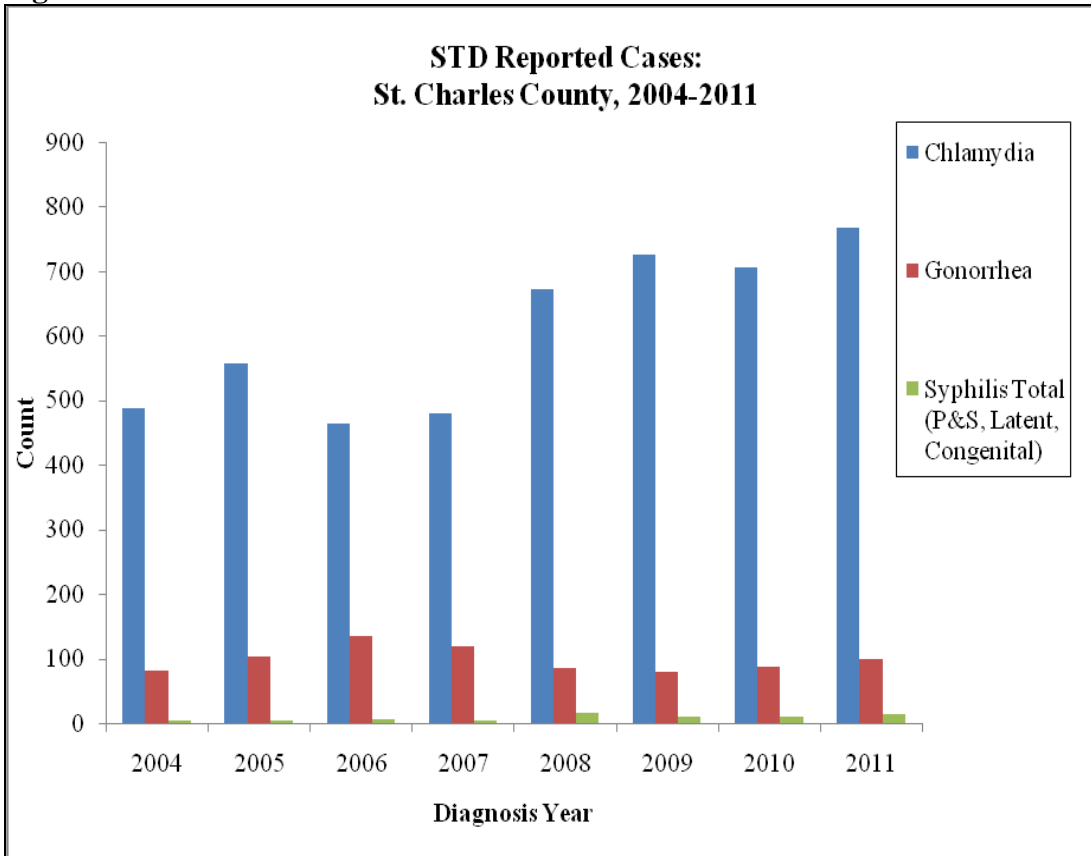


**STD Report**  
**2011 Summary**  
**St. Charles County Department of Community Health and the Environment**  
**Alison Tucker, MSc**

*STD cases include Chlamydia, Gonorrhea, and Syphilis*

There was a total of **881** reported laboratory confirmed reportable STD cases in 2011 among St. Charles County residents (Chlamydia, Gonorrhea and Syphilis cases). This is a 12.3% increase from the previous 5 year median. Previous year's total cases were 802, 814, 773, 602, and 605 for the years 2010 - 2006, respectively. As you can see from the graph below, the biggest increase in the last couple of years is among Chlamydia cases.

