

# PREVENT HIV/STDS, VACCINE PREVENTABLE DISEASES AND HEALTHCARE-ASSOCIATED INFECTIONS



# STDs IN COLUMBIA & GREENE COUNTIES

### The Effect of STDs on the Population

Source: 2011-2013 Bureau of STD Prevention and Epidemiology Data as of July, 2015

	Columbia	Greene	Capital Region
Number of Gonorrhea cases per year (2013)	7	11	504
Number of Chlamydia cases (2013)	132	124	1,001
Number of HIV cases per year (2013)	15	5	68
Number of AIDS deaths per year (2013)	S	S	15



# STD Indicators and Significance per 100,000 population compared to NYS

Source: 2011-2013 Bureau of STD Prevention and Epidemiology Data as of July, 2015

	Colu	nbia	Gre	ene	Capital Region		Upstate
Gonorrhea cases rate	16.6	Lower	28.1	Lower	54.5	Lower	61.1
Gonorrhea cases rate ages 15-19	52.1	Lower	133.4	Lower	177.4	Lower	203.6
Chlamydia cases rate (Females)	102.1	Lower	184.9	Lower	488.0	Higher	466.8
HIV Cases Rate (Age- Adjusted)	8.8	Higher	3.5	Lower	7.0	Lower	7.9
AIDS Mortality (Age-Adjusted)	0.4	Lower	2.5	Lower	4.4	Lower	4.5

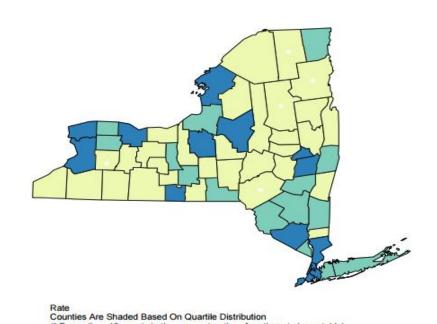


### Gonorrhea Case Rates per 100,000 females, ages 15-44 (2013)

Gonorrhea case rate per 100,000 - All ages

2011-2013



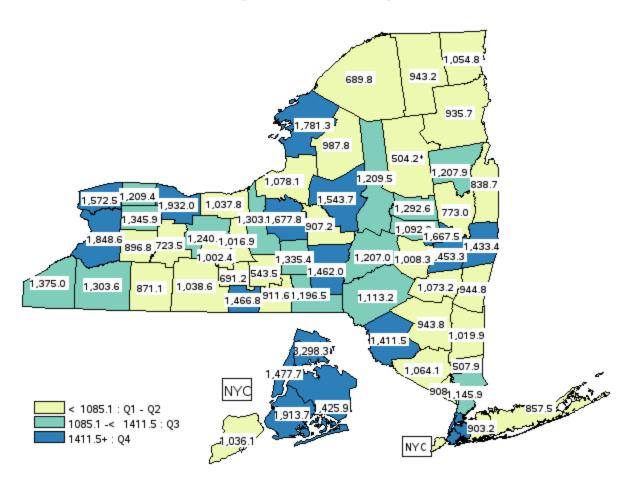


(\* Fewer than 10 events in the numerator, therefore the rate is unstable)

0-< 25.0 : Q1 & Q2

### Chlamydia Case Rates per 100,000 females, ages 15-44 (2013)

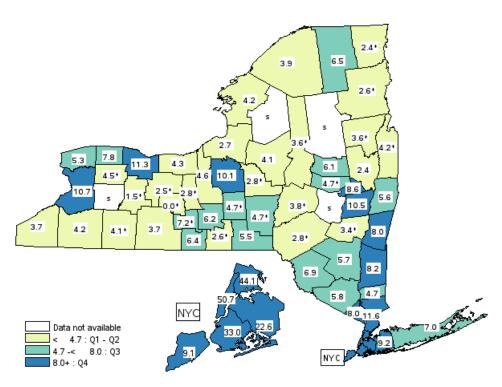
Data Source: NYS STD Surveillance System data as of January 2015





