

# North Carolina HIV/STD Quarterly Surveillance Report: Vol. 2009, No. 3

## Communicable Disease Surveillance Unit

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### ANNOUNCEMENTS:

Readers will note a dramatic increase in syphilis reports for 2009 as compared to 2008. This increase is noteworthy and represents true increases in disease morbidity. Increases in gonorrhea and chlamydia however are more likely the result of enhancements to related laboratory reporting.

The North Carolina STD Surveillance data system underwent extensive changes in 2008 as North Carolina implemented NC EDSS (North Carolina Electronic Disease Surveillance System). Reporting delays and changes in reporting processes for chlamydia and gonorrhea can substantially affect data. Some cases listed in this report are considered presumptive; their status may change as case investigation continues. **Readers should consider the data in this report to be preliminary.** Readers are also cautioned that these data represent reports for short time periods and that changes noted from quarter to quarter may not be meaningful.

HIV disease and AIDS are both presented by "date of report" in this publication. This gives a preliminary look at HIV and AIDS surveillance for the current year. Because HIV and AIDS morbidity trends are better described using "date of diagnosis" rather than "date of report", only summary counts for the counties and a state total are provided. For descriptions of HIV disease and AIDS morbidity, please see our annual reports or the Epidemiologic Profile. Also, HIV and AIDS cases diagnosed/reported from long-term care institutions such as prisons are not included in county totals.

If you have questions or comments, please contact us at the address or phone number above.

### About the authors

North Carolina law requires that diagnoses of certain communicable diseases, including sexually transmitted diseases (STDs), be reported to local health departments that in turn report the information to the state. The Communicable Disease Surveillance Unit (CDSU) is the designated recipient for STD morbidity reports at the state level and is responsible for aggregating reports and providing statewide information about these diseases to others, including the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia. The CDSU is part of the Communicable Disease Branch within the North Carolina Division of Public Health.

### About the contents of this report

The *North Carolina HIV/STD Surveillance Report: Vol. 2009, No 3* presents statistics and trends of sexually transmitted diseases (including HIV and AIDS) in North Carolina from January 1 through June 30, 2009. All reports are presented by the date received by the CDSU. This report is intended as a reference document for local health departments, program managers, health planners, researchers and others who are concerned with the public health implications of these diseases. The information in this quarterly report is meant to be brief and provide limited data on these diseases throughout the year. More detailed and complete information will continue to be available in annual publications. This report and our annual publications are available on our website ([www.epi.state.nc.us/epi/hiv/surveillance.html](http://www.epi.state.nc.us/epi/hiv/surveillance.html)). The CDC maintains data about these diseases for the United States; national information is available from its website ([www.cdc.gov](http://www.cdc.gov))



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10/09



## **AIDS and HIV disease surveillance data**

**HIV disease case reports** represent persons who have a confirmed diagnosis with human immunodeficiency virus (HIV). This category represents all new diagnoses with HIV regardless of the stage of the disease. Most persons are reported with only an HIV infection, but some persons are reported with a concurrent diagnosis of AIDS (acquired immunodeficiency syndrome). In North Carolina, about one-third of the new HIV disease reports represent persons who are diagnosed with HIV infection and AIDS at the same time. **AIDS case reports**, by contrast, represent only persons with HIV infection who have progressed to this later, more life threatening, stage of disease. Most AIDS case reports represent persons who were diagnosed with HIV infection in earlier years. For these reasons, HIV disease reports and AIDS case reports should be considered separately. The two categories should never be combined to estimate an infected population, as the broad group of HIV disease includes AIDS cases but the time references are different.

## **Chlamydia surveillance data**

Chlamydia case reports represent persons who have a laboratory-confirmed chlamydial infection. It is important to note that chlamydial infection is often asymptomatic in both males and females, and most cases are detected through screening. Changes in the number of reported cases may be due to changes in screening practices. Morbidity totals have increased since 2008 as a result of enhancements in laboratory reporting. The disease can cause serious complications in females, and a number of screening programs are in place to detect infection in young women. There are no comparable screening programs for young men. For this reason, chlamydia case reports are always highly biased with respect to gender.

## **Gonorrhea surveillance data**

Gonorrhea case reports represent persons who have a laboratory-confirmed gonorrhea infection. Gonorrhea is often symptomatic in males and slightly less so in females. Many cases are detected when patients seek medical care. Others are detected through screening but to a far lesser degree than chlamydia cases. Gonorrhea can cause serious complications for females and a number of screening programs exist targeting this population. There is less screening of males but since they are more likely to have symptoms that would bring them to the STD clinic, gender bias in gonorrhea reporting is not likely to be large. Public clinics and health departments may do a better job of conducting such screening programs and reporting cases, causing the reported cases to be biased toward those attending public clinics. Morbidity totals have increased since 2008 as a result of enhancements in laboratory reporting.

