002-2017: Peoria County, Illinois and United States

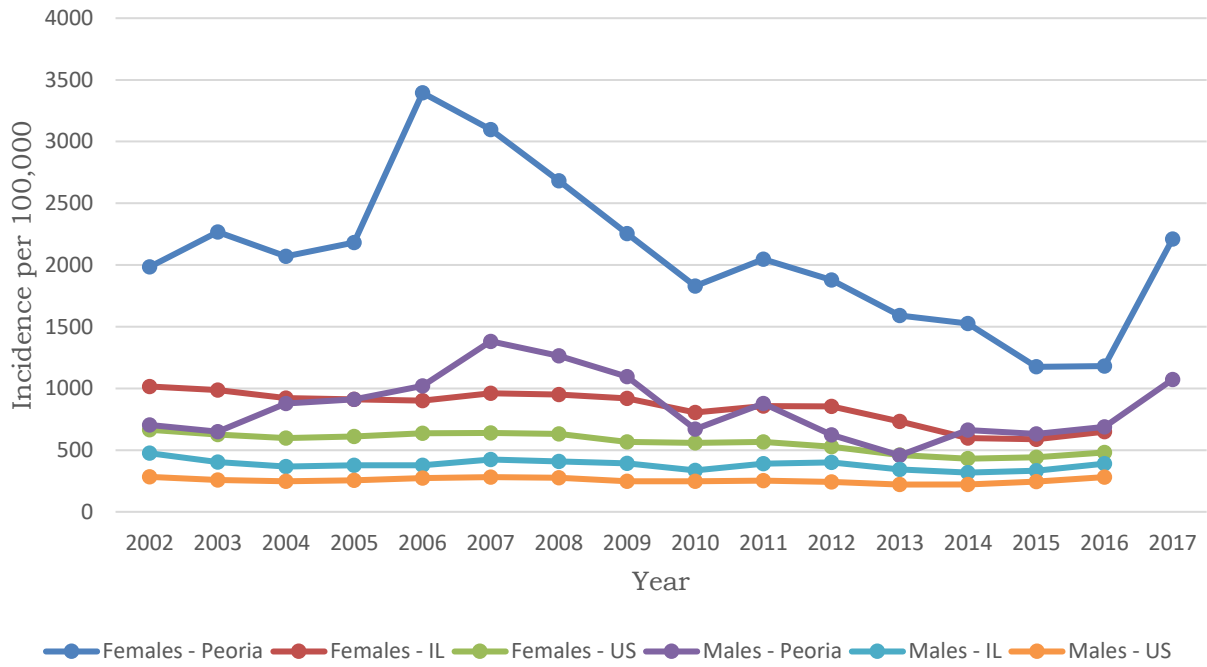
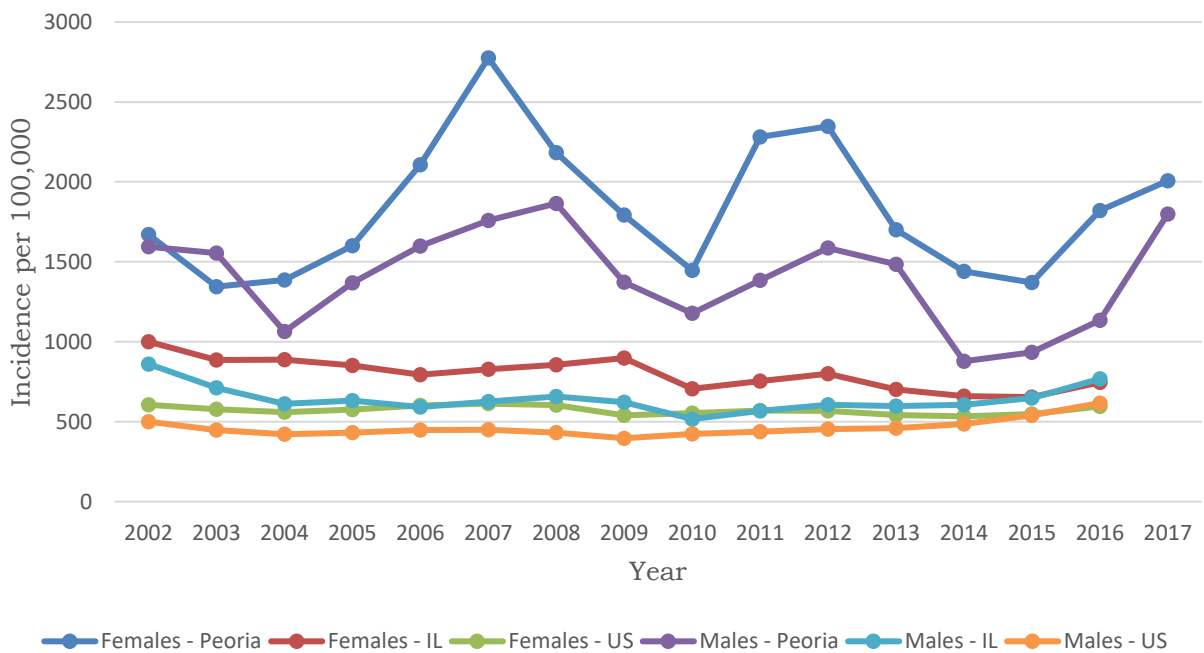