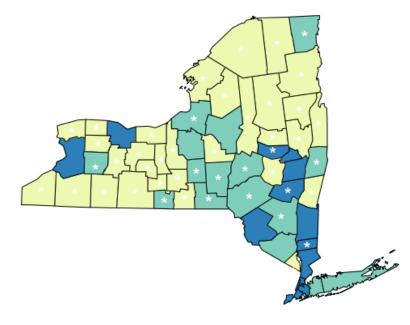
### Newly diagnosed HIV case rate per 100,000 (2011-2013)

#### Data Source: Bureau of HIV/AIDS Epidemiology data as of April 2015

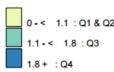


### **AIDS Mortality rate per 100,000 (2011-2013)**





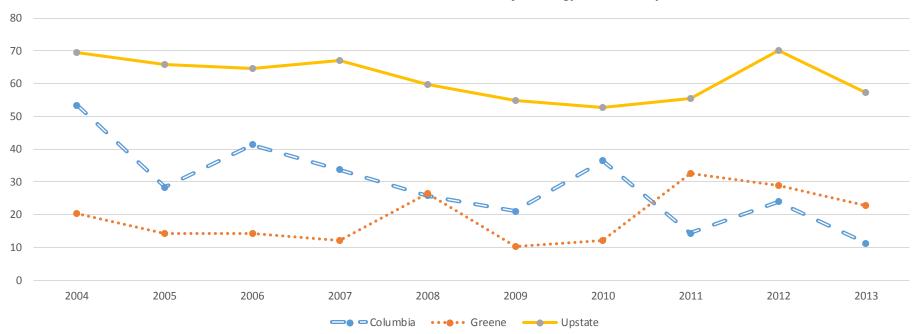
Death Rate Counties Are Shaded Based On Quartile Distribution (\* Fewer than 10 events in the numerator, therefore the rate is unstable)



Source: 2011-2013 Vital Statistics Data as of February, 2015

### Gonorrhea Case Rate per 100,000 population (all ages) for NYS (excl. NYC), Columbia, and Greene Counties, 2004-2013

Source: 2011-2013 Bureau of STD Prevention and Epidemiology Data as of July, 2015

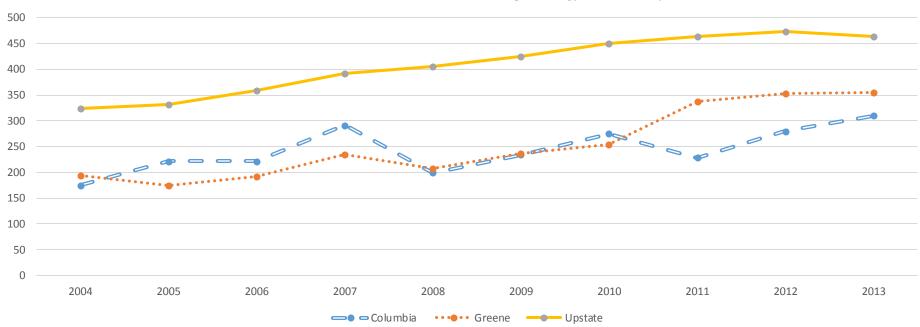


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Columbia	53.4	28.3	41.3	33.7	25.8	21.1	36.5	14.4	24	11.2
Greene	20.3	14.1	14.1	12.2	26.5	10.2	12.2	32.7	28.8	22.7
Upstate	69.4	65.8	64.6	67	59.6	54.8	52.8	55.6	70.2	57.4



### Chlamydia Case Rate per 100,000 of the female population (all ages) for NYS (excl. NYC), Columbia, and Greene Counties, 2004-2013

