

Sexually Transmitted Infections (STIs) in the City of St. Louis

5 YEAR SUMMARY 2010-2014

**City of St. Louis
Department of Health**

February, 2015



Data Sources

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Data Sources: Missouri Department of Health and Senior Services STD-MIS (unless otherwise noted)

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Outline

1. Public Health Impact of STIs
2. Changes in 2014
3. Regional Efforts to Reduce STIs
4. Regional Strategic Goals
5. Chlamydia
6. Gonorrhea
7. Primary and Secondary Syphilis
8. STIs in Young Adults



STIs and Impact on Public Health

- Chlamydia and Gonorrhea are the most commonly reported sexually transmitted Infections in the United States, Missouri and City of St. Louis.
- Women with untreated chlamydia and gonorrhea develop pelvic inflammatory disease which can lead to infertility.
- Babies born to women with untreated STIs may suffer death or experience significant damage and sometimes permanent disability.
- STIs can increase the risk of HIV transmission and acquisition.



2014 City of St. Louis STI Rates - Key Numbers

Chlamydia

- There was a 3.3% decrease in new chlamydia cases compared to 2013
- The rate of chlamydia in 2014 was 1250.6 cases per 100,000
- 70% of all chlamydia cases occurred in youth aged 13-24
- 80% of all youth aged 13-24 with chlamydia were African American

Gonorrhea

- There was a 12% decrease in new gonorrhea cases compared to 2013
- The rate of gonorrhea in 2014 was 484.2 cases per 100,000
- 62% of all gonorrhea cases occurred in youth aged 13-24
- 88% of all youth aged 13-24 with gonorrhea were African American

Primary and Secondary Syphilis

- The rate of syphilis in 2014 is 25.4 cases per 100,000
- 86% of P and S syphilis occurs among males
- 91.4% of P and S syphilis occurs in males aged 25-49



City of St. Louis - Department of Health Response

- Increased mobile outreach testing funded by Health Education Risk Reduction grant
- Continued expansion of education and outreach to area schools, youth programs, and community partners such as Better Family Life and 100 Black Men
- Expanding the regional HIV prevention group to include STI elimination and viral Hepatitis
- Condom availability program; over 60 sites and expanding
- Downtown Urgent Care and North City Urgent Care; sliding fee scale
- Dedicated staff person for gonorrhea follow up



Strategic Goals

- Identify at-risk populations through data analysis, assist providers with data analysis
- Determine gaps in testing for at-risk populations
- Increase prevention messages to reduce STIs through targeted education and outreach
- Develop a comprehensive STI surveillance system, move to real-time monitoring
- Sustain working evidence-based interventions
- Monitor progress by evaluating test statistics from the state and private labs
- Contribute to a Regional plan for STI related care



STI Rankings by Counties and Independent Cities, 2010-2014

Year	Chlamydia				Gonorrhea				P&S Syphilis			
	Case Count	Rate per 100,000	Rate Rank out of 70	Count Rank Out of 70	Case Count	Rate per 100,000	Rate Rank out of 70	Count Rank Out of 70	Case Count	Rate per 100,000	Rate Rank out of 70	Count Rank Out of 70
2010	4,509	1,412.2	na*	na*	1694	530.5	3	37	57	17.5	20	49
2011	4,642	1,453.8	2	59	1952	611.3	2	34	45	14.1	16	63
2012	4,081	1,278.1	2	62	1763	552.2	2	40	47	14.7	19	70
2013	4,128	1,292.9	1	63	1754	549.3	2	44	60	18.5	9	58
2014	3,996	1,251.5	1	68	1546	484.7	1	47	82	25.4	9	51

*Chlamydia rankings for City of St. Louis were not included in the 2010 CDC STD Surveillance Report

Source: Centers for Disease Control and Prevention - Annual STD Surveillance Summaries as published



St. Louis Metropolitan Statistical area STI Rankings Among Selected* MSA, 2010-2014

Year	CHLAMYDIA		GONORRHEA		PRIMARY & SECONDARY SYPHILIS	
	<i>Rate Rank</i>	<i>Count Rank</i>	<i>Rate Rank</i>	<i>Count Rank</i>	<i>Rate Rank</i>	<i>Count Rank</i>
2010	13	14	18	13	35	26
2011	13	15	7	11	42	31
2012	15	16	10	12	42	34
2013	12	15	12	13	43	33
2014	15	15	17	12	38	32

*Metropolitan Statistical Areas were selected based on the largest population according to the 2010 U.S. Census, Definitions for MSAs are issued by the Office of Management and Budget (OMB) to be used in presentation of statistics by agencies of the federal government

Source: Centers for Disease Control and Prevention - Annual STD Surveillance Summaries as published



Chlamydia, Gonorrhea & Syphilis Rate per 100,000 City of St. Louis 2010-2014

Year	Chlamydia		Gonorrhea		Primary and Secondary Syphilis		Early Latent Syphilis		Congenital Syphilis*°	
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
2009	4,390	1374.9	1,296	405.9	39	12.8	55	15.7	1	19.5
2010	4,509	1412.2	1,694	530.5	57	17.5	50	15.7	0	0.0
2011	4,642	1453.8	1,952	611.3	45	14.1	42	13.2	1	20.2
2012	4,081	1278.1	1,763	552.2	47	14.7	38	11.9	0	0.0
2013	4,128	1292.9	1,754	549.3	60	18.8	70	21.9	1	22.0
2014	3,993	1250.6	1,546	484.2	81	25.4	72	22.5	1	22.0

* Congenital Syphilis rates per 100,000 Live Births; all other rates per 100,000 population

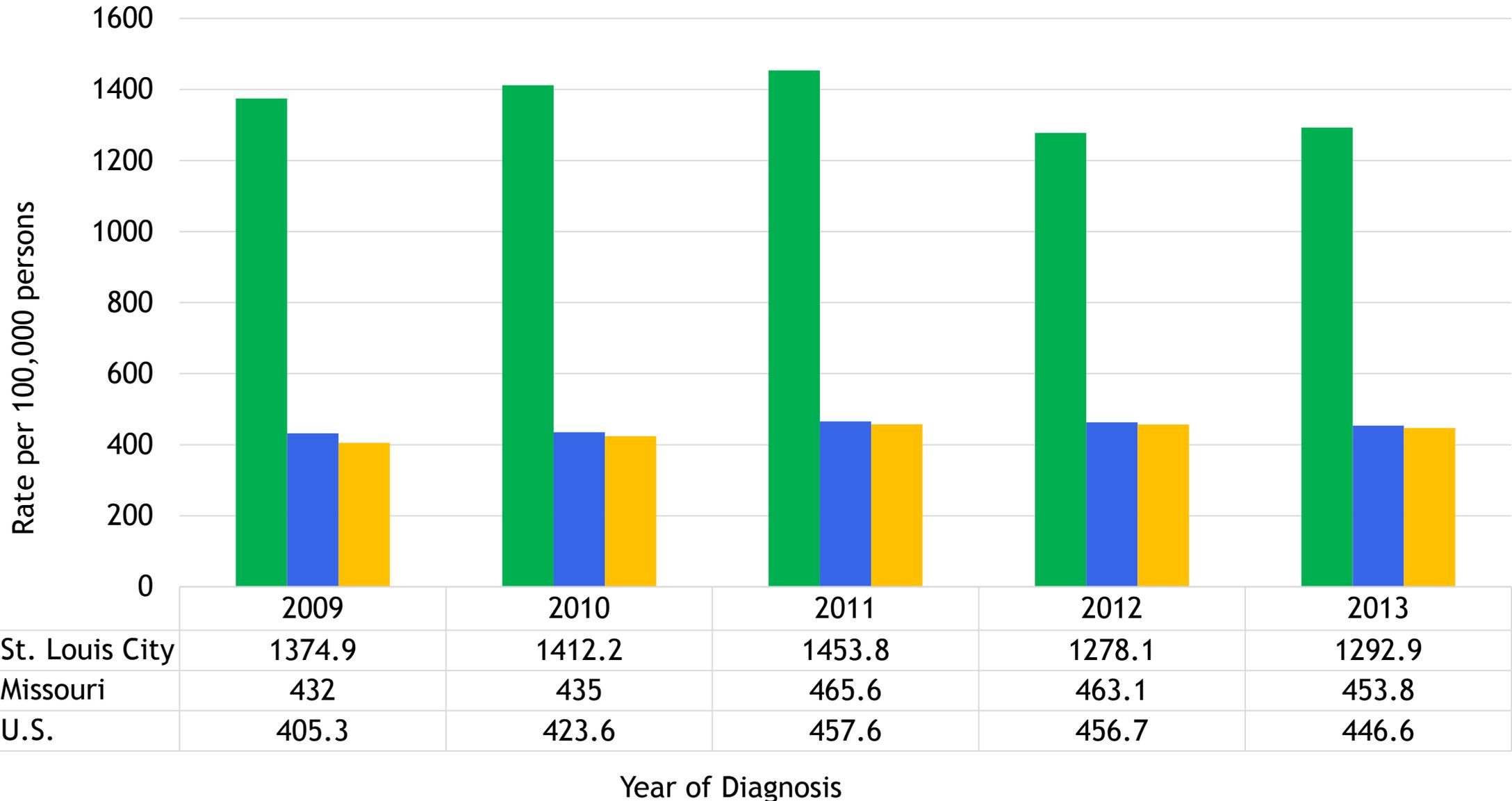
° Congenital Syphilis Rates for 2013 and 2014 are calculated using 2013 live birth data