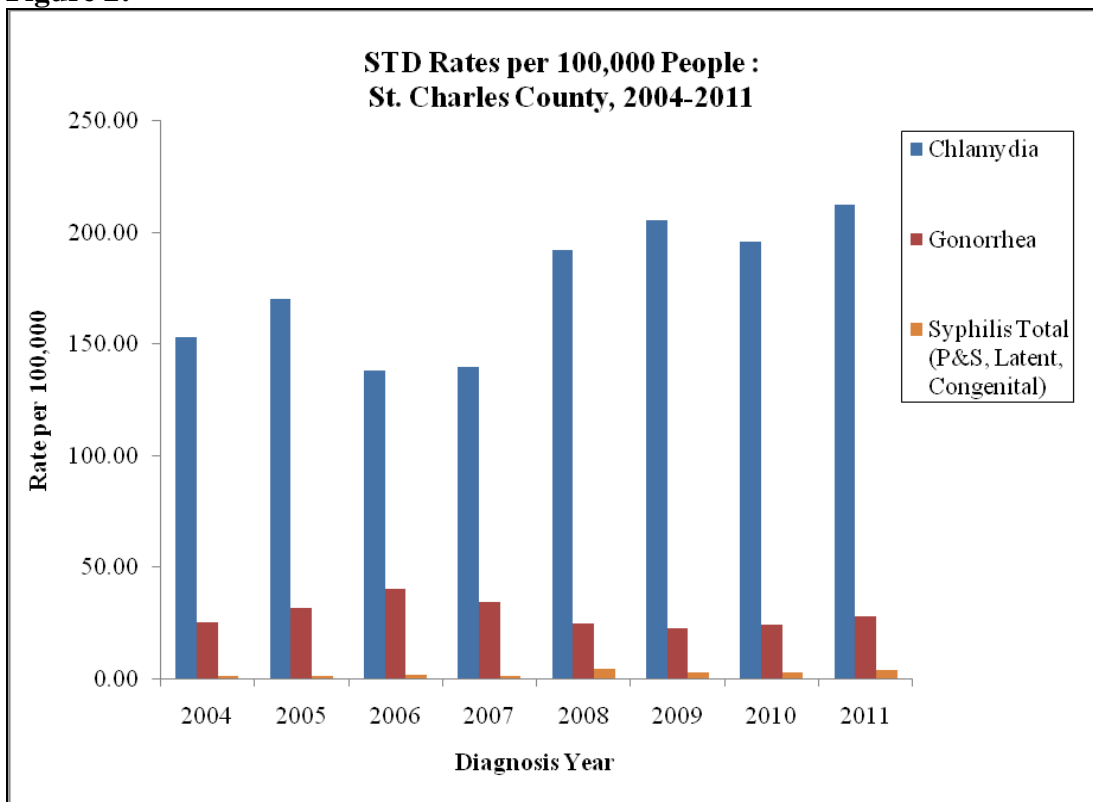
**Figure 1:**



	2006	2007	2008	2009	2010	2011
<b>Chlamydia</b>	464	480	672	725	706	767
<b>Gonorrhea</b>	135	118	86	80	87	100
<b>Syphilis Total</b>	6	4	15	9	9	14
<i>Syphilis Duration Unknown</i>	0	0	0	0	2	1
<i>Syphilis Late Latent</i>	1	2	7	4	3	4
<i>Early Syphilis (Primary, Secondary, &amp; Early Latent)</i>	5	2	8	5	4	9

The population in St. Charles County has increased over the last few years so to show the true reported STD trends we need to look at the rates by population year. The graph below displays the STD rates per 100,000 people in St. Charles County using **yearly population increases** from the Economic Development Center of St. Charles County (<http://www.edcstcharlescounty.com/facts/index.php3>) and the US Census Data (<http://2010.census.gov/2010census/#/panel-3>). From this graph we see that Gonorrhea rates have been going down since 2007 with a slight increase in 2011 at 27.74 per 100,000 people. Chlamydia rates have been high with close to 200 people per 100,000 population for the last 4 years; 2011 rates for Chlamydia were 212.77 per 100,000 people. Syphilis rates went down after 2009 and are creeping up again in 2011 with 3.88 people per 100,000 population.

**Figure 2:**



	2006	2007	2008	2009	2010	2011
<b>Chlamydia</b>	138.17	139.86	192.33	205.34	195.85	212.77
<b>Gonorrhea</b>	40.20	34.38	24.61	22.66	24.13	27.74
<b>Syphilis Total</b>	1.79	1.17	4.29	2.55	2.50	3.88

