

In this Issue:

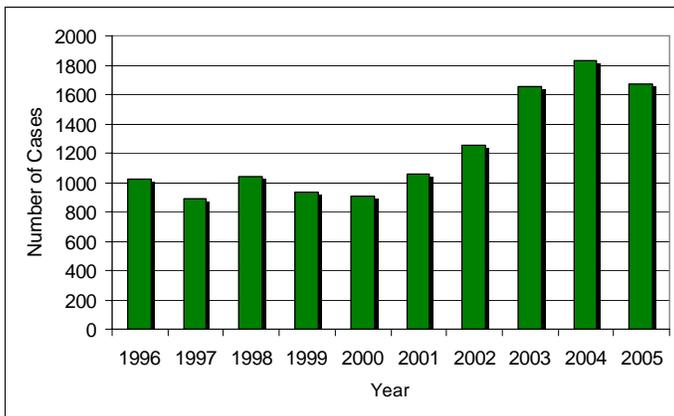
- STD 2005 Update
- HIV Biannual Update
- Perinatal Study
- Reportable Conditions Summary

Sexually Transmitted Disease (STD) 2005 Update

Chlamydia

In 2005, 1,670 cases of chlamydia were reported to the North Dakota Department of Health (NDDoH); a nine percent decrease from the 1,835 cases reported in 2004 (**Figure 1**). One thousand ninety-three (65.4%) of the cases were reported among females. As in 2004, people age 20 to 24 had the most reported cases with 774 (46.3%), followed by 15- to 19-year-olds with 466 (27.9%) and 25- to 29-year-olds with 280 (16.8%) (**Figure 2**).

Figure 1. Reported Chlamydia Cases by Year, North Dakota, 1995-2005



More cases were reported among whites than any other race. Nine hundred fifty-one (56.9%) cases were reported among whites, followed by American Indians with 363 (21.7%), African Americans with 80 (4.8%) and Hispanics with 49 (2.9%). However, minority populations continue to be disproportionately affected by STDs in North Dakota. The chlamydia rate for African Americans for 2005 was 2,042.9 per 100,000 (**Figure 3**). Among American Indians, North Dakota's largest minority population, the rate was 1,158.7 per 100,000. In comparison, the chlamydia rate for whites in 2005 was 160.3 per 100,000. The rate for all of North Dakota was

260.0 per 100,000, compared to 285.7 per 100,000 in 2004.

Figure 2. Reported Chlamydia Cases by Age Group, North Dakota, 2005

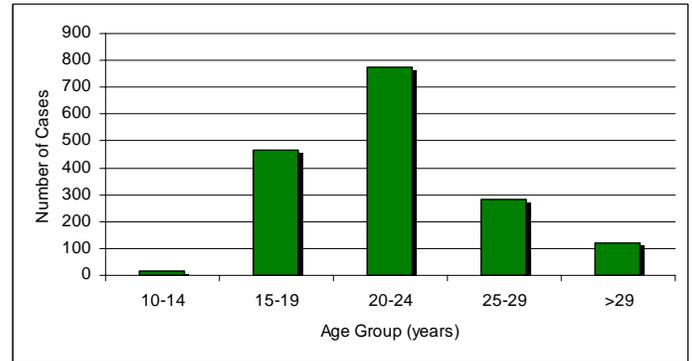
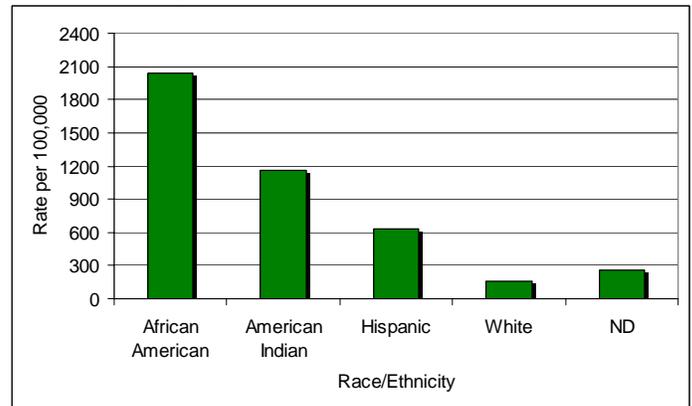


Figure 3. Reported Chlamydia Rates by Race/Ethnicity, North Dakota, 2005



One thousand five hundred eighty-seven (95%) of the reported cases were reported from 15 counties. The four counties with the highest chlamydia rates are counties with American Indian reservations. Sioux, Benson, Mountrail and Rolette counties reported incidence rates of 1,409.5, 818.5, 648.5 and 621.6 per 100,000 population respectively. These rates are significantly greater than the rate of 260.0 per 100,000 for all of North Dakota. Overall, 10 counties (Sioux, Benson, Mountrail, Rolette, Ward, Williams, Ramsey, Grand Forks, Burleigh and Cass)

reported rates greater than the North Dakota rate. In 2005, 16,648 chlamydia tests submitted from clinics participating in the Region VIII Infertility Prevention Project in North Dakota were analyzed at the NDDoH Division of Laboratory Services. Of these, 1,181 (7.1%) were positive.