Chlamydia

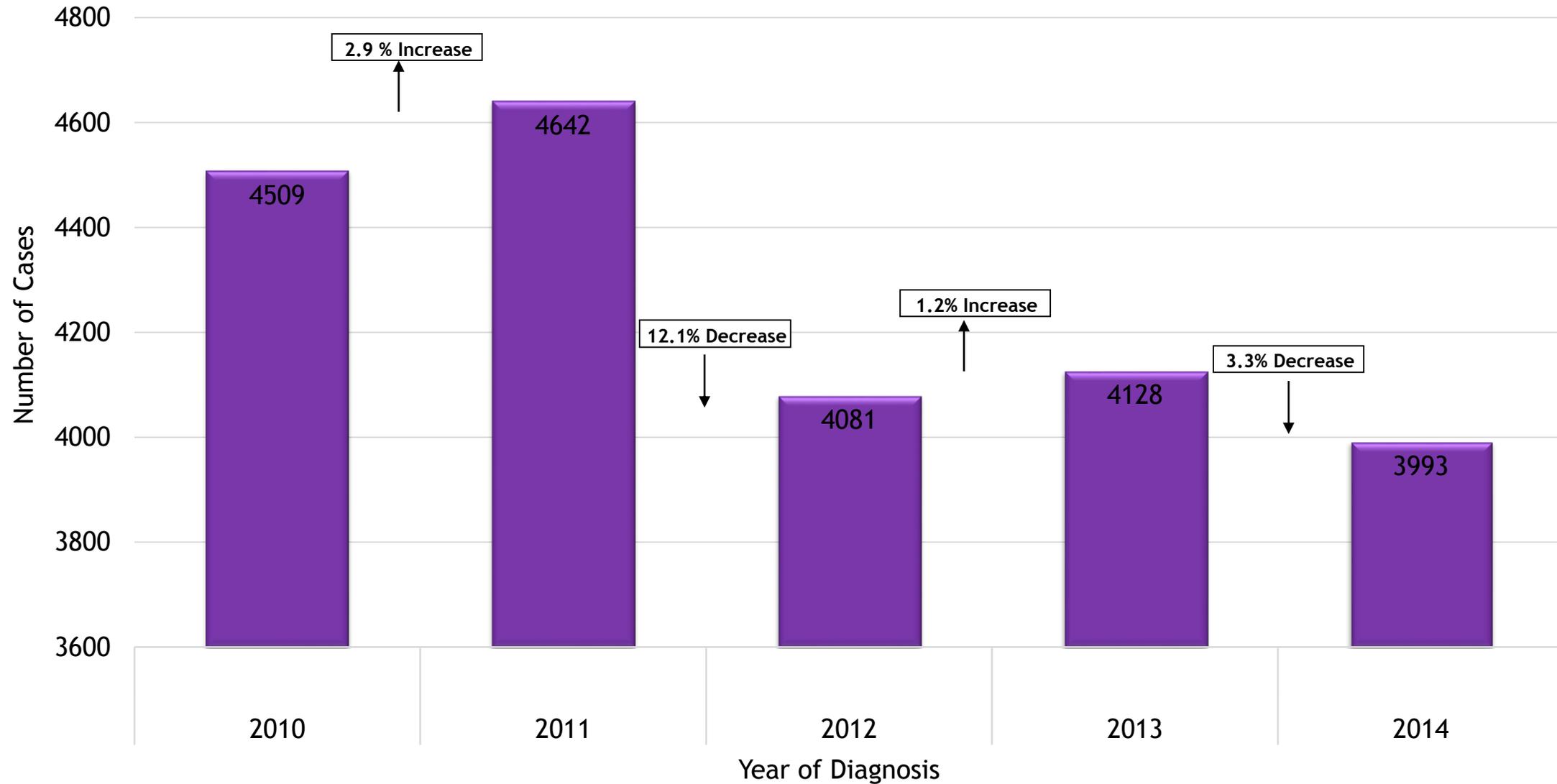


Comparison of Chlamydia Incidence Rate City of St. Louis, Missouri, and United States 2009-2013