## Chlamydia

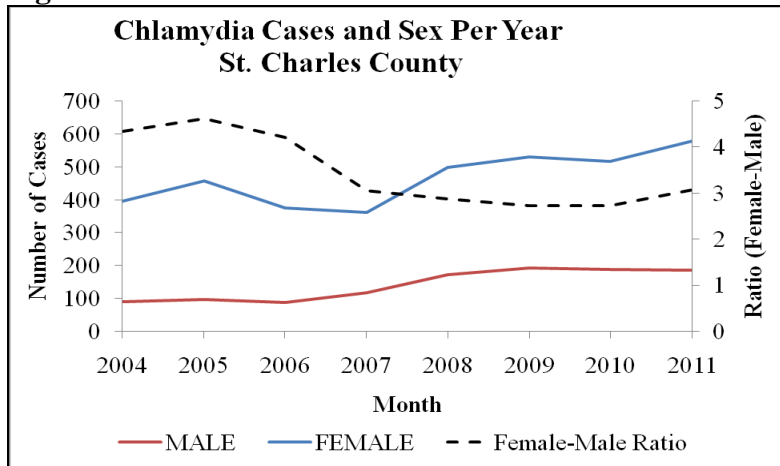
In 2011 there were 767 cases of Chlamydia reported to the Health Department, a 12.4% increase from previous 5 year median. When looking at rates of Chlamydia there was a decrease in 2006 and 2007 with about 139 cases per 100,000 people and the past 4 years this has jumped to upwards of 200 cases per 100,000 people. In 2011 it was 212.77 cases per 100,000 population (figure 2). This increase is likely a combination of increase in morbidity, but also an increase in screening.

Compared to national rates, rates of Chlamydia in St. Charles County is about 1/2 of the national rate. National rates in 2010 were 426.0 cases per 100,000, a 5.1% increase from 2009 (<http://www.cdc.gov/std/stats10/toc.htm>).

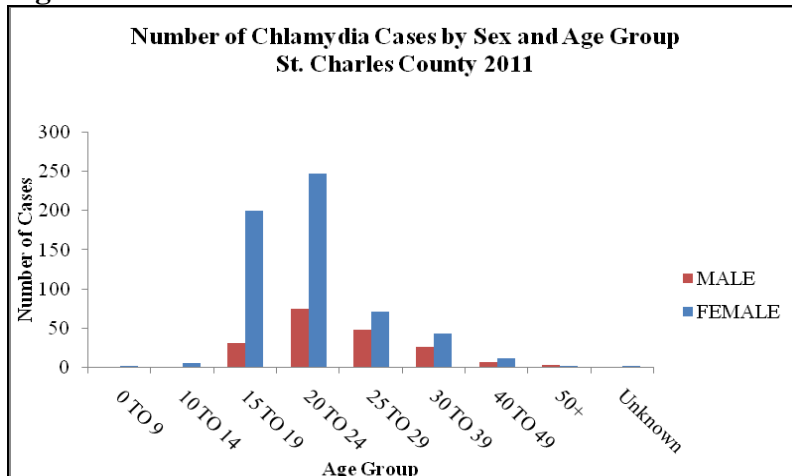
The female-male ratio the past 5 years have been 3.0 for Chlamydia cases, this corresponds to the national ratio. Prior to 2007 the female-male ratio was 4.5, the increase availability of urine screening for males may account for this (Figure 3).

The age groups 15-19 and 20-24 make up more than 72.2% of the Chlamydia cases in St. Charles County (Figure 4).

**Figure 3:**



**Figure 4:**



## Gonorrhea

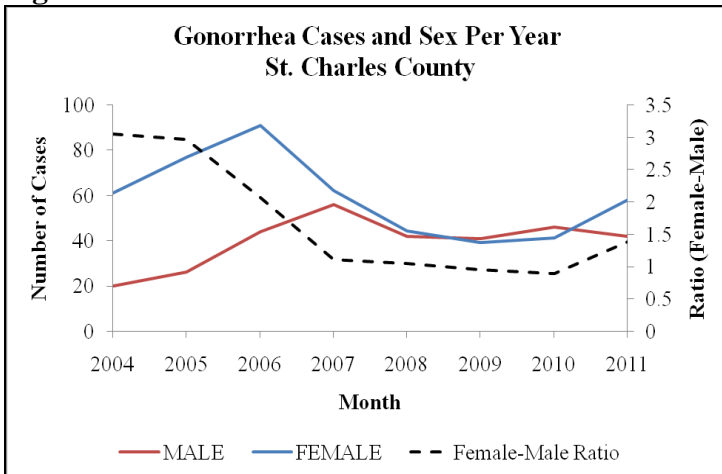
In 2011 there were 100 cases of Gonorrhea reported to the Health Department, a 13.0% increase from previous 5 year median. This is a rate of 27.7 per 100, 000 people (figure 1, figure 2).

Compared to national rates, Gonorrhea rates in St. Charles County are about a 1/4 of the national rate. The national rate in 2010 was 100.8 cases per 100, 000, a 2.8% increase from 2009 (<http://www.cdc.gov/std/stats10/toc.htm>).