## **Syphilis surveillance data**

Syphilis cases are reported by stage of infection, which is determined through a combination of laboratory testing and patient interviews. Primary and secondary syphilis have very specific symptoms associated with them, so misclassification of these stages is highly unlikely. Early latent syphilis is asymptomatic but can be staged with confirmation that the infection is less than a year old. Together these three stages that occur within the first year of infection are called 'early syphilis'. This report includes only early syphilis cases, though other later stages are reported to CDSU. Because North Carolina performs patient interviews, partner notification, and contact tracing on all early syphilis cases, the quality of the early latent case data is also quite good. Screening programs are more likely to detect asymptomatic cases, which may introduce some bias in the early latent case reports toward screened populations (pregnant women, jail inmates, others). But, thorough contact tracing further aids in case detection and reduces these biases.

## **For more information**

The data descriptions provided on this page are succinct. For a more detailed discussion of the content, strengths, and weaknesses of STD and HIV surveillance data, please see Appendix B in the *Epidemiologic Profile for HIV/STD Prevention & Care Planning, October 2008*. This report can be found on our website [www.epi.state.nc.us/epi/hiv/surveillance.html](http://www.epi.state.nc.us/epi/hiv/surveillance.html) .

**NORTH CAROLINA STD/HIV REPORTS- January through September, 2009**

2009 Chlamydia Reports		1st Qtr		2nd Qtr		3rd Qtr		4th Qtr		Year to Date	
		Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
<b>Sex</b>	<b>Age Group</b>										
<b>Male</b>	<b>Unknown</b>	11	0.1	5	0.0	5	0.0	n/a	n/a	21	0.1
	<b>0-9</b>	6	0.1	8	0.1	9	0.1	n/a	n/a	23	0.1
	<b>10-14</b>	8	0.1	5	0.0	4	0.0	n/a	n/a	17	0.1
	<b>15-19</b>	487	4.4	507	4.4	434	4.2	n/a	n/a	1,428	4.3
	<b>20-24</b>	812	7.3	848	7.3	715	6.9	n/a	n/a	2,375	7.2
	<b>25-29</b>	432	3.9	412	3.6	306	3.0	n/a	n/a	1,150	3.5
	<b>30-34</b>	207	1.9	177	1.5	134	1.3	n/a	n/a	518	1.6
	<b>35-39</b>	83	0.7	114	1.0	79	0.8	n/a	n/a	276	0.8
	<b>40-44</b>	60	0.5	55	0.5	40	0.4	n/a	n/a	155	0.5
	<b>45-54</b>	38	0.3	31	0.3	36	0.3	n/a	n/a	105	0.3
	<b>55-64</b>	13	0.1	10	0.1	7	0.1	n/a	n/a	30	0.1
	<b>65+</b>	2	0.0	2	0.0	1	0.0	n/a	n/a	5	0.0
<b>Total</b>		2,159	19.5	2,174	18.7	1,770	17.2	n/a	n/a	6,103	18.5
<b>Female</b>	<b>Age Group</b>										
	<b>Unknown</b>	47	0.4	43	0.4	32	0.3	n/a	n/a	122	0.4
	<b>0-9</b>	13	0.1	11	0.1	6	0.1	n/a	n/a	30	0.1
	<b>10-14</b>	101	0.9	114	1.0	102	1.0	n/a	n/a	317	1.0
	<b>15-19</b>	3,560	32.1	3,545	30.6	3,396	33.0	n/a	n/a	10,501	31.8
	<b>20-24</b>	3,257	29.4	3,498	30.2	3,187	30.9	n/a	n/a	9,942	30.1
	<b>25-29</b>	1,109	10.0	1,250	10.8	1,053	10.2	n/a	n/a	3,412	10.3
	<b>30-34</b>	458	4.1	480	4.1	401	3.9	n/a	n/a	1,339	4.1
	<b>35-39</b>	192	1.7	205	1.8	176	1.7	n/a	n/a	573	1.7
	<b>40-44</b>	72	0.6	84	0.7	69	0.7	n/a	n/a	225	0.7
	<b>45-54</b>	49	0.4	44	0.4	43	0.4	n/a	n/a	136	0.4
	<b>55-64</b>	13	0.1	10	0.1	7	0.1	n/a	n/a	30	0.1
<b>65+</b>	1	0.0	2	0.0	n/a	0.0	n/a	n/a	3	0.0	
<b>Total</b>		8,872	80.0	9,286	80.1	8,472	82.3	n/a	n/a	26,630	80.7
<b>Total</b>	<b>Age Group</b>										
	<b>Unknown</b>	78	0.7	71	0.6	46	0.4	n/a	n/a	195	0.6
	<b>0-9</b>	19	0.2	22	0.2	15	0.1	n/a	n/a	56	0.2
	<b>10-14</b>	111	1.0	119	1.0	107	1.0	n/a	n/a	337	1.0
	<b>15-19</b>	4,058	36.6	4,080	35.2	3,840	37.3	n/a	n/a	11,978	36.3
	<b>20-24</b>	4,081	36.8	4,398	37.9	3,922	38.1	n/a	n/a	12,401	37.6
	<b>25-29</b>	1,545	13.9	1,680	14.5	1,368	13.3	n/a	n/a	4,593	13.9
	<b>30-34</b>	669	6.0	661	5.7	540	5.2	n/a	n/a	1,870	5.7
	<b>35-39</b>	276	2.5	324	2.8	257	2.5	n/a	n/a	857	2.6
	<b>40-44</b>	133	1.2	141	1.2	110	1.1	n/a	n/a	384	1.2
	<b>45-54</b>	87	0.8	76	0.7	79	0.8	n/a	n/a	242	0.7
	<b>55-64</b>	26	0.2	20	0.2	14	0.1	n/a	n/a	60	0.2
<b>65+</b>	3	0.0	4	0.0	1	0.0	n/a	n/a	8	0.0	
<b>Total</b>		11,086	100.0	11,596	100.0	10,299	100.0	n/a	n/a	32,981	100.0