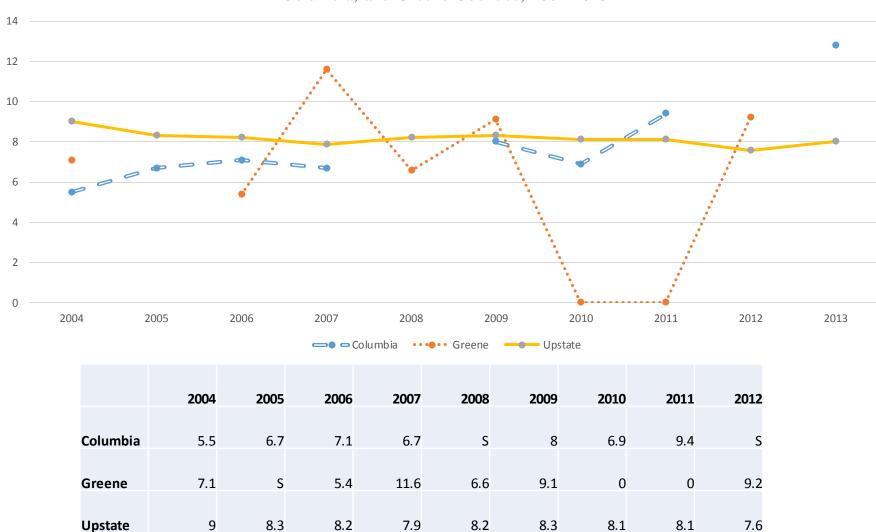
Source: 2011-2013 Bureau of STD Prevention and Epidemiology Data as of July, 2015

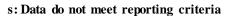


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Columbia	174.8	222	221.6	291.1	199.6	234.1	274.5	228.1	279.4	309.5
Greene	193.1	174.5	191.5	235.3	207.1	237.5	254.9	337.5	352.5	354
Upstate	324.3	331.2	358.9	391.6	405.5	423.9	449.2	464.2	473.4	462.7



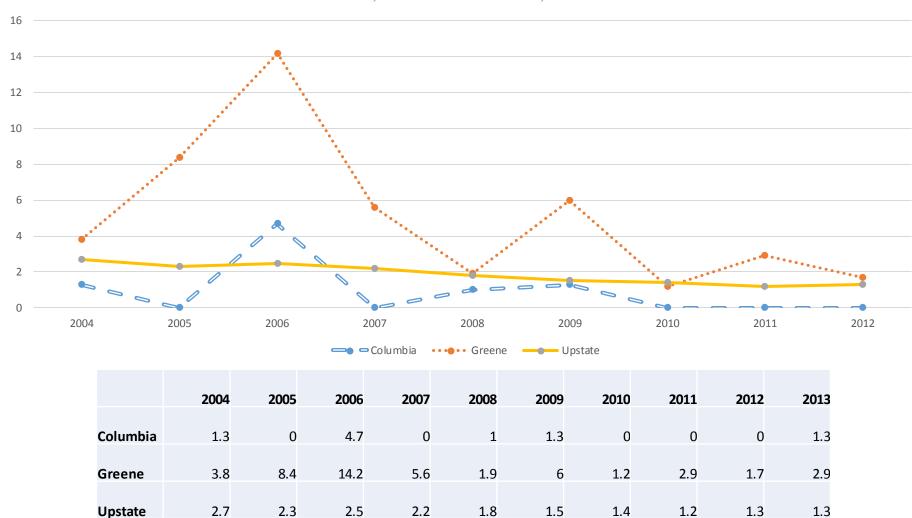
Age-Adjusted HIV Case Rate per 100,000 population (all ages) for NYS (excl. NYC), Columbia, and Greene Counties, 2004-2013







Age-Adjusted AIDS Mortality Rate per 100,000 population (all ages) for NYS (excl. NYC), Columbia, and Greene Counties, 2004-2013







### **EQUITY**

# STD Indicators per 100,000 population by Age compared to NYS, excl. NYC

Source: 2011-2013 Bureau of STD Prevention and Epidemiology Data as of July, 2015

Gonorrhea	Columbia	Greene	Capital Region	Upstate
Ages 15-19	52.1	133.4	177.4	203.6
All ages	16.6	28.1	54.5	61.1