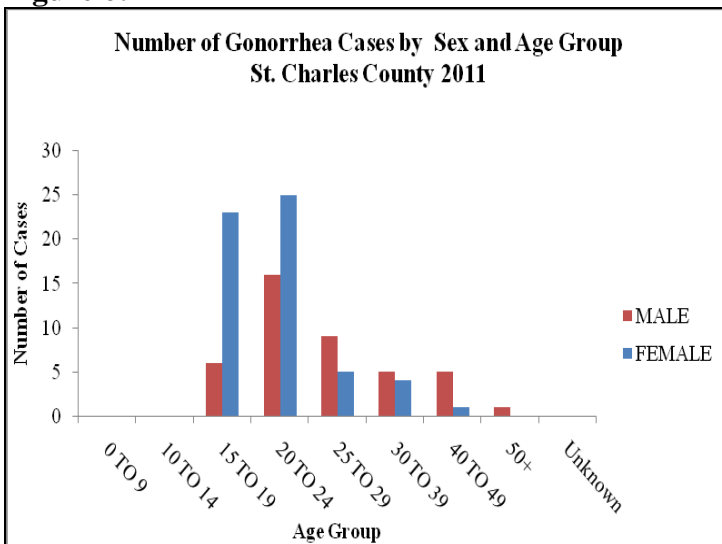
When looking at the female-male ratio from 2004-2006 the average ratio was 2.7, but since 2007 this discrepancy has almost disappeared with the female-male ratio being 1.1, 1.1 and 1.4 the past 3 years respectively (figure 5).

Like Chlamydia, most cases are in the 15-19 and 20-24 age groups with these 2 age groups making up 70.0% of reported cases (Figure 6).

**Figure 5:**



**Figure 6:**



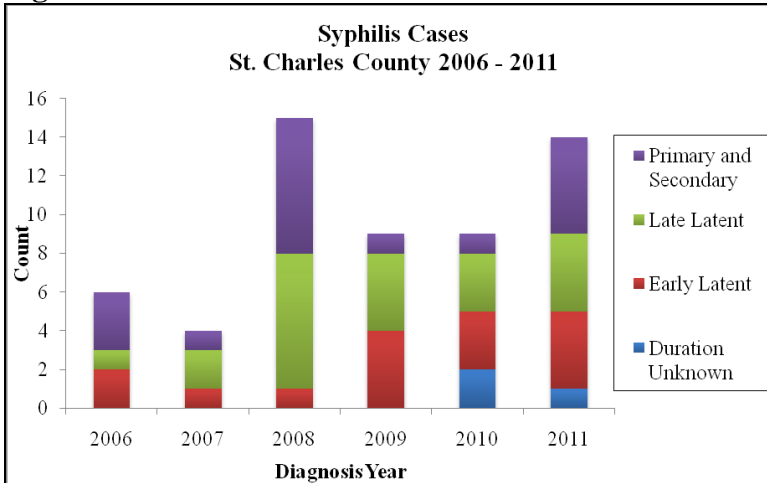
**Syphilis**

In 2011 there were 14 total cases of Syphilis reported, a 35.7% increase from the previous 5 year median. This is a rate of 3.88 cases per 100,000 people. They have been no reports of congenital syphilis in St. Charles County in 2011.

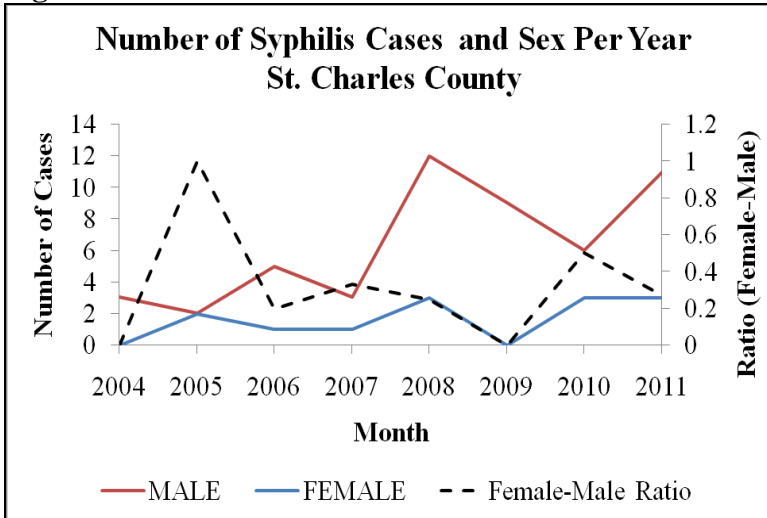
Compared to national rates, total Syphilis rates in St. Charles County are about 1/4 of the national rate. The national rate in 2010 was 14.85 cases per 100,000, a 2.2% increase from 2009). The rate of Primary and Secondary Syphilis cases in St. Charles County is about 1/3 of the national rates (<http://www.cdc.gov/std/stats10/toc.htm>).