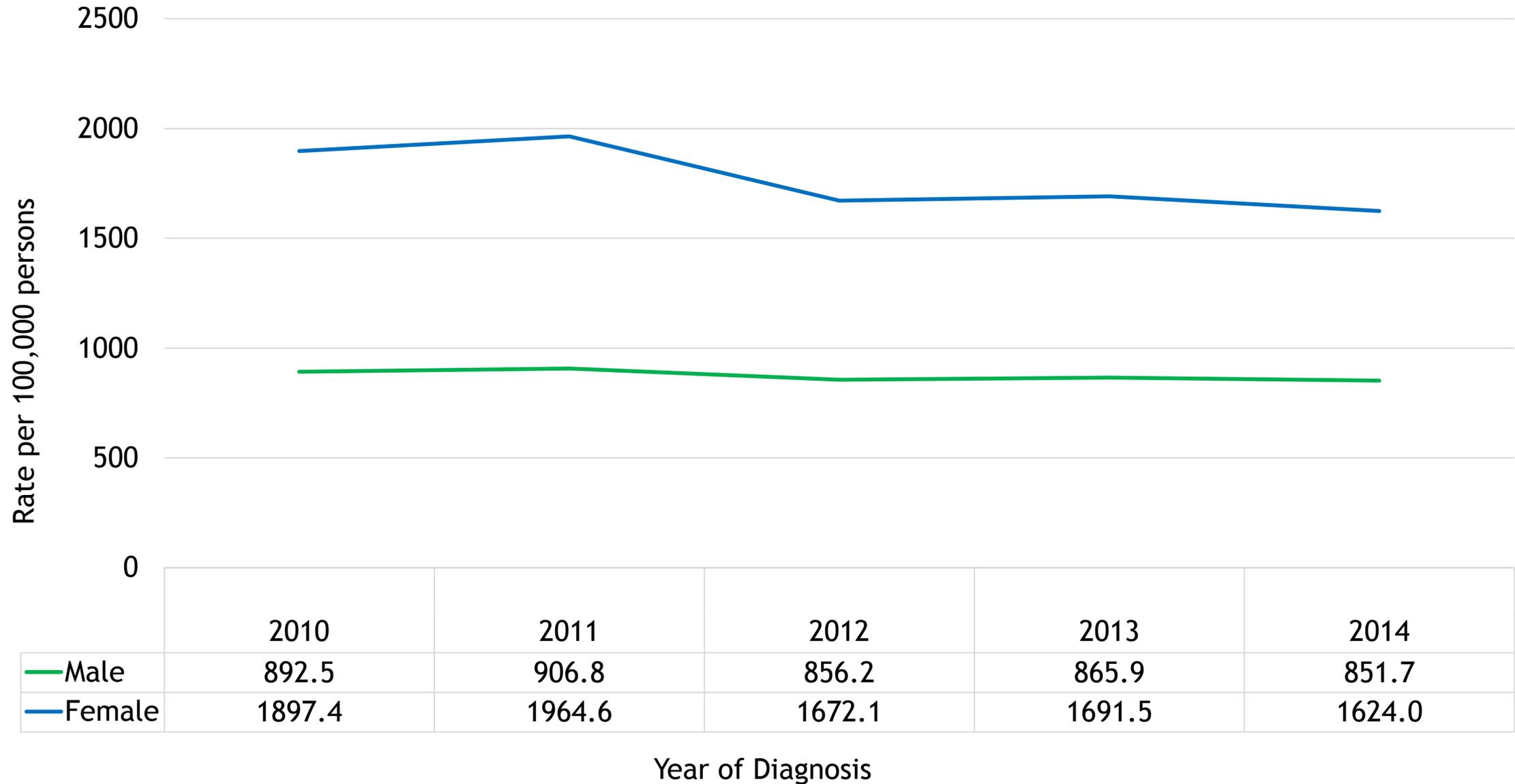
Reported Chlamydia Cases by Year

City of St. Louis, 2010-2014

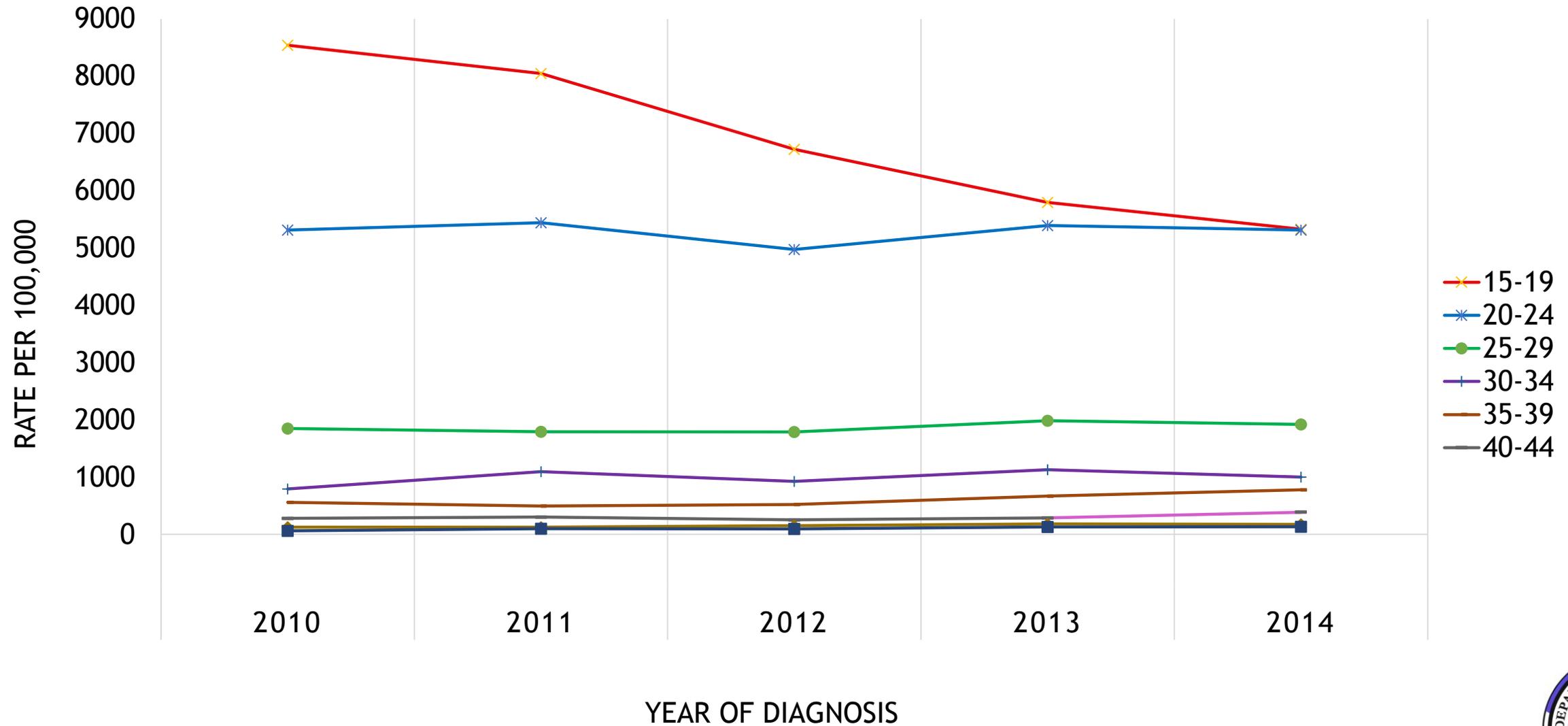


Chlamydia Incidence Rate by Gender

City of St. Louis, 2010-2014

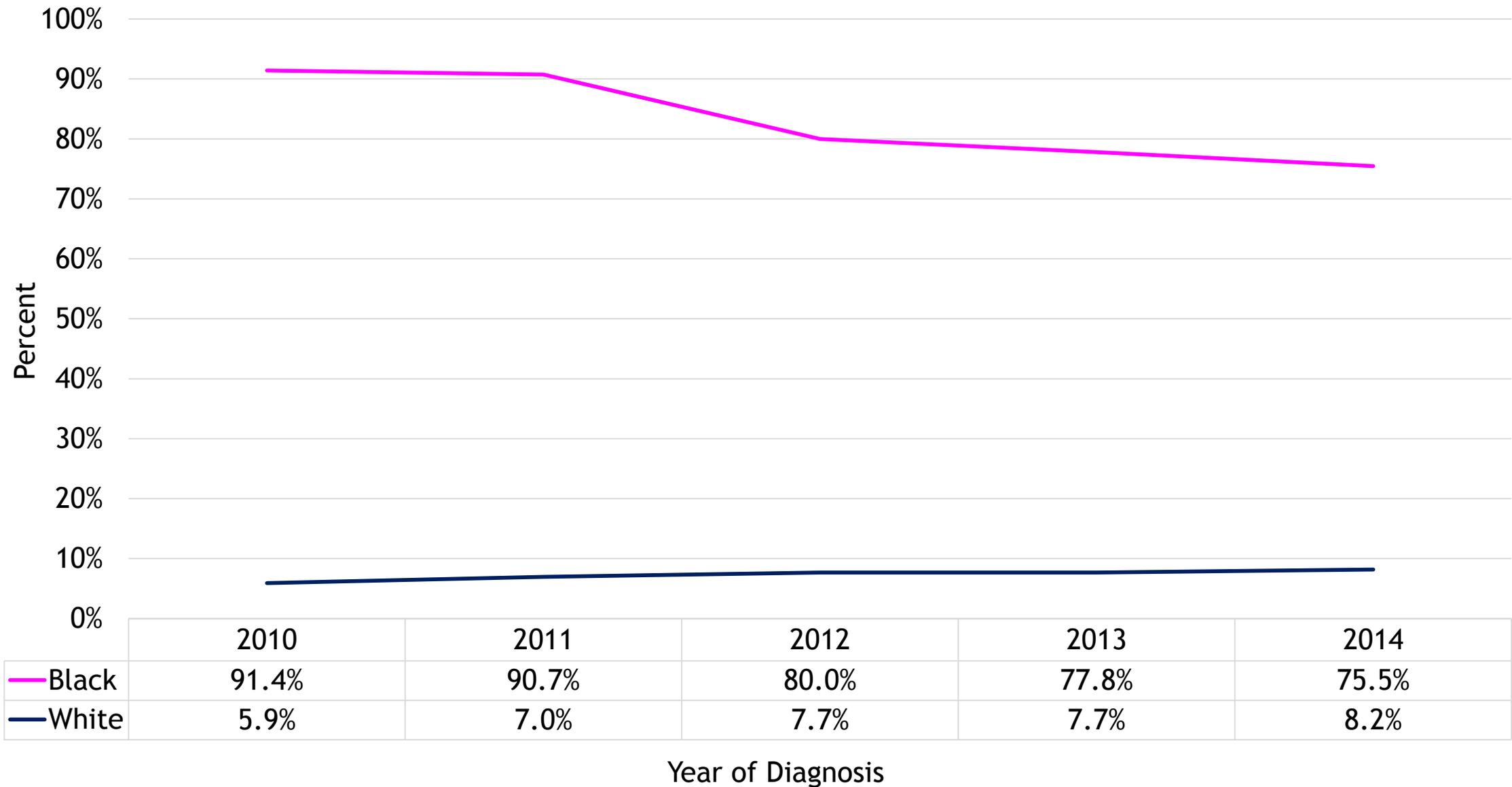


Chlamydia Incidence Rate by Age Group City of St. Louis, 2010-2014

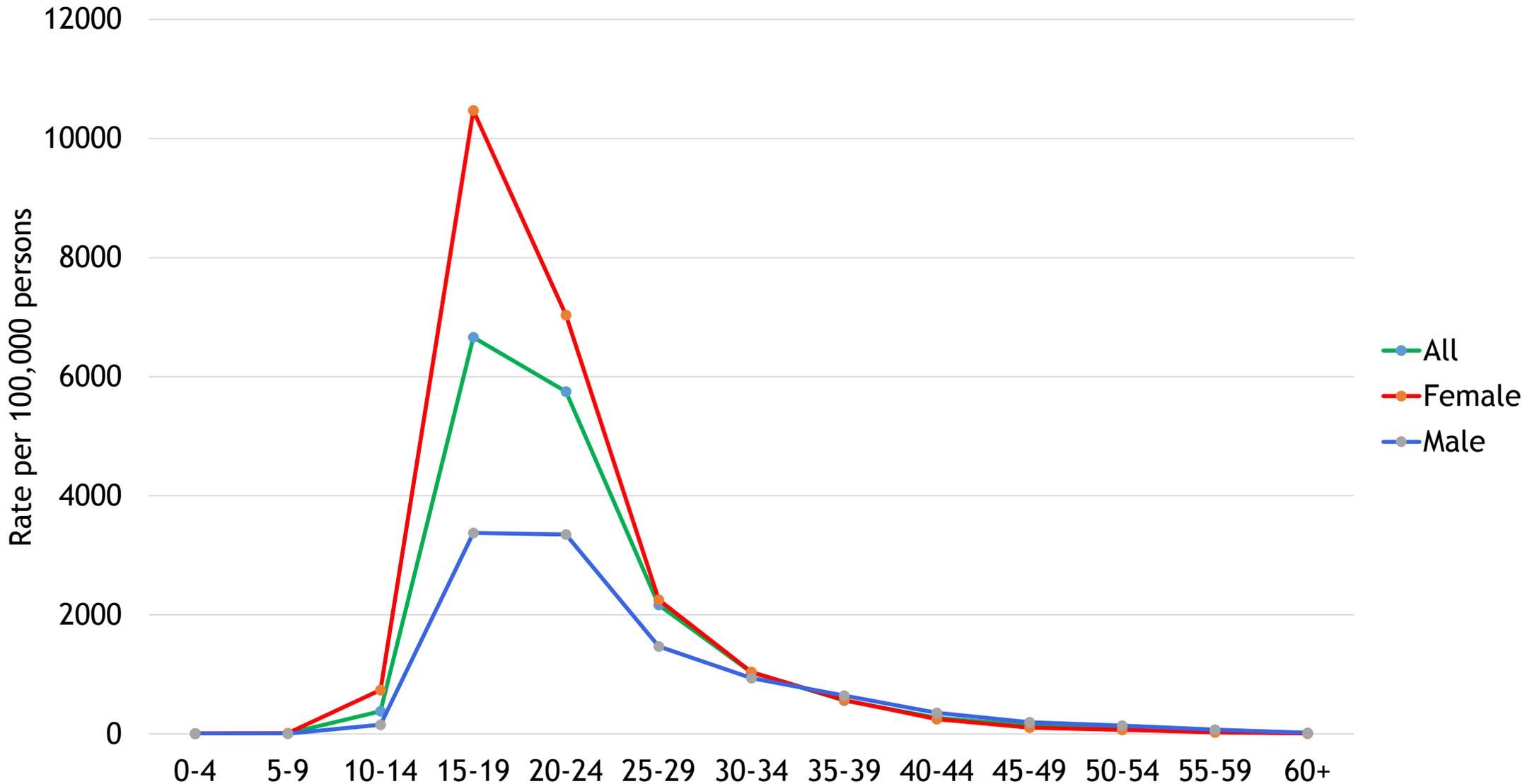


Percent of Chlamydia Reported Cases by Race

City of St. Louis, 2010-2014



Chlamydia Incidence Rate by Age Group and Gender City of St. Louis 2010-2014 Five Year Average



Chlamydia Compared - City of St. Louis

2010-2014 Average

4270.6 Cases

68% Female

76% Black

72% 15-24 age Group

Highest Rate Zip Code

63120 (33.3 cases per 1,000)

63106 (26.2 cases per 1,000)

63113 (21.5 cases per 1,000)

2014

3993 Cases

67% Female

75% Black

68% 15-24 age Group

Highest Rate Zip Code

63120 (27.4 cases per 1,000)

63106 (21.6 cases per 1,000)

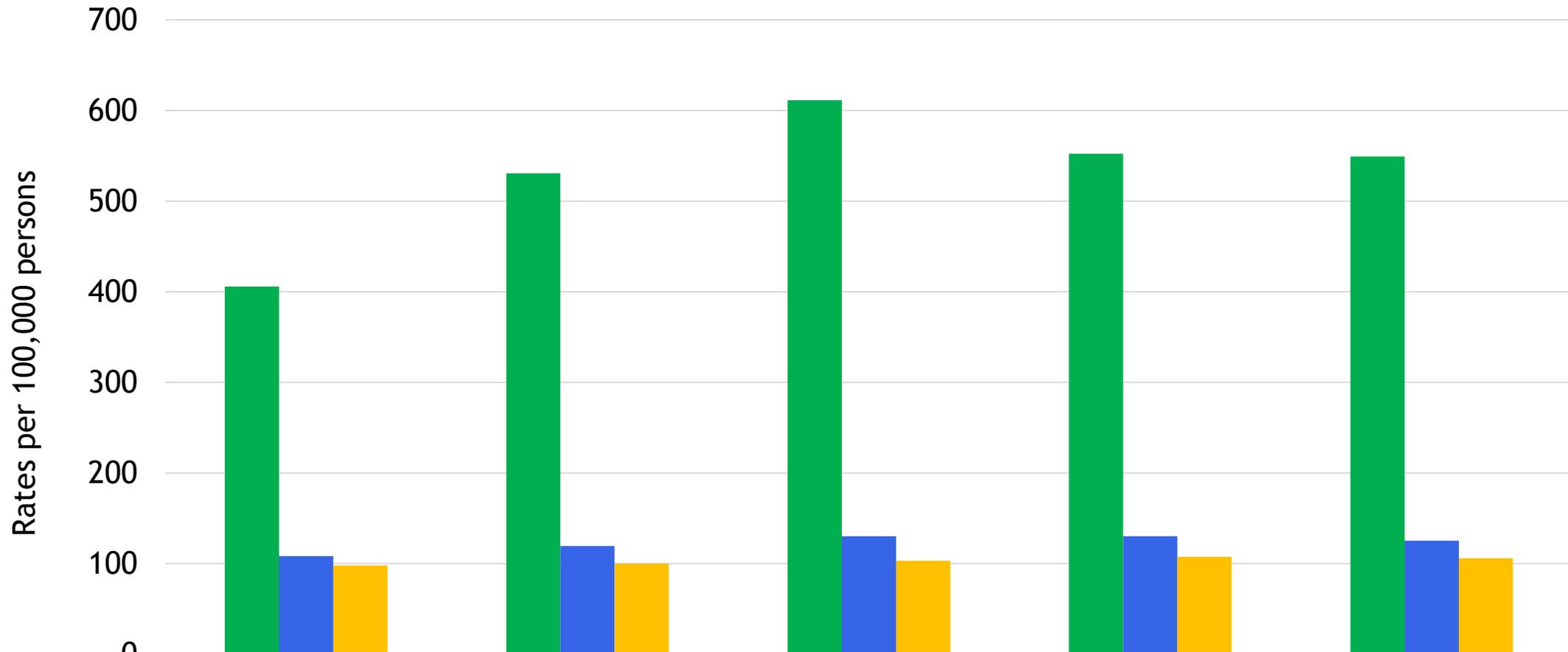
63113 (19.3 cases per 1,000)



Gonorrhea



Comparison of Gonorrhea Incidence Rate City of St. Louis, Missouri, and United States 2009-2013