**NORTH CAROLINA STD/HIV REPORTS- January through September, 2009**

2009 Chlamydia Reports		1st Qtr		2nd Qtr		3rd Qtr		4th Qtr		Year to Date	
		Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
<b>Sex</b>	<b>Race/Ethnicity</b>										
<b>Unknown</b>	<b>Unknown</b>	16	0.1	111	1.0	36	0.3	n/a	n/a	163	0.5
	<b>White*</b>	8	0.1	2	0.0	3	0.0	n/a	n/a	13	0.0
	<b>Black*</b>	26	0.2	16	0.1	18	0.2	n/a	n/a	60	0.2
	<b>American Indian*</b>	1	0.0	0	0.0	0	0.0	n/a	n/a	1	0.0
	<b>Asian, Pac Islander*</b>	0	0.0	0	0.0	0	0.0	n/a	n/a	0	0.0
	<b>Hispanic</b>	4	0.0	7	0.1	0	0.0	n/a	n/a	11	0.0
	<b>Total</b>		55	0.5	136	1.2	57	0.6	n/a	n/a	248
<b>Male</b>	<b>Race/Ethnicity</b>										
	<b>Unknown</b>	627	5.7	691	6.0	628	6.1	n/a	n/a	1,946	5.9
	<b>White*</b>	298	2.7	243	2.1	187	1.8	n/a	n/a	728	2.2
	<b>Black*</b>	1,029	9.3	1,074	9.3	835	8.1	n/a	n/a	2,938	8.9
	<b>American Indian*</b>	21	0.2	19	0.2	15	0.1	n/a	n/a	55	0.2
	<b>Asian, Pac Islander*</b>	10	0.1	13	0.1	6	0.1	n/a	n/a	29	0.1
	<b>Hispanic</b>	174	1.6	134	1.2	99	1.0	n/a	n/a	407	1.2
<b>Total</b>		2,159	19.5	2,174	18.7	1,770	17.2	n/a	n/a	6,103	18.5
<b>Female</b>	<b>Race/Ethnicity</b>										
	<b>Unknown</b>	2,389	21.5	2,769	23.9	2,697	26.2	n/a	n/a	7,855	23.8
	<b>White*</b>	1,658	15.0	1,601	13.8	1,371	13.3	n/a	n/a	4,630	14.0
	<b>Black*</b>	4,111	37.1	4,163	35.9	3,767	36.6	n/a	n/a	12,041	36.5
	<b>American Indian*</b>	118	1.1	132	1.1	144	1.4	n/a	n/a	394	1.2
	<b>Asian, Pac Islander*</b>	55	0.5	43	0.4	41	0.4	n/a	n/a	139	0.4
	<b>Hispanic</b>	541	4.9	578	5.0	452	4.4	n/a	n/a	1,571	4.8
<b>Total</b>		8,872	80.0	9,286	80.1	8,472	82.3	n/a	n/a	26,630	80.7
<b>Total</b>	<b>Race/Ethnicity</b>										
	<b>Unknown</b>	3,032	27.3	3,571	30.8	3,361	32.6	n/a	n/a	9,964	30.2
	<b>White*</b>	1,964	17.7	1,846	15.9	1,561	15.2	n/a	n/a	5,371	16.3
	<b>Black*</b>	5,166	46.6	5,253	45.3	4,620	44.9	n/a	n/a	15,039	45.6
	<b>American Indian*</b>	140	1.3	151	1.3	159	1.5	n/a	n/a	450	1.4
	<b>Asian, Pac Islander*</b>	65	0.6	56	0.5	47	0.5	n/a	n/a	168	0.5
	<b>Hispanic</b>	719	6.5	719	6.2	551	5.4	n/a	n/a	1,989	6.0
<b>Total</b>		11,086	100.0	11,596	100.0	10,299	100.0	n/a	n/a	32,981	100.0