Chlamydia	Columbia	Greene	Capital Region	Upstate
Females (Ages 15-19)	1,533.9	2,252.3	2,637.2	2,387.5
Females (Ages 20-24)	2,279.2	2,870.3	2,681.2	2,743.8
Females (Ages 15-44)	944.8	1,073.2	1,290.6	1,220.3
Females (All ages)	272.3	348.0	488.0	466.8



### STD Indicators per 100,000 population by Gender compared to NYS, excl. NYC Source: 2011-2013 Bureau of STD Prevention and Epidemiology Data as of July, 2015

Gonorrhea	Columbia	Greene	Capital Region	Upstate
Females ages 15- 44 (2013)	41.1	107.3	140.0	149.3
Males 15-44 (2013)	28.7	31.0	111.9	129.7
Chlamydia	Columbia	Greene	Capital Region	Upstate
Females (Ages 15- 19)	1,533.9	2,252.3	2,637.2	2,3875
<b>Males (Ages 15-19)</b>	341.7	817.2	651.5	608.6
Females (Ages 20-24)	2,279.2	2,870.3	2,681.2	2,743.8
Males (Ages 20-24)	730.2	917.1	1,055.3	1,089.0
Females (All Ages)	272.3	348.0	488.0	466.8
Males (All Ages)	102.1	184.9	210.8	203.0



### STDs Summary



### Annually, Columbia and Greene County have:

- 256 cases of Chlamydia amongst all ages; 172 to all females and 53 to females 15-19 years old
- 68 cases of Gonorrhea amongst all ages; 18 case of Gonorrhea amongst 15-19 year olds
- 3 deaths resulting from AIDS

### STDs Summary

- Both Columbia and Greene counties have significantly lower rates of Gonorrhea compared to the rest of NYS
- Columbia county had significantly lower male and female Chlamydia rates when compared to the rest of NYS; Greene county had higher Chlamydia rates than that of the rest of NYS in females ages 20-24 and males ages 15-19
- Gonorrhea has seen a general decrease in both counties and rates have remained much lower than that of the rest of NYS; Greene county is in the 4<sup>th</sup> Risk Quartile for Gonorrhea cases in females ages 15-44 years
- Female Chlamydia rates have been increasing both counties over the last decade
- HIV case rates have seen unsteady rates over the last decade, with some data unavailable, but there appears to be increasing rates since 2010.
- Gonorrhea and Chlamydia rates decrease with age, teens having the highest rates.
- Females have higher Gonorrhea and Chlamydia rates when compared to males





# LYME DISEASE IN COLUMBIA & GREENE COUNTIES

### The Effect of Lyme Disease on the Population

Source:2011-2013 Bureau of Communicable Disease Control Data as of June, 2015

	Columbia	Greene	Capital Region
Number of Lyme Disease cases (2013)	303	326	1,983

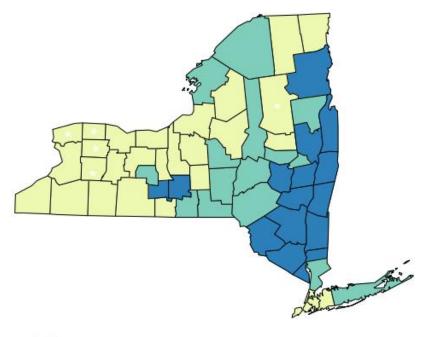
## Lyme Disease Indicators and Significance Compared to NYS, excl. NYC, 2011-2013

	Columbia	Greene	Capital Region	Upstate
Lyme Disease Cases rate per 100,000	533.9	574.3	206.8	57.8



### Lyme Disease Case Rate per 100,000 (2011-2013)





Incidence rate
Counties Are Shaded Based On Quartile Distribution
(\* Fewer than 10 events in the numerator, therefore the rate is unstable)