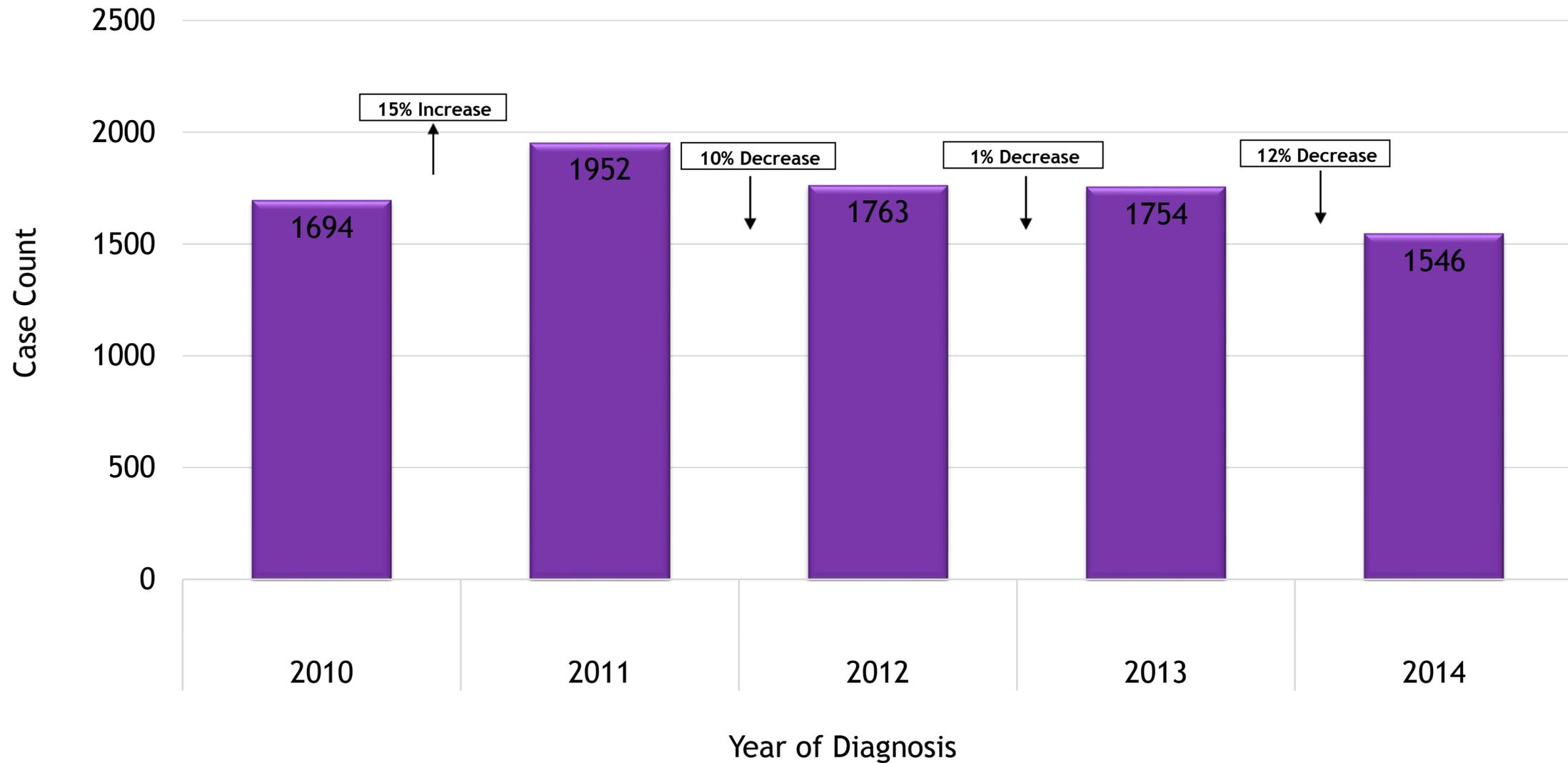


	2009	2010	2011	2012	2013
■ St. Louis City	405.9	530.5	611.3	552.2	549.3
■ Missouri	108.4	119.5	130.3	130.3	125.3
■ U.S.	98.1	100.2	103.3	107.5	106.1