Nine family planning clinics submitted 8,848 specimens of which 557 (6.3%) were positive. Of the family planning specimens, 7,857 were from females of which 374 (4.8%) were positive. Nine hundred eighty-two male specimens were submitted of which 183 (18.6%) were positive.

Other clinics participating in the Region VIII chlamydia project submitted 7,800 specimens for chlamydia testing; 624 (8.0%) were positive. Of those, 5,443 were from females and 371 (6.8%) were positive.

In 2005, a total of 21,081 chlamydia tests were performed at the Division of Laboratory Services, with 1,402 positive results for a positivity rate (percentage of positive test results) of 6.7 percent. In comparison, 21,585 chlamydia tests were performed in 2004, of which 1,612 were reported positive for a positivity rate of 7.5 percent. Overall, when comparing 2005 test data with 2004 data, the number of positive tests decreased by 13.0 percent, and the positivity rate decreased by 10.7 percent.

Gonorrhea

In 2005, 128 cases of gonorrhea were reported to the NDDoH, a 15.3 percent increase from the 111 cases reported during 2004 (**Figure 4**). Seventy-six (59.4%) of the cases occurred among females, a 4.1 percent increase compared to the 73 cases for the previous year. Fifty (39.1%) cases occurred among 20- to 24-year-olds, a 51.5 percent increase compared to the 33 cases reported in this age group in 2004. Thirty-three (25.8%) cases occurred among 25- to 29-year-olds (**Figure 5**).

Fifty-seven cases were reported among whites, 28 cases among American Indians and 23 cases among African Americans. However, the rates continue to reflect disparity among North Dakota racial and ethnic groups. The gonorrhea rate for African Americans in 2005 was 587.3 per 100,000, a 64.3 percent increase compared to 2004 (**Figure 6**). Among American Indians, the rate was 89.4 per 100,000. In contrast, the rate among whites in 2005 was 9.6 per 100,000, and the rate for all of North Dakota was 19.9 per 100,000.

In 2005, gonorrhea cases were reported from 17 counties. Eighty-three (64.8%) of the cases were reported from three counties: Cass, Ward and Grand Forks. The two counties with the highest gonorrhea rates are counties with American Indian reservations. Sioux and Benson counties reported incidence rates of 173.1 and 114.9 per 100,000 population respectively. These rates are significantly higher than the rate of 19.9 per 100,000 for all of North Dakota. Overall, seven counties (Sioux, Benson, Golden

Valley, Mountrail, Ward, Cass and Barnes) reported rates higher than the North Dakota rate.