\*non Hispanic

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2009 Gonorrhea Reports		1st Qtr		2nd Qtr		3rd Qtr		4th Qtr		Year to Date	
		Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
<b>Sex</b>	<b>Age Group</b>										
<b>Male</b>	<b>Unknown</b>	6	0.2	3	0.1	9	0.2	n/a	n/a	18	0.2
	<b>0-9</b>	5	0.1	2	0.1	3	0.1	n/a	n/a	10	0.1
	<b>10-14</b>	4	0.1	2	0.1	5	0.1	n/a	n/a	11	0.1
	<b>15-19</b>	327	8.9	319	8.2	304	8.1	n/a	n/a	950	8.4
	<b>20-24</b>	550	14.9	557	14.3	545	14.6	n/a	n/a	1,652	14.6
	<b>25-29</b>	290	7.9	315	8.1	289	7.7	n/a	n/a	894	7.9
	<b>30-34</b>	180	4.9	166	4.3	154	4.1	n/a	n/a	500	4.4
	<b>35-39</b>	100	2.7	109	2.8	93	2.5	n/a	n/a	302	2.7
	<b>40-44</b>	61	1.7	78	2.0	62	1.7	n/a	n/a	201	1.8
	<b>45-54</b>	95	2.6	76	2.0	89	2.4	n/a	n/a	260	2.3
	<b>55-64</b>	21	0.6	28	0.7	13	0.3	n/a	n/a	62	0.5
	<b>65+</b>	7	0.2	4	0.1	5	0.1	n/a	n/a	16	0.1
<b>Total</b>		1,646	44.6	1,659	42.7	1,571	42.0	n/a	n/a	4,876	43.1
<b>Female</b>	<b>Age Group</b>										
	<b>Unknown</b>	7	0.2	15	0.4	15	0.4	n/a	n/a	37	0.3
	<b>0-9</b>	1	0.0	4	0.1	2	0.1	n/a	n/a	7	0.1
	<b>10-14</b>	23	0.6	24	0.6	27	0.7	n/a	n/a	74	0.7
	<b>15-19</b>	761	20.6	763	19.6	742	19.8	n/a	n/a	2,266	20.0
	<b>20-24</b>	719	19.5	802	20.6	792	21.2	n/a	n/a	2,313	20.4
	<b>25-29</b>	273	7.4	325	8.4	322	8.6	n/a	n/a	920	8.1
	<b>30-34</b>	121	3.3	139	3.6	132	3.5	n/a	n/a	392	3.5
	<b>35-39</b>	61	1.7	62	1.6	57	1.5	n/a	n/a	180	1.6
	<b>40-44</b>	32	0.9	30	0.8	30	0.8	n/a	n/a	92	0.8
	<b>45-54</b>	19	0.5	10	0.3	23	0.6	n/a	n/a	52	0.5
	<b>55-64</b>	5	0.1	5	0.1	1	0.0	n/a	n/a	11	0.1
<b>65+</b>	0	0.0	0	0.0	0	0.0	n/a	n/a	0	0.0	
<b>Total</b>		2,022	54.8	2,179	56.1	2,143	57.3	n/a	n/a	6,344	56.1
<b>Total</b>	<b>Age Group</b>										
	<b>Unknown</b>	15	0.4	30	0.8	28	0.7	n/a	n/a	73	0.6
	<b>0-9</b>	6	0.2	6	0.2	5	0.1	n/a	n/a	17	0.2
	<b>10-14</b>	27	0.7	26	0.7	32	0.9	n/a	n/a	85	0.8
	<b>15-19</b>	1,092	29.6	1,087	28.0	1,053	28.2	n/a	n/a	3,232	28.6
	<b>20-24</b>	1,277	34.6	1,379	35.5	1,343	35.9	n/a	n/a	3,999	35.4
	<b>25-29</b>	567	15.4	644	16.6	614	16.4	n/a	n/a	1,825	16.1
	<b>30-34</b>	302	8.2	308	7.9	289	7.7	n/a	n/a	899	7.9
	<b>35-39</b>	161	4.4	172	4.4	150	4.0	n/a	n/a	483	4.3
	<b>40-44</b>	94	2.5	108	2.8	94	2.5	n/a	n/a	296	2.6
	<b>45-54</b>	114	3.1	88	2.3	112	3.0	n/a	n/a	314	2.8
	<b>55-64</b>	26	0.7	33	0.8	14	0.4	n/a	n/a	73	0.6
<b>65+</b>	7	0.2	4	0.1	5	0.1	n/a	n/a	16	0.1	
<b>Total</b>		3,688	100.0	3,885	100.0	3,739	100.0	n/a	n/a	11,312	100.0