Year of Diagnosis

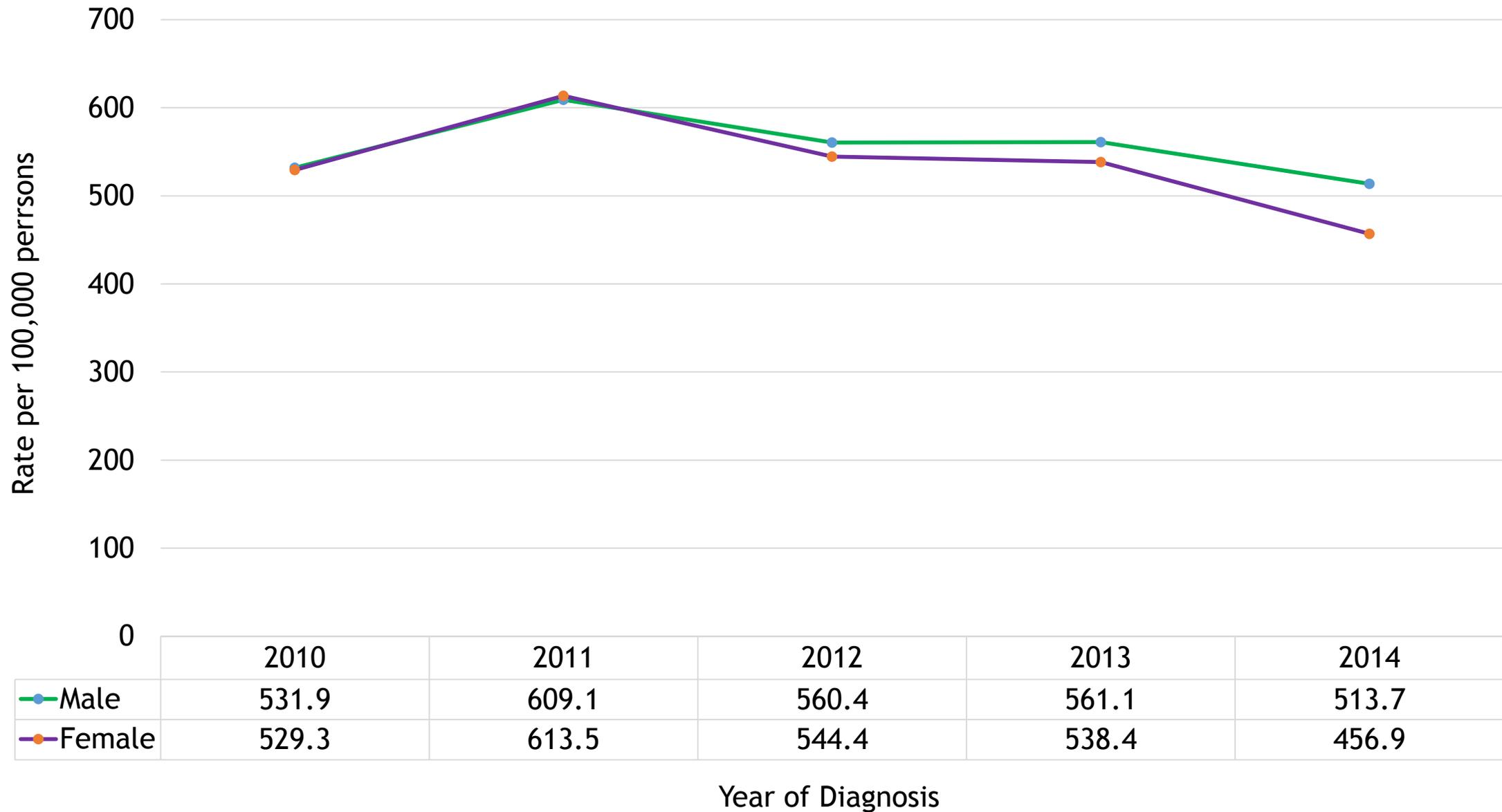


Reported Gonorrhea Cases City of St. Louis, 2010-2014



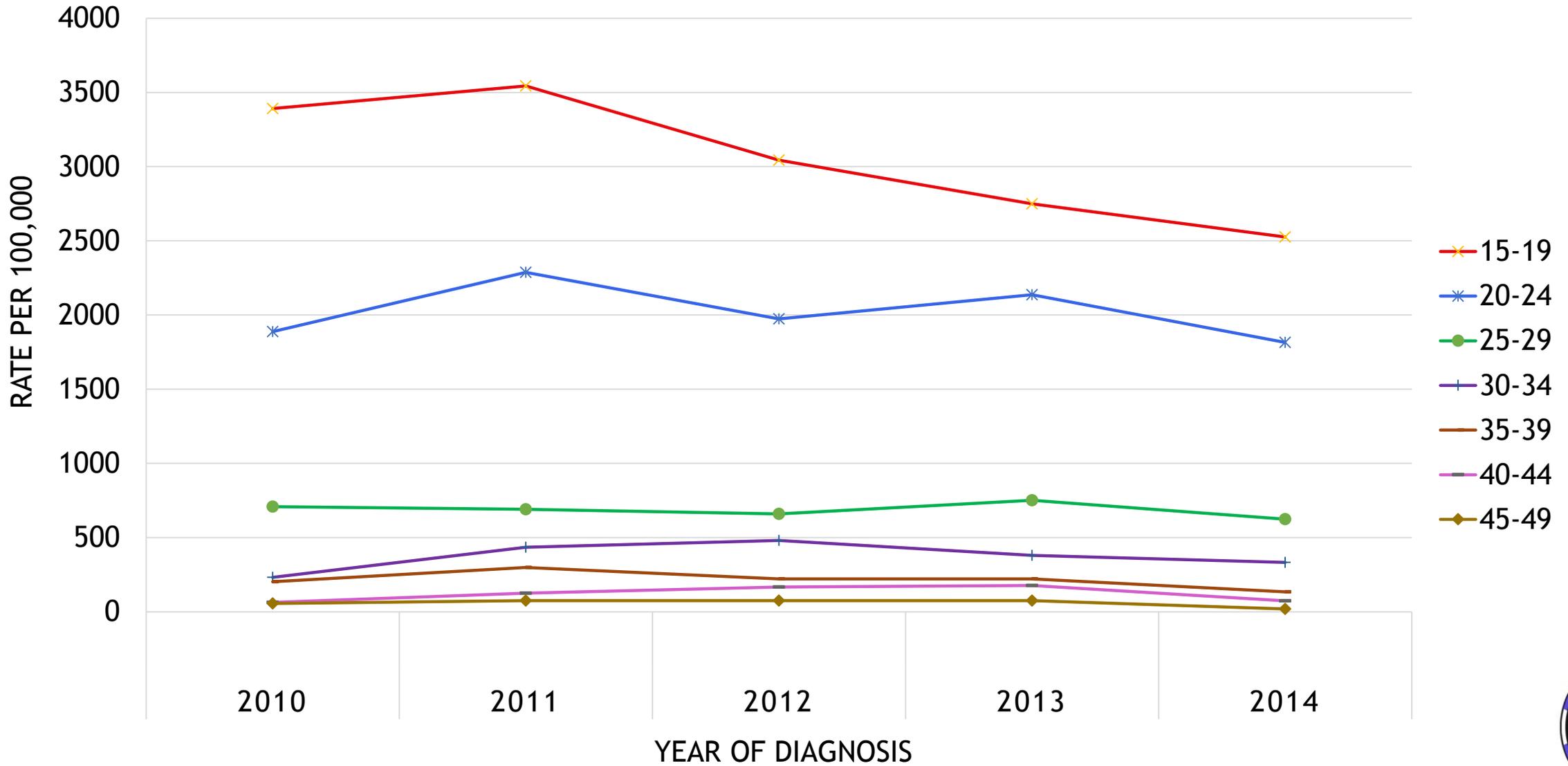
Gonorrhea Incidence Rate by Gender

City of St. Louis, 2010-2014



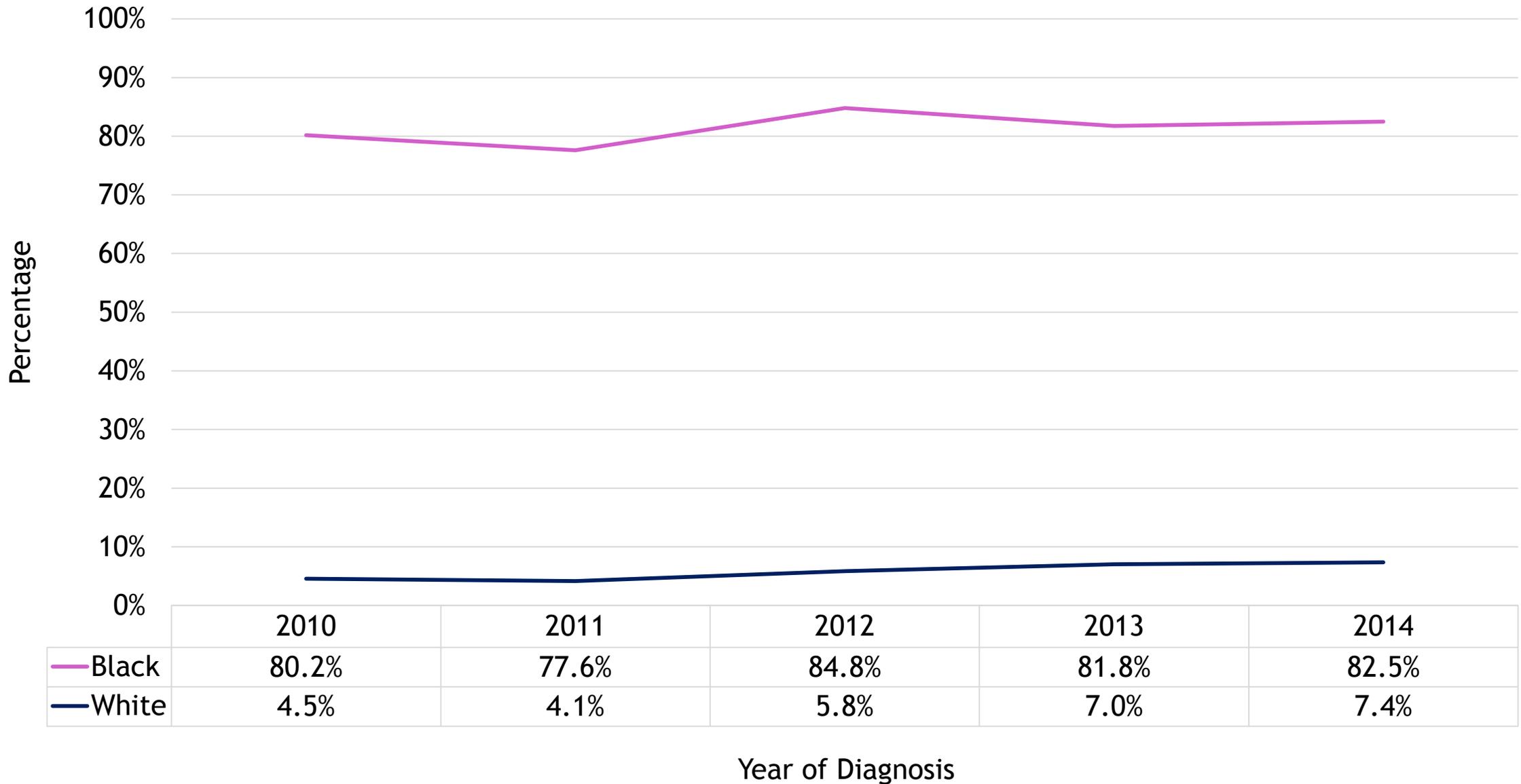
Gonorrhea Incidence Rate by Age Group

City of St. Louis, 2010-2014

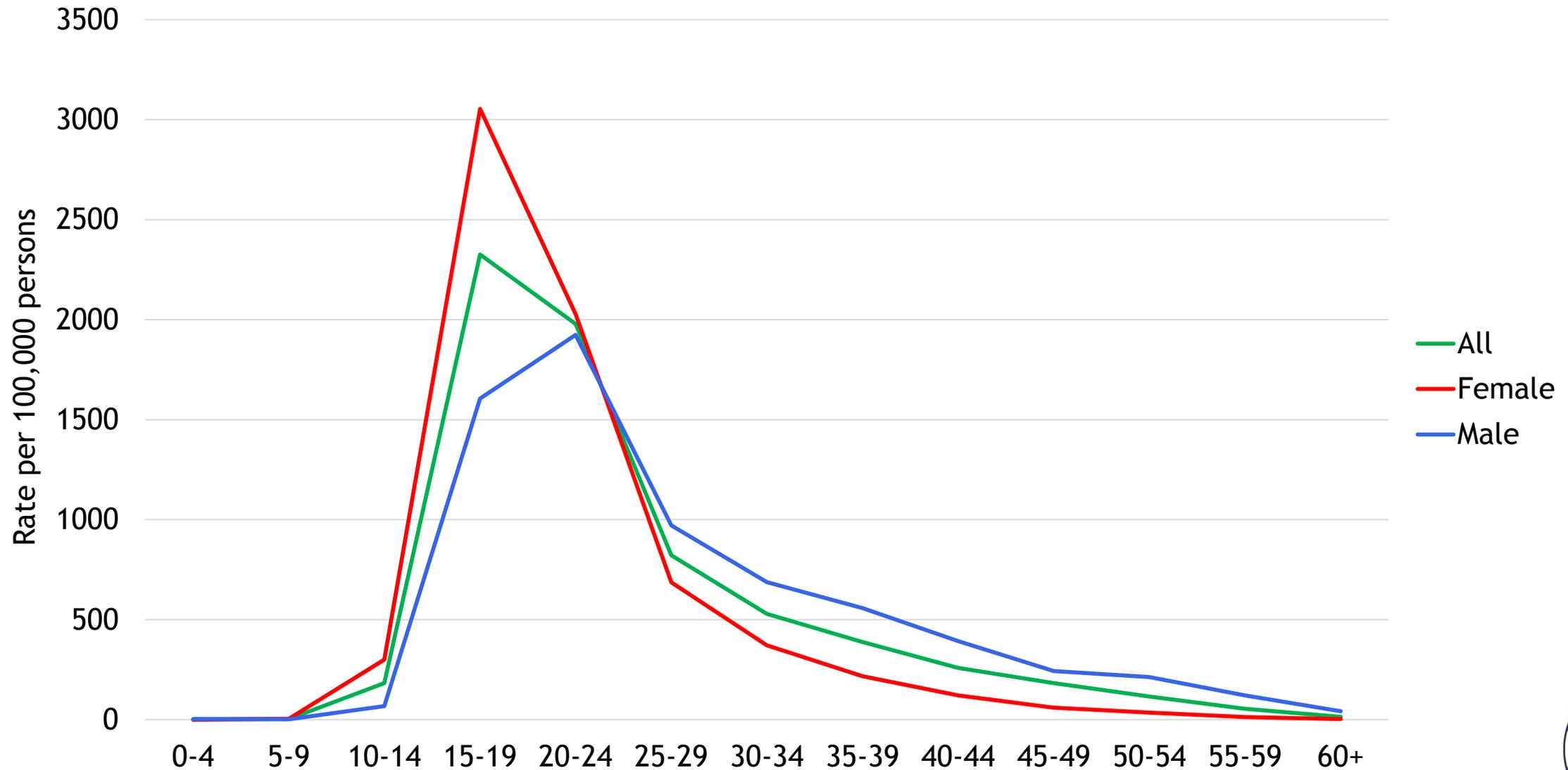


Percent of Gonorrhea Cases by Known Races

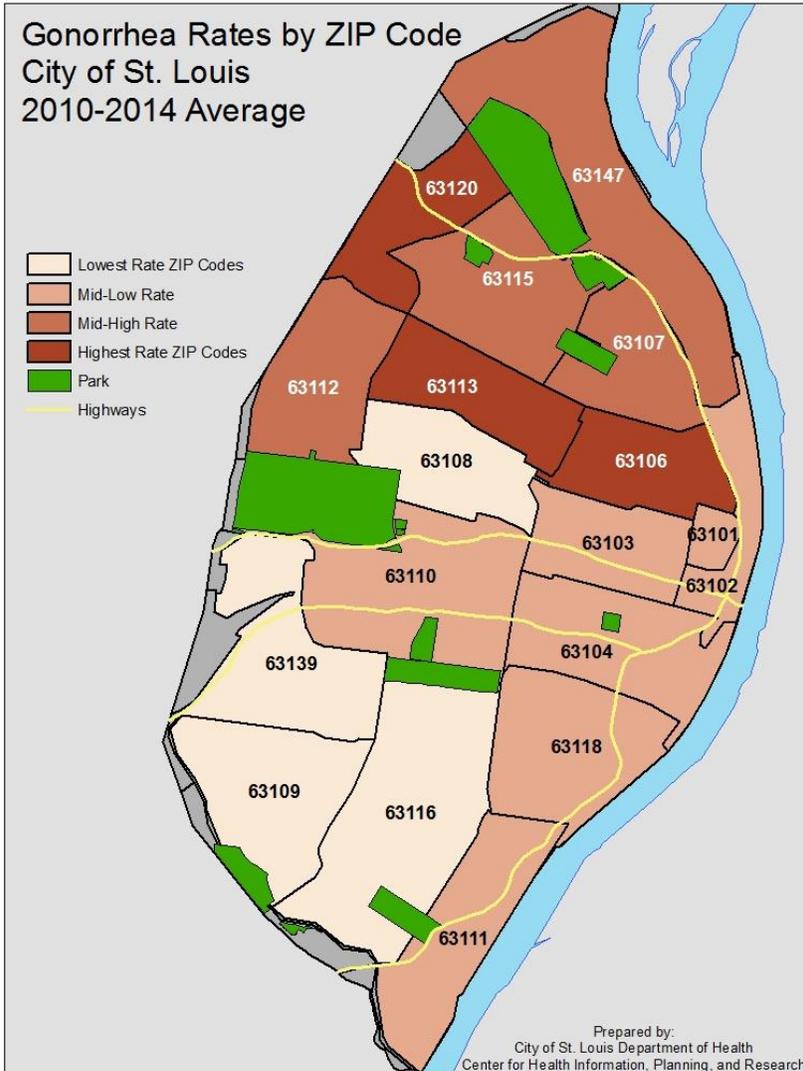
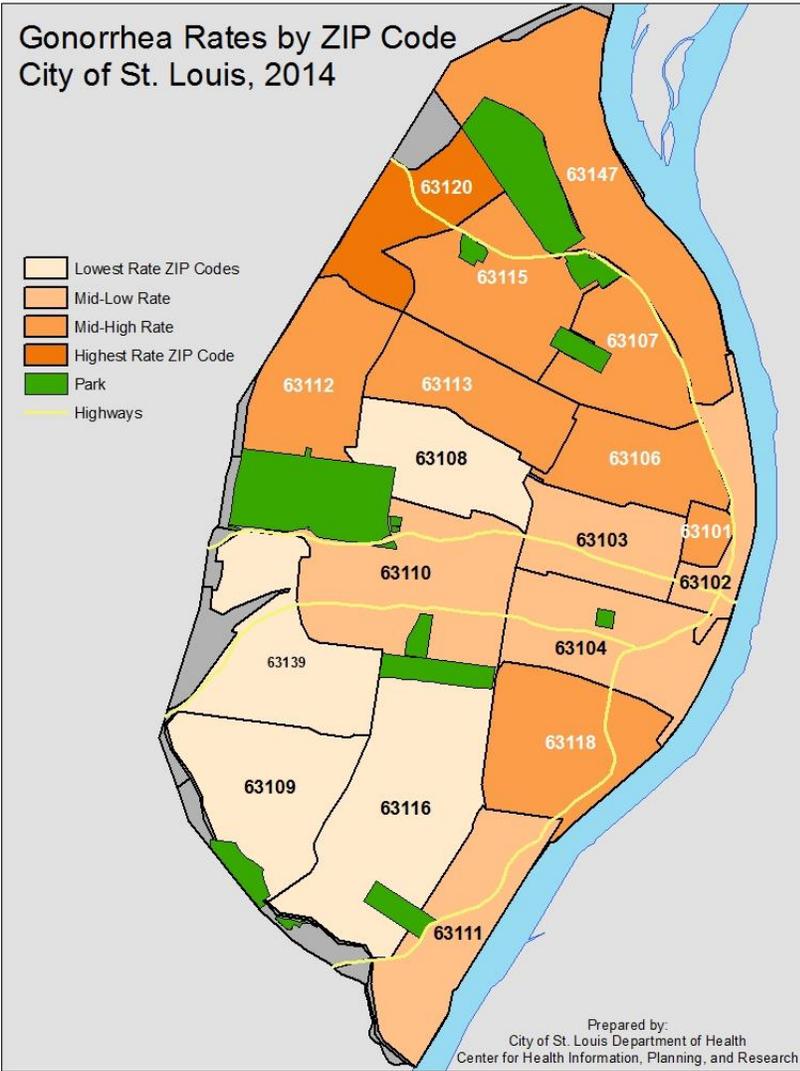
City of St. Louis, 2010-2014



Gonorrhea Incidence Rate by Age Group and Gender City of St. Louis, 2010-2014 Five-Year Average