0 - < 24.8 : Q1 & Q2 24.8 - < 74.6 : Q3 74.6 + : Q4

Source: 2011-2013 Bureau of Communicable Disease Control Data as of June, 2015

### Lyme Disease Summary



- Annually, Columbia and Greene counties had 629 cases of Lyme Disease
- Both counties have much higher infection rates than of the rest of NY
- Both counties fall into the 4<sup>th</sup> Risk Quartile for Lyme disease



### VACCINE-PREVENTABLE DISEASE IN COLUMBIA & GREENE COUNTIES





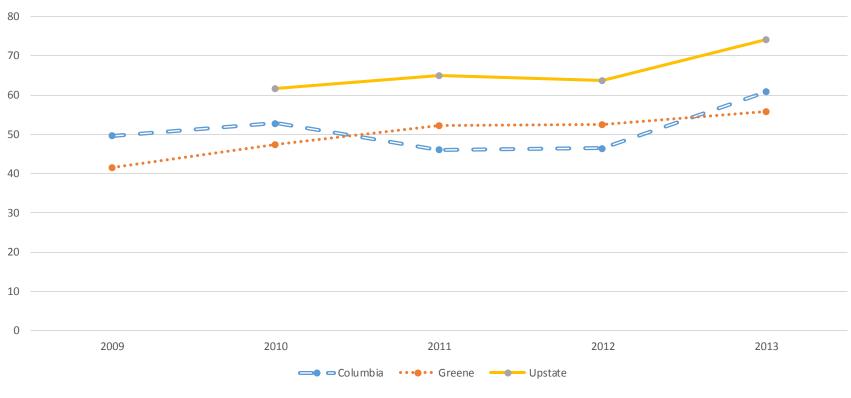
	Columbia	Greene	Capital Region
Number of children ages 19-35 months not immunized per year (2013)	279	387	4,480
Number of females ages 13-17 not immunized for HPV per year (2013)	1,159	1,010	18,866
Number of adults ages 65+ not receiving flu vaccine per year (2013- 2014)	2,634	3,063	33,488

### Vaccine-Preventable Disease Indicators and Significance Compared to NYS (excl. NYC)

	Columbia		Greene		Capital Region		Upstate
Percentage of children with immunizations, 19-35 months of age (2013)	60.9	Similar	55.9	Lower	69.5	Higher	60.0
Percentage of females with 3-dose HPV immunization, 13-17 years of age (2013)	29.7	Higher	30.3	Higher	35.6	Higher	28.1
Percentage of Adults with flu immunization, ages 65+ (2013-2014)	77.7	Higher	65.7	Lower	75.8	Lower	76.8



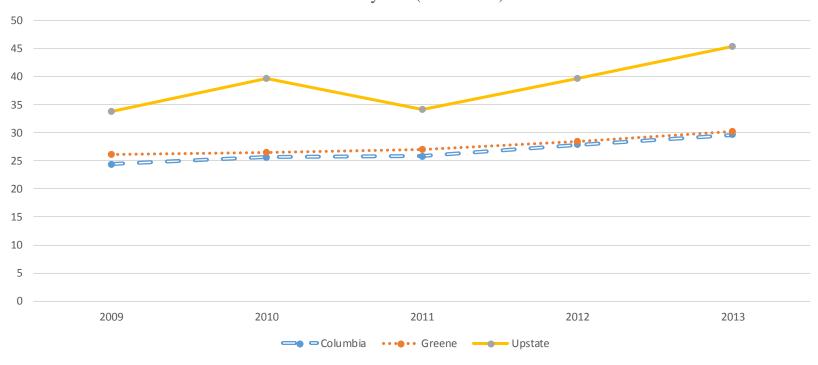
#### Percentage of Children with Immunization series, Aged 19-35 months (2009-2013)



	2009	2010	2011	2012	2013
Columbia	49.6	52.8	46.1	46.4	60.9
Greene	41.6	47.3	52.2	52.6	55.9
Upstate	*	61.6	65.1	63.7	74.3