Figure 4. Reported Gonorrhea Cases by Year, North Dakota, 1995-2005

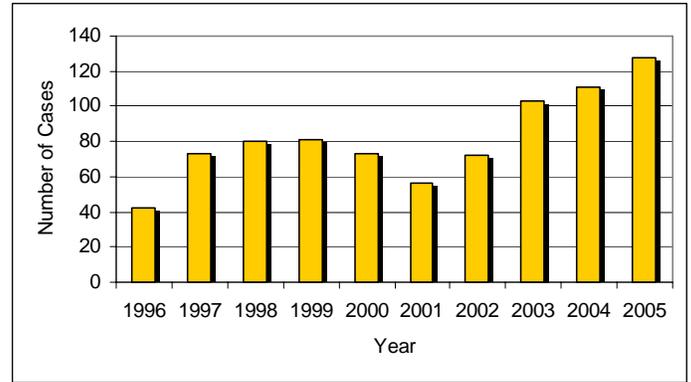


Figure 5. Reported Gonorrhea Cases by Age Group, North Dakota, 2005

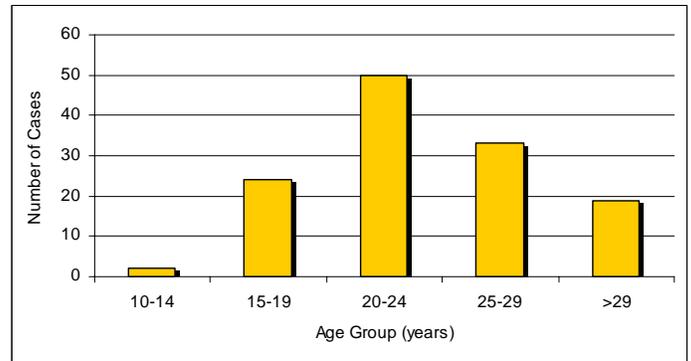
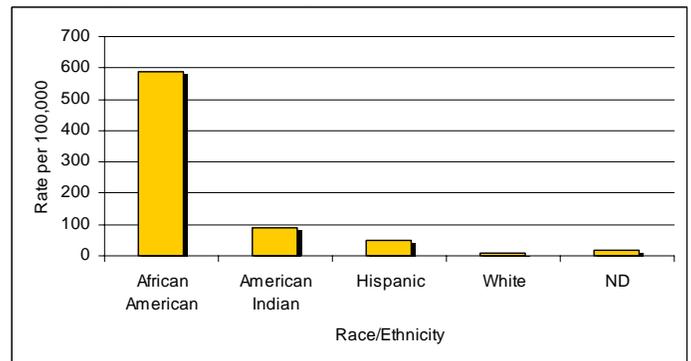


Figure 6. Reported Gonorrhea Rates by Race Ethnicity, North Dakota, 2005



Syphilis

In 2005, one case of primary syphilis was reported to the NDDoH. The case was a white male who had recently traveled out of the country and had a history of multiple sex partners while in the foreign country.

For more information about STDs in your region, contact Kim Weis, STD program manager, at 701.328.2385 or kweis@nd.gov, or your local field epidemiologist. [Click here](#) for a listing of the field epidemiologist in your area.

HIV Biannual Update

Table 1 summarizes newly diagnosed HIV/AIDS cases reported from Jan. 1 through June 30, 2006, and compares the data to the same period in 2005. The table also

provides a summary about residents of North Dakota diagnosed with HIV or AIDS and known to be living as of Dec. 31, 2005

Table 1. New HIV and AIDS Diagnoses by Gender, Age at Diagnosis, Race/Ethnicity, and Exposure Risk											
North Dakota, 2005 – 2006											
	New HIV Diagnoses ¹				New AIDS Diagnoses ²				Living HIV and AIDS Cases ³		
	January – June				January - June						
	2006		2005		2006		2005		No.	(%)*	
	No.	(%)*	No.	(%)*	No.	(%)*	No.	(%)*	No.	(%)*	
Gender											
Male	3	(75)	2	(67)	3	(100)	2	(67)	100	(80)	
Female	1	(25)	1	(33)	0	(--)	1	(33)	28	(20)	
Race/Ethnicity											
White	2	(50)	3	(100)	2	(67)	1	(33)	90	(72)	
American Indian	0	--	0	--	0	--	0	--	11	(8)	
Black	0	--	0	--	1	(33)	2	(67)	21	(15)	
Hispanic	0	--	0	--	0	--	0	--	6	(5)	
Native Hawaiian/Pacific Islander	1	(25)	0	--	0	--	0	--	0	--	
Unknown	1	(25)	0	--	0	--	0	--	0	--	
Age at Diagnosis											
<12	0	--	0	--	0	--	0	--	2	(1)	
13-19	0	--	0	--	0	--	0	--	4	(3)	
20-29	2	(50)	1	(33)	0	--	1	(33)	35	(28)	
30-39	0	--	1	(33)	1	(33)	1	(33)	49	(38)	
40-49	2	(50)	0	--	0	--	1	(33)	27	(21)	
50-59	0	--	0	--	2	(67)	0	--	11	(8)	
>60	0	--	1	(33)	0	--	0	--	0	--	
Risk											
Male-to-Male Sexual Contact (MMS)	1	(25)	2	(67)	1	(33)	1	(33)	62	(50)	
Injecting drug use (IDU)	0	--	0	--	0	--	0	--	11	(9)	
MMS/IDU	0	--	0	--	1	(33)	0	--	2	(2)	
Heterosexual contact	0	--	1	(33)	1	(33)	1	(33)	29	(20)	
Heterosexual contact/IDU	1	(25)	0	--	0	--	0	--	0	--	
Receipt of blood or tissue	0	--	0	--	0	--	0	--	3	(2)	
Adult Hemophilia/coagulation disorder	0	--	0	--	0	--	0	--	2	(2)	
Mother w/or risk for HIV infection	0	--	0	--	0	--	0	--	2	(2)	
Pediatric hemophilia/coag. Disorder	0	--	0	--	0	--	0	--	0	(1)	
Risk not specified	2	(50)	0	--	0	--	1	(33)	17	(13)	
Total	4		3		3		3		128		

¹ Due to rounding, values may not equal 100 percent.

¹ New HIV diagnoses reflects all residents of North Dakota diagnosed with HIV infection for the first time during the time period, regardless of AIDS status. Also, some may be counted as AIDS cases if they received an AIDS diagnosis during the same period.