Geographic Distribution Of Gonorrhea Cases by ZIP Codes City of St. Louis, 2010-2014



Gonorrhea Compared - City of St. Louis

2010-2014 Average

1741.8 Cases

51% Female

81% Black

63% 15-24 age Group

Highest Rate Zip Code

63120 (13.4 cases per 1,000)

63106 (10.6 cases per 1,000)

63113 (10.1 cases per 1,000)

2014

1564 Cases

48% Female

82% Black

60% 15-24 age Group

Highest Rate Zip Code

63120 (13.3 cases per 1,000)

63106 (9.2cases per 1,000)

63147 (8.6 cases per 1,000)



Female to Male Ratio of Cases by Year

City of St. Louis, 2010-2014

Chlamydia (All ages)

Year	Female	Male	Ratio
2010	3133	1376	2.3
2011	3244	1396	2.3
2012	2761	1320	2.1
2013	2793	1335	2.1
2014	2680	1313	2.0
Five Year Average	2922	1348	2.2

Gonorrhea (All ages)

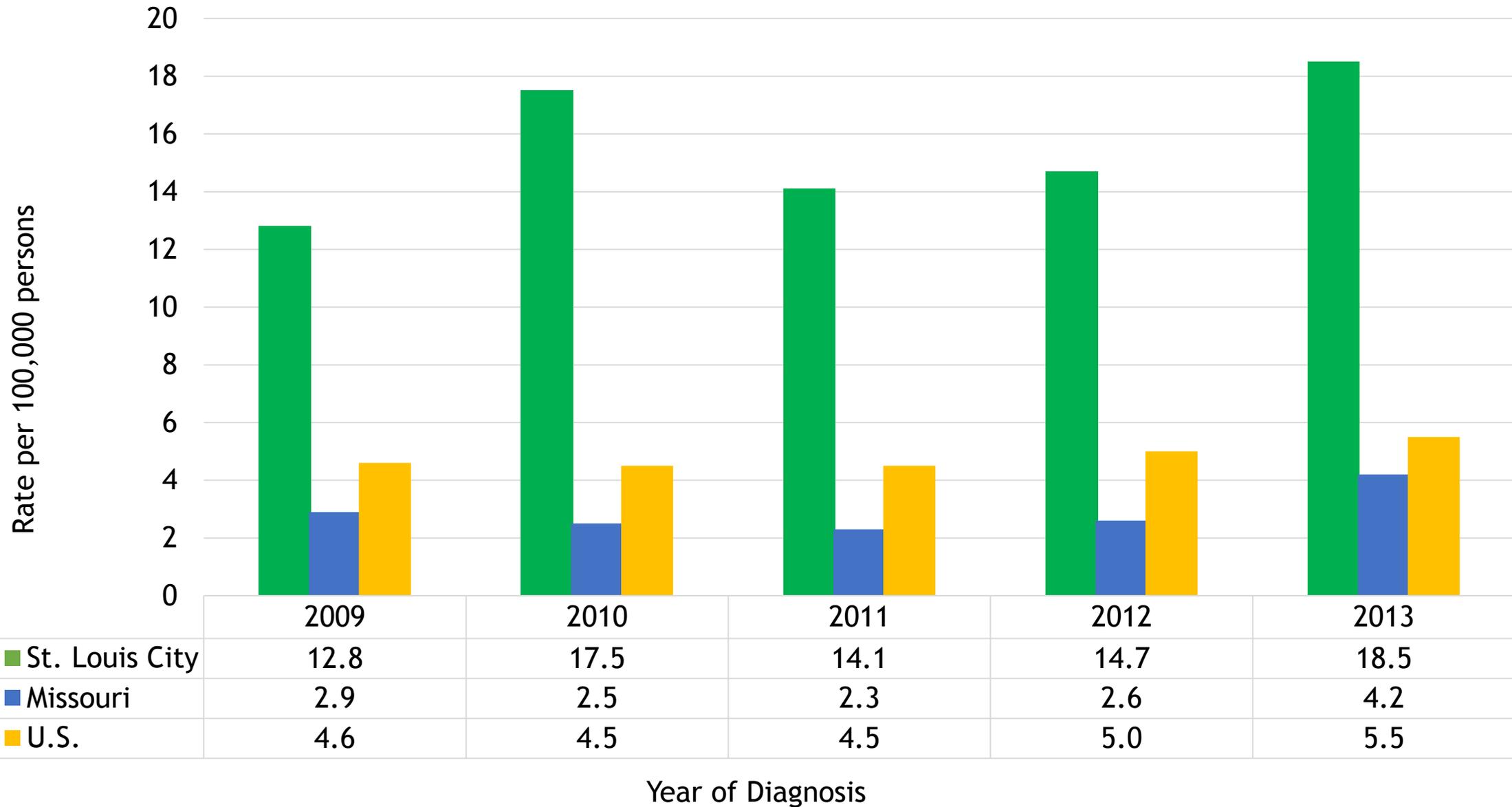
Year	Female	Male	Ratio
2010	874	820	1.1
2011	899	939	1.0
2012	889	864	1.0
2013	869	865	1.0
2014	754	792	0.95
Five Year Average	857	856	1.0



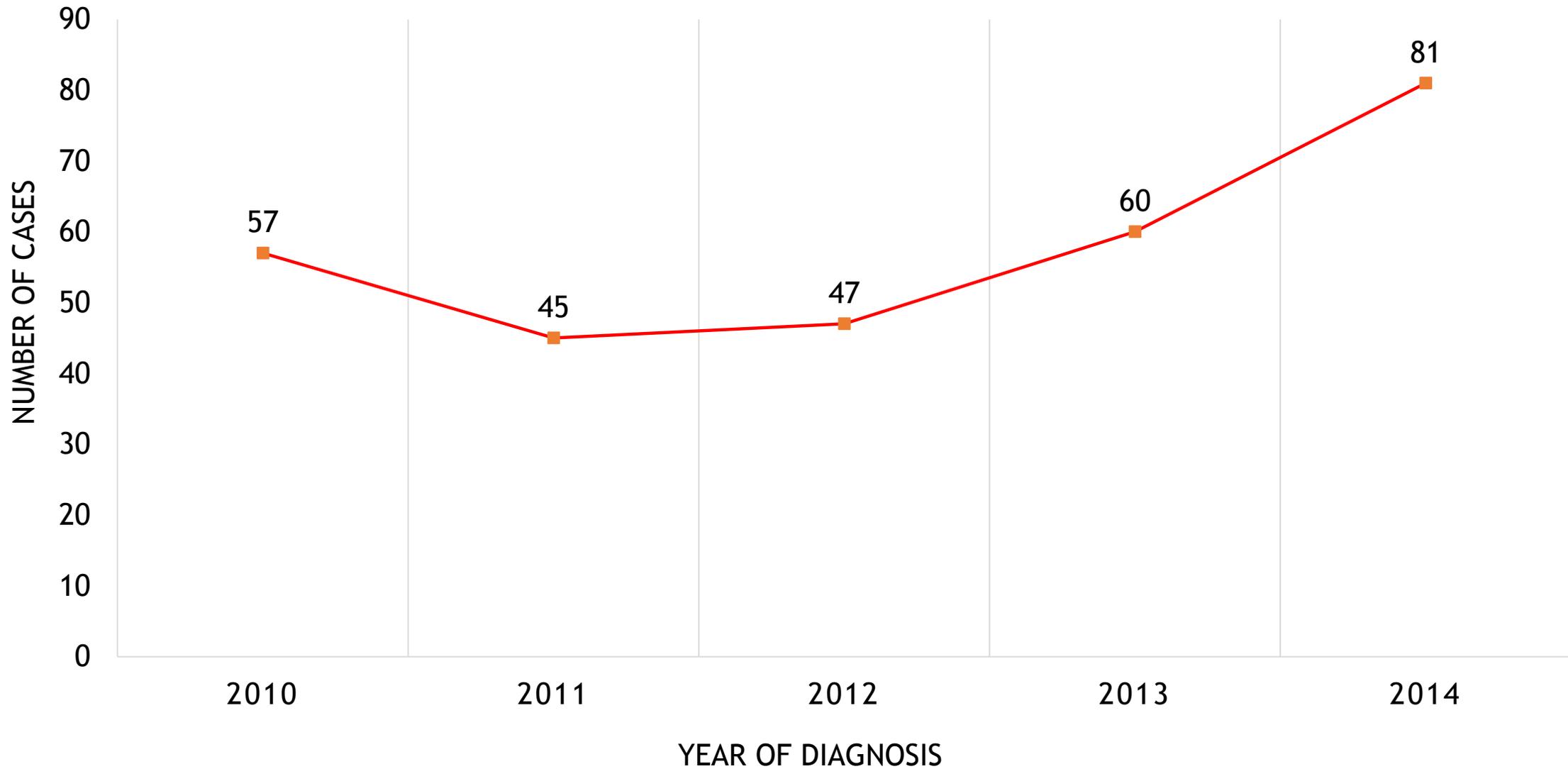
Primary and Secondary Syphilis



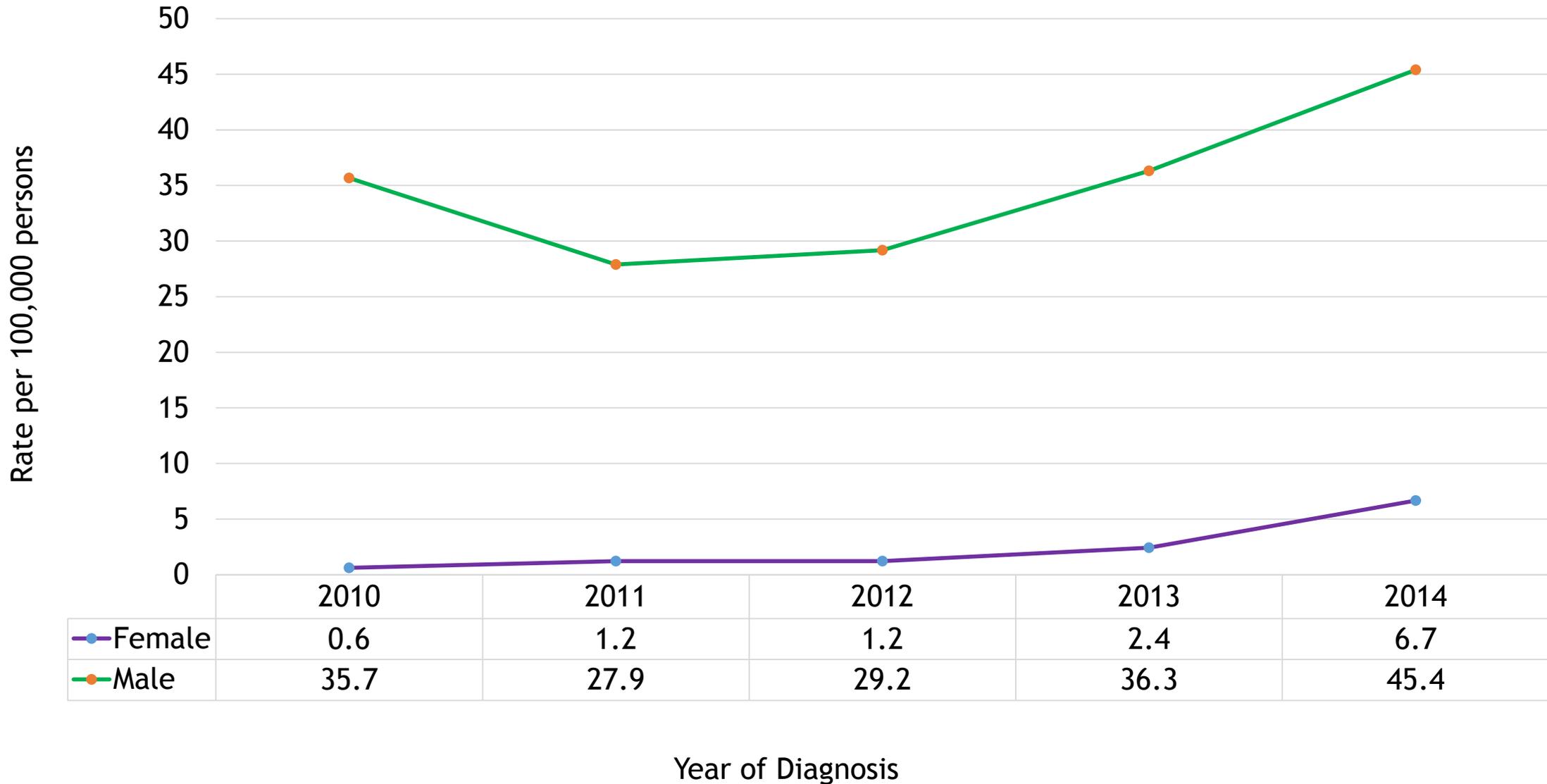
Comparison of Primary & Secondary Syphilis Incidence Rate City of St. Louis, Missouri, and United States 2009-2013