### Percentage of Adolescent Females with 3 or more doses of HPV immunization, Aged 13-17 years (2009-2013)

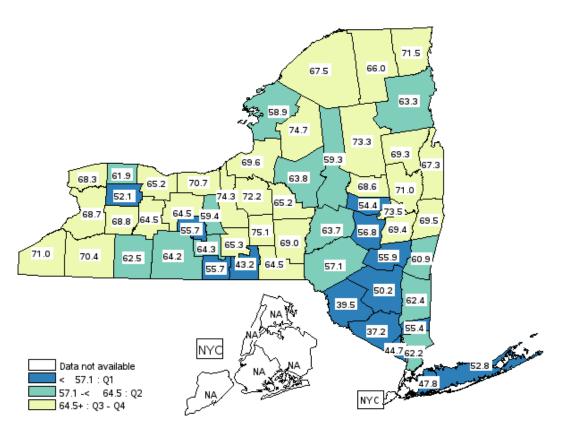


	2009	2010	2011	2012	2013
Columbia	24.4	25.7	25.8	27.9	29.7
Greene	26.1	26.5	27	28.5	30.3
Upstate	33.8	39.7	34.2	39.7	45.4



### Percentage of children with immunization series by ages 19-35 months (2013)

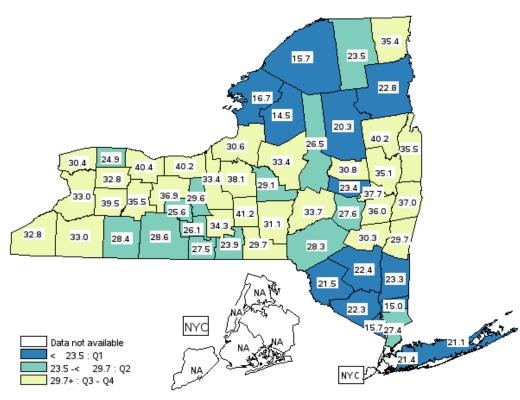
Data Source: NYS Immunization Information System data as of January 2015



### Percentage of young women with 3 or more doses of the HPV immunization, ages 13-17 (2013)

Data Source: NYS Immunization Information System data as of January 2015

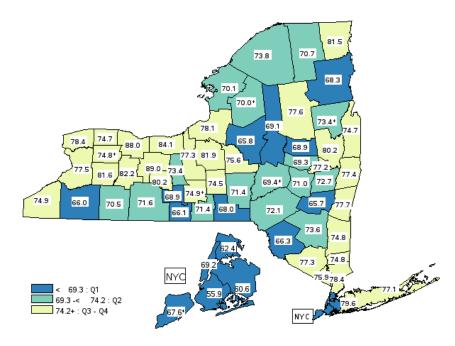




### Percentage of Adults with Flu Immunizations, ages 65+ (2013-2014)



Data Source: 2013-2014 NYS Expanded Behavioral Risk Factor Surveillance System (NYS Counties outside NYC); 2012 NYC Community Health Survey (NYC counties), data as of September 2014



# Adjusted Percentage of Adults with Flu Immunization ages 65+ for NYS (excl. NYC), Albany and Renssalaer Counties

	2003	2008-2009	2013-2014
Columbia	N/A	69.6	77.7
Greene	N/A	71.4	65.7
Capital Region	N/A	N/A	75.8
Upstate	N/A	76.0	77.7



### Vaccine-Preventable Disease Summary

- Columbia county has rates similar to that of Upstate NYS for percentages of children 19-35 months of age who were full immunized; Greene county as lower rates than that of Upstate.
- Both Columbia and Greene counties had higher percentages of young women ages 13-17 years of age who received HPV immunization when compared to Upstate.
- Greene county had a lower percentage of adults aged 65 and older who have received the influenza vaccination when compared to Upstate and fell into the 4<sup>th</sup> Risk Quartile for all NYS counties.
- Columbia and Greene both show increasing trends in childhood immunization rates since 2009. HPV immunization rates for both counties were very similar and slightly increasing.
- Greene county showed a significant decrease in flu immunization rates for the 65+ year old population from 2008-2009 to 2013-2014., while Columbia county showed a significant increase.