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2009 Gonorrhea Reports		1st Qtr		2nd Qtr		3rd Qtr		4th Qtr		Year to Date	
		Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
<b>Sex</b>	<b>Race/Ethnicity</b>										
<b>Unknown</b>	<b>Unknown</b>	5	0.1	34	0.9	15	0.4	n/a	n/a	54	0.5
	<b>White*</b>	4	0.1	1	0.0	2	0.1	n/a	n/a	7	0.1
	<b>Black*</b>	11	0.3	11	0.3	7	0.2	n/a	n/a	29	0.3
	<b>American Indian*</b>	0	0.0	0	0.0	0	0.0	n/a	n/a	0	0.0
	<b>Asian, Pac Islander*</b>	0	0.0	0	0.0	0	0.0	n/a	n/a	0	0.0
	<b>Hispanic</b>	0	0.0	1	0.0	1	0.0	n/a	n/a	2	0.0
	<b>Total</b>		20	0.5	47	1.2	25	0.7	n/a	n/a	92
<b>Male</b>	<b>Race/Ethnicity</b>										
	<b>Unknown</b>	409	11.1	429	11.0	443	11.8	n/a	n/a	1,281	11.3
	<b>White*</b>	123	3.3	125	3.2	99	2.6	n/a	n/a	347	3.1
	<b>Black*</b>	1,045	28.3	1,051	27.1	980	26.2	n/a	n/a	3,076	27.2
	<b>American Indian*</b>	22	0.6	16	0.4	15	0.4	n/a	n/a	53	0.5
	<b>Asian, Pac Islander*</b>	5	0.1	5	0.1	3	0.1	n/a	n/a	13	0.1
	<b>Hispanic</b>	42	1.1	33	0.8	31	0.8	n/a	n/a	106	0.9
<b>Total</b>		1,646	44.6	1,659	42.7	1,571	42.0	n/a	n/a	4,876	43.1
<b>Female</b>	<b>Race/Ethnicity</b>										
	<b>Unknown</b>	443	12.0	561	14.4	602	16.1	n/a	n/a	1,606	14.2
	<b>White*</b>	270	7.3	273	7.0	247	6.6	n/a	n/a	790	7.0
	<b>Black*</b>	1,214	32.9	1,264	32.5	1,224	32.7	n/a	n/a	3,702	32.7
	<b>American Indian*</b>	39	1.1	30	0.8	33	0.9	n/a	n/a	102	0.9
	<b>Asian, Pac Islander*</b>	6	0.2	6	0.2	7	0.2	n/a	n/a	19	0.2
	<b>Hispanic</b>	50	1.4	45	1.2	30	0.8	n/a	n/a	125	1.1
<b>Total</b>		2,022	54.8	2,179	56.1	2,143	57.3	n/a	n/a	6,344	56.1
<b>Total</b>	<b>Race/Ethnicity</b>										
	<b>Unknown</b>	857	23.2	1,024	26.4	1,060	28.3	n/a	n/a	2,941	26.0
	<b>White*</b>	397	10.8	399	10.3	348	9.3	n/a	n/a	1,144	10.1
	<b>Black*</b>	2,270	61.6	2,326	59.9	2,211	59.1	n/a	n/a	6,807	60.2
	<b>American Indian*</b>	61	1.7	46	1.2	48	1.3	n/a	n/a	155	1.4
	<b>Asian, Pac Islander*</b>	11	0.3	11	0.3	10	0.3	n/a	n/a	32	0.3
	<b>Hispanic</b>	92	2.5	79	2.0	62	1.7	n/a	n/a	233	2.1
<b>Total</b>		3,688	100.0	3,885	100.0	3,739	100.0	n/a	n/a	11,312	100.0

\*non Hispanic