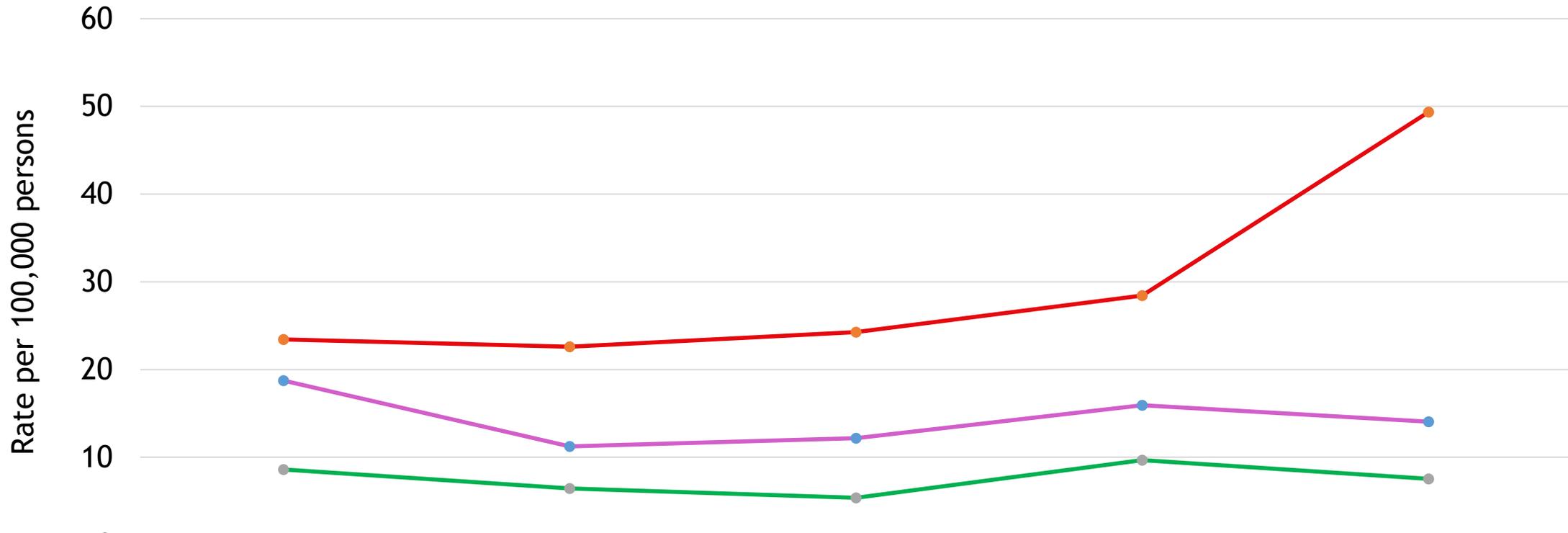
Reported Cases of Primary and Secondary Syphilis City of St. Louis, 2010-2014



Primary and Secondary Syphilis Incidence Rate by Gender City of St. Louis, 2010-2014



Incidence Rate of Primary and Secondary Syphilis by Age Group City of St. Louis, 2010-2014



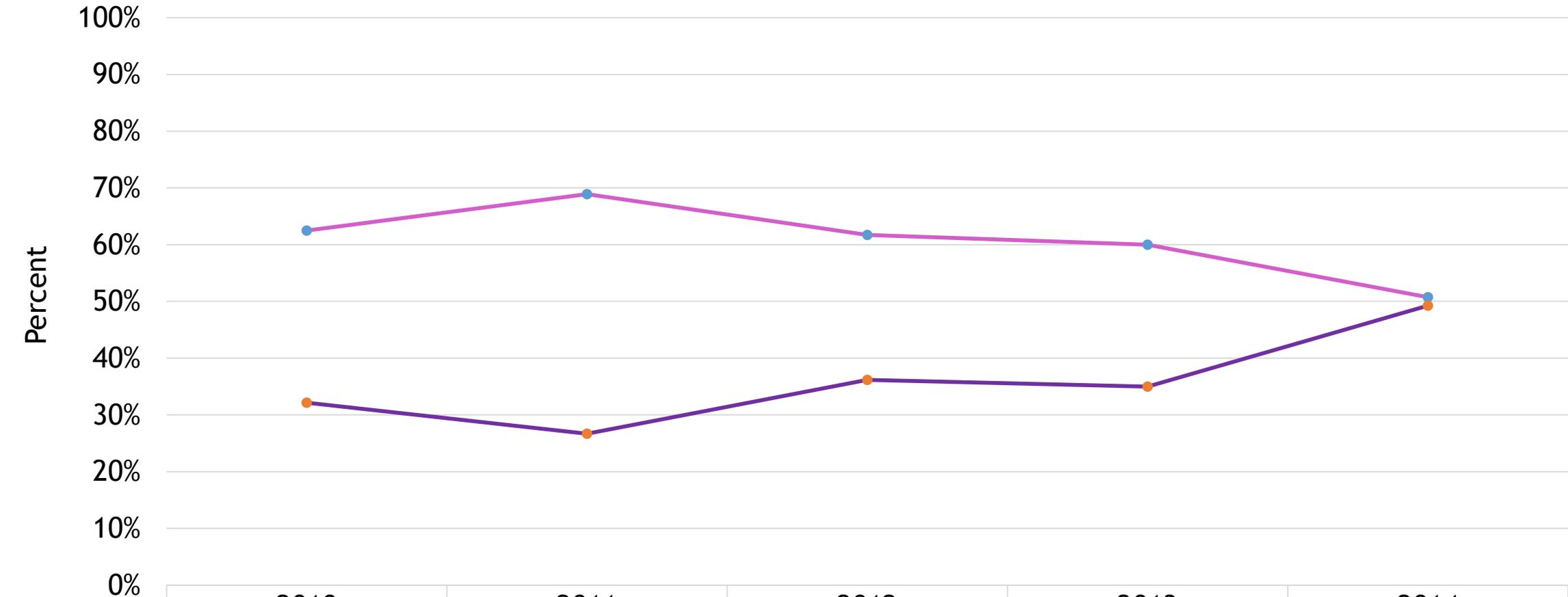
	2010	2011	2012	2013	2014
● <25	18.7	11.2	12.2	15.9	14.0
● 25-49	23.4	22.6	24.3	28.4	49.4
● 50+	8.6	6.5	5.4	9.7	7.5

Year of Diagnosis



Percent of Primary and Secondary Syphilis Cases by Race

City of St. Louis, 2010-2014

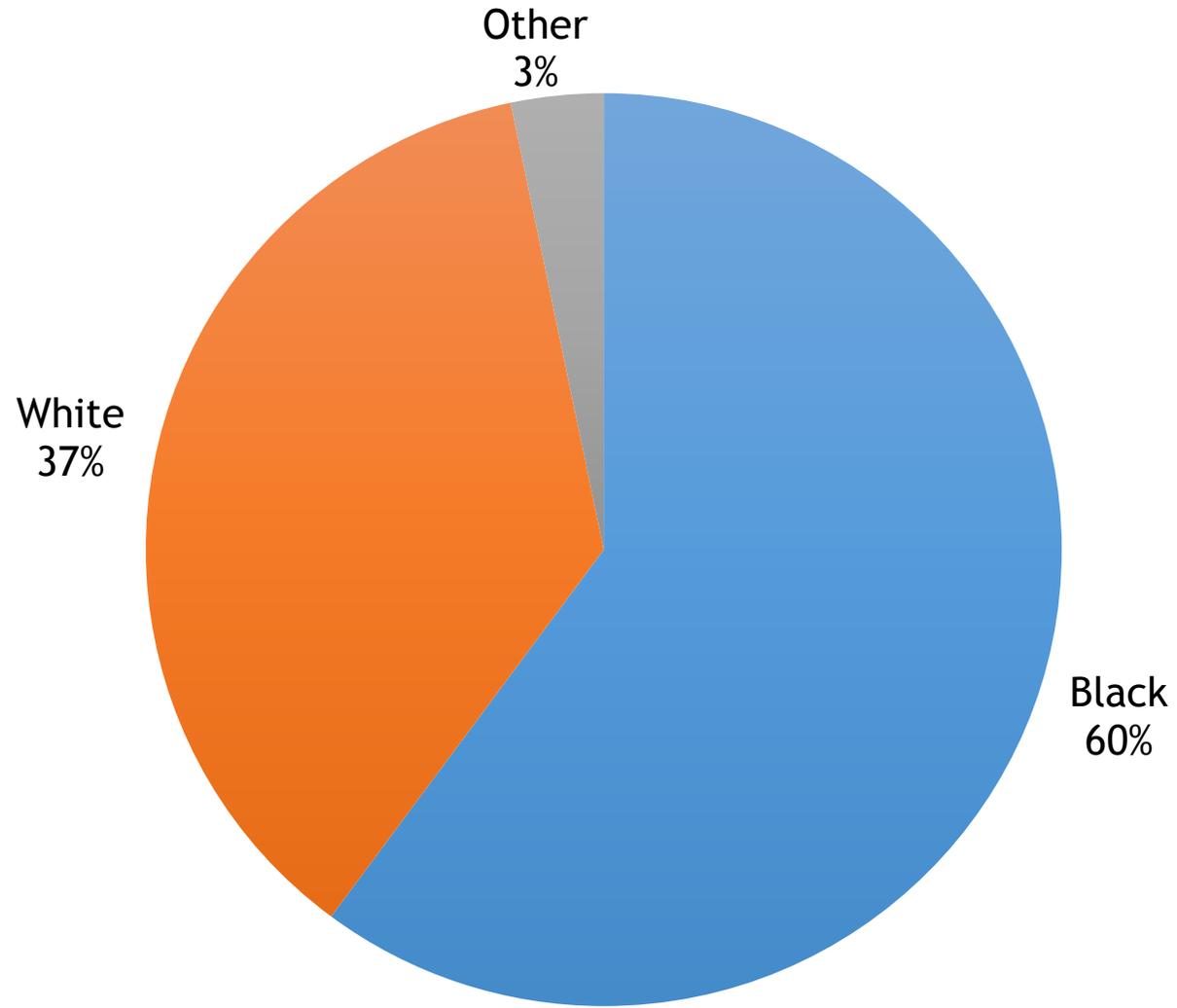


	2010	2011	2012	2013	2014
Black	62.5%	68.9%	61.7%	60.0%	50.7%
White	32.1%	26.7%	36.2%	35.0%	49.3%