Figure 8: Gonorrhea Incidence among Females and Males Ages 20-24, 2002-2017: Peoria County, Illinois, and United States



Partnership for a Healthy Community: Reproductive Health

In December 2016, the Peoria County Board of Health approved the Tri-County Community Health Improvement Plan (CHIP) 2017-2020. CHIP provides a systematic approach to address health issues identified through a community-driven process. Reproductive health is one of the four priorities to be addressed in collaboration with community partners.

Reproductive Health		
Perceptions of Health in Our Community		
#6 Early Sexual Activity	Ranked among Top Ten health issues within the Tri-County area	#10 Sexually Transmitted Infections
Sexually Transmitted Infections		
<p>Chlamydia</p> <ul style="list-style-type: none"> • 877.3 cases per 100,000 Peoria County residents • 1.5-2.0 times the national rate 	<p>Gonorrhea</p> <ul style="list-style-type: none"> • 466.2 cases per 100,000 Peoria County residents • More than 3 times the national rate 	

The goal of the Reproductive Health priority is to improve and promote reproductive and sexual health of adolescents and young adults. National benchmark objectives and evidence-based strategies to achieve the Reproductive Health goal are listed below.

Objectives

- Reduce total preterm births among Peoria County African America/Black women to 11.4% by 2019 (baseline = 13.2%)
- Reduce gonorrhea rates among men and women ages 15-44 years by 10% by 2019
- Reduce pregnancies among adolescent females age 15-19 years by 10% by 2019

Strategies

- Preconception care and contraception
- Service Learning Programs
- Comprehensive Risk Reduction Sexual Education
- Behavioral and Biomedical Interventions
- Parenting and Caregiver Interventions

Data Sources

Peoria County chlamydia and gonorrhea data:

This report presents information on the cases and rates of Chlamydia infection and Gonorrhea infection within Peoria County. Both of 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 Peoria City/County Health Department investigates and conducts follow-up for treatment of both Chlamydia and Gonorrhea before submission to the Illinois Department of Public Health. The case values utilized in the report are for the year 2017. Once finalized data has been processed by the Illinois Department of Public Health and validated by the Centers for Disease Control and Prevention, an updated report will be published.

State and national chlamydia and gonorrhea data:

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

Population data:

Incidence rates were calculated using population estimates from U.S. Census American Community Survey 5-year estimates. Information includes estimates on total population, gender, race, and age groups for Peoria 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 as 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.

Partnership for a Health Community

Additional information including data and improvement planning can be found at www.healthyhoi.com.

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