Unlike Chlamydia and Gonorrhea where females outnumber males in case reporting, males outnumber females when it comes to total Syphilis cases on average 3 to 1 (figure 8). Age of diagnosis tends to be higher overall for Syphilis cases compared to Chlamydia and Gonorrhea with most cases over 25-29 age group (figure 9).

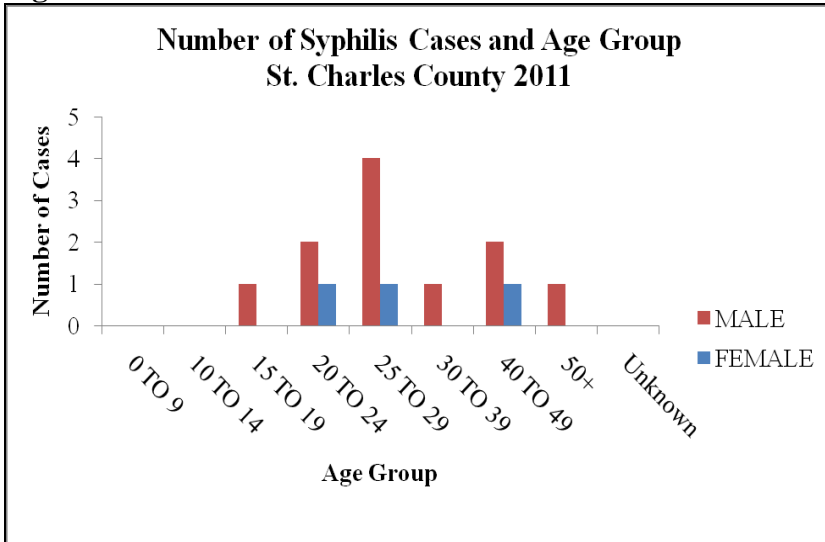
**Figure 7:**



**Figure 8:**



**Figure 9:**



**Zip codes and STD Rates**

The following table shows the 2011 rates and the previous 5 year mean rates of STD cases per zip code per 10,000 people. This was done using Census 2010 population for zip code. (Please note that populations for the 63348 and 63357 zip codes are estimates since they share a border with Warren County).

We can see from this table that the highest rate of cases in 2011 and the previous 5 year mean is in the 63301 (St. Charles City) zip code. Part of the reason for these high rates is that the 63301 zip code has the highest percentage of people aged 18-24 years (2010 Census Data). The percentage of 18-24 year olds in 63301 is 14.8 percent, this is twice as high as the average in all the other zip codes in the County (average in all remaining zip codes is 7.4%). Lindenwood University is located in the 63301 zip code and can account for the higher percentage of 18-24 year olds.

Zip Code	2010 Population	2011		2006-2010	
		Number of STD Cases	2011 Rate/10,000	Previous YTD 5 Year Median	Pr YTD 5 Year Median Rate/10,000
63301	48514	170	35.0	157.0	32.4
63303	45834	129	28.1	106.0	23.1
63304	40336	70	17.4	56.0	13.9
63332	1292	1	7.7	1.0	7.7
63341	3530	5	14.2	4.0	11.3
63348	4847	3	6.2	4.0	8.3
63357	277	0	0.0	1.0	36.1
63366	46175	104	22.5	99.0	21.4
63367	19433	33	17.0	29.0	14.9
63368	43360	63	14.5	56.0	12.9
63373	603	2	33.2	1.0	16.6
63376	70828	153	21.6	142.0	20.0
63385	35750	52	14.5	58.0	16.2
63386	538	0	0.0	2.0	37.2
unknown	unknown	17	unknown	18.0	unknown

### **STD Counts throughout Year 2010**

The graph below compares quarterly reported STD cases for 2010, 2011 and the 5 previous year average (2006-2010). This graph is intended to show the seasonality of STDs in St. Charles County. We can see from the 5 year average that we typically see a rise in cases being reported in the 2<sup>nd</sup> quarter of the year and continuing throughout. But, the past couple of years (2010 and 2011) the number of cases reported each quarter has stayed relatively the same.

**Figure 10:**