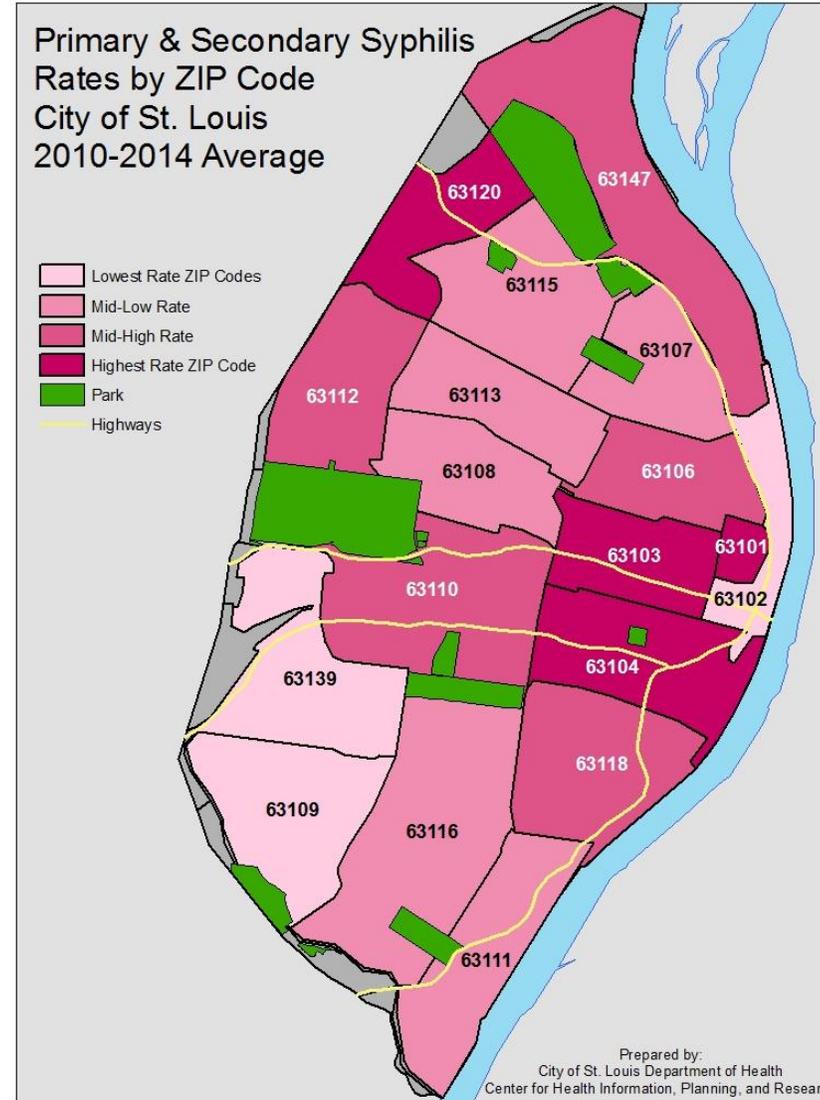
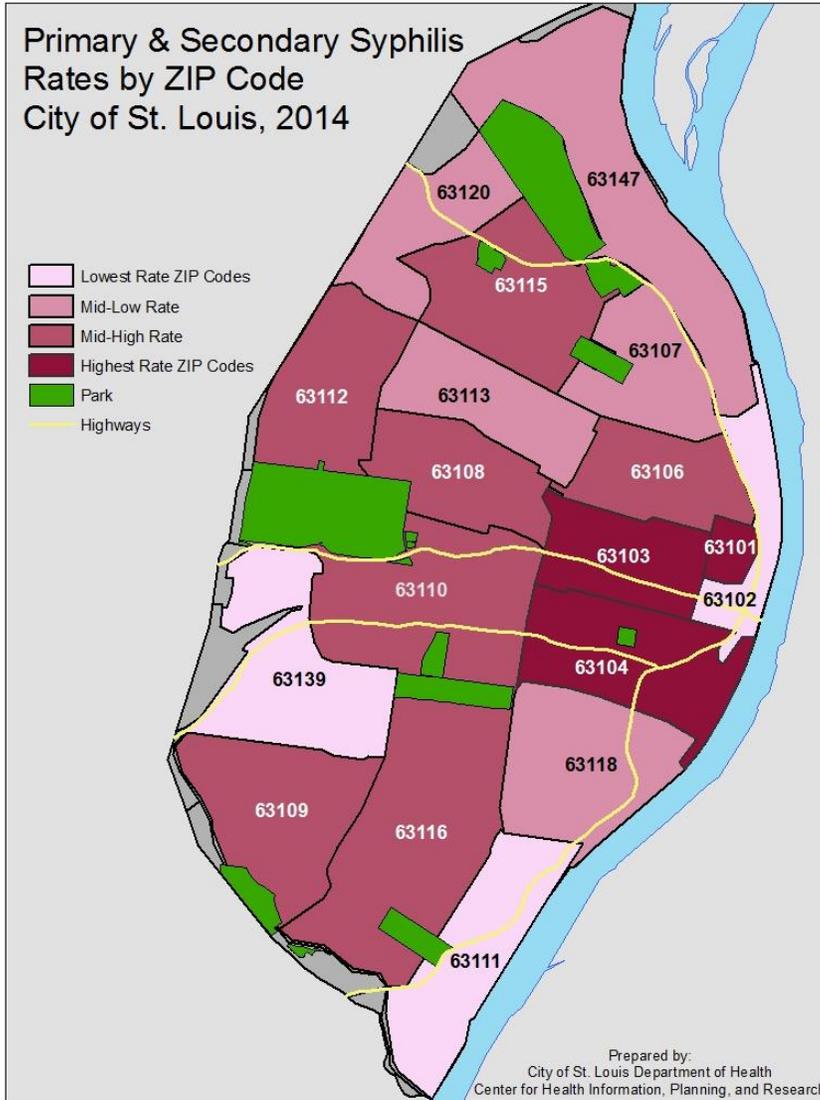
Year of Diagnosis



Percent of Primary and Secondary Syphilis Cases by Race City of St. Louis, Five Year Average 2010-2014



Geographic Distribution of Primary and Secondary Syphilis Cases by Zip Codes City of St. Louis, 2010-2014



Primary and Secondary Syphilis Compared

2010-2014 Average

58 Cases

93% Male

60% Black

61% 25-49 age Group

Highest Rate Zip Code

63103 (41.1 cases per 100,000)

63101 (40.2 cases per 100,000)

63120 (36.0 cases per 100,000)

2014

81 Cases

86% Male

51% Black

73% 25-49 age Group

Highest Rate Zip Code

63104 (61.7 cases per 100,000)

63101 (50.3 cases per 100,000)

63103 (48.1 cases per 100,000)



Male to Female Ratio of Primary and Secondary Syphilis City of St. Louis, 2010-2014

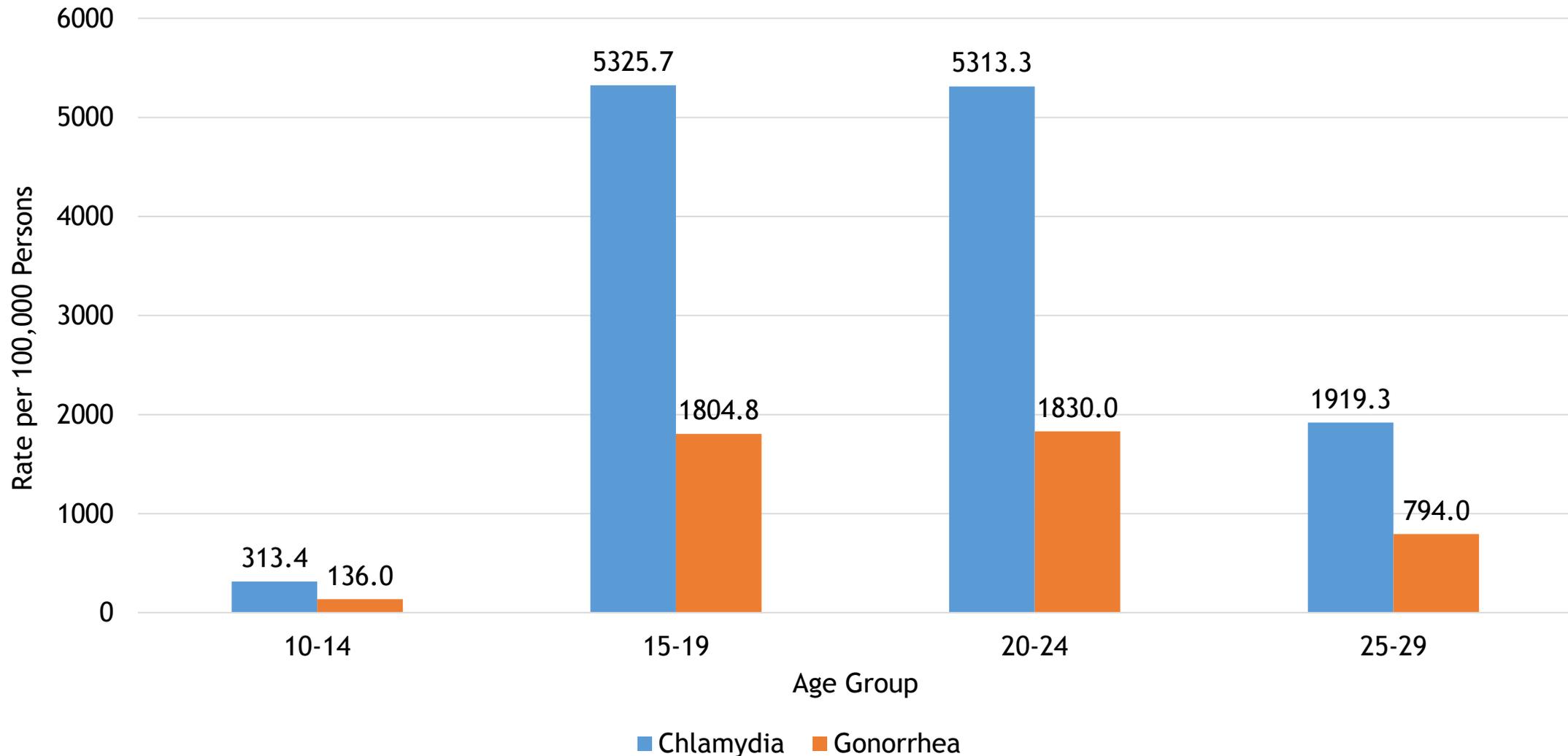
Year	Male	Female	Ratio
2010	56	1	56.0
2011	43	2	21.5
2012	45	2	22.5
2013	56	4	14.0
2014	70	11	6.4
Five-Year Average	54	4	13.5



Sexually Transmitted Infections in Youth and Young Adults



Chlamydia and Gonorrhea Incidence Rate Among Youth and Young Adults by Specific Age Groups, City of St. Louis, 2014



Female to Male Ratio Among Youth and Young Adults by Year City of St. Louis, 2010-2014

Chlamydia (Age 15-19)

Year	Female	Male	Ratio
2010	1424	484	2.9
2011	1403	447	3.1
2012	1124	392	2.9
2013	998	309	3.2
2014	917	284	3.2
Five Year Average	1173.2	383.2	3.1

Gonorrhea (Age 15-19)

Year	Female	Male	Ratio
2010	377	227	1.7
2011	402	204	2.0
2012	341	195	1.7
2013	308	161	1.9
2014	283	124	2.3
Five Year Average	342.2	182.2	1.9



Geographic Distribution of STIs Among Youth by Zip Codes City of St. Louis, 2010-2014