² New AIDS diagnoses reflect all residents of North Dakota who first met the criteria for AIDS during the time period, regardless of when their HIV infection was reported to the state.

³ Living HIV and AIDS cases reflect people diagnosed with HIV or AIDS as a resident of North Dakota and were known to be living on December 31, 2005. All deaths may not have been reported.

Cumulative Reported Cases

Cumulative reported cases include newly diagnosed cases of HIV infection and AIDS in North Dakota residents and cases previously diagnosed in other states who resided in North Dakota during the reporting period.

As of June 30, 2006, 369 cumulative HIV/AIDS cases have been reported to the North Dakota Department of Health (NDDoH) since HIV/AIDS surveillance began in 1984. Of these, 37 percent are known to have died. Of those still alive, 38 percent are known to be living with AIDS and 62 percent are known to be living with HIV but have not received an AIDS diagnosis.

Most frequently reported risk factors are unprotected male-to-male sexual contact at 52 percent, unprotected heterosexual contact at 15 percent and injecting drug use at nine percent.

Of the 369 reported cases:

- 85 percent were male; 15 percent female.
- 74 percent were between the ages of 20 and 39 at time of diagnosis.
- 77 percent (281) were white; 11 percent (40) were American Indian; 10 percent (36) were black; three percent (9) were Hispanic – any race; and less than one percent were Asian/Pacific Islander.

All HIV/AIDS data are based on the best information available but are subject to change as more complete information is received. Please note that a slight change in the number of reported HIV cases will result in significant changes in rates because of the relatively low numbers.

Reporting HIV/AIDS Diagnoses

North Dakota health-care and service providers are required to report to the NDDoH anyone with HIV for whom they are providing care or services.

The following indicators of HIV infection are mandated as reportable to the NDDoH: a confirmed positive HIV antibody screen, detectable and non-detectable viral load test results and any CD4 T-lymphocyte test result.

Accurately counting newly diagnosed HIV and AIDS cases impacts federal resources allocated to North Dakota for HIV/AIDS prevention, care and supportive services and surveillance activities.

**New Title II/ADAP/HIV
Surveillance Coordinator
Krissie Mayer
kmayer@nd.gov
701.328.4555**

Perinatal Project

The North Dakota Department of Health Division of Disease Control has recently completed a survey to assess the prevalence of perinatal screening at birthing facilities in North Dakota. The survey involved chart reviews of labor and delivery records from a random sample of North Dakota’s 2003 resident births. There were 26 hospitals identified as birthing facilities in 2003, and from those a total of 671 labor and delivery charts were reviewed.

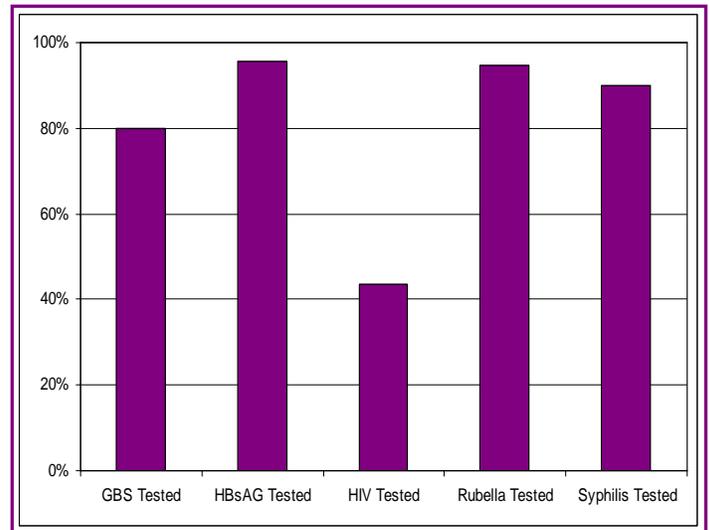
The purpose of this study was two-fold: (1) to assess the prevalence of perinatal screening for hepatitis B virus (HBV), group B streptococcus (GBS), HIV, syphilis and rubella and (2) to determine levels of prophylaxis against perinatal transmission of HBV, GBS and HIV.

In the summer of 2005, a pilot study was conducted in which 150 charts were reviewed and in June, July and August, 2006, the remaining 521 charts were reviewed.

Preliminary review of the charts includes the following:

- Ninety- six percent (641) were perinatally screened for hepatitis B
- Ninety-five percent (635) were screened for rubella susceptibility
- Ninety percent (603) were screened for syphilis
- Eighty percent (536) were screened for GBS
- Forty-four percent (293) were screened for HIV

Figure 7. Percentage of Pregnant Women Screened for HBV, GBS, HIV, Syphilis and Rubella



A final report will be published in the winter/spring of 2007.

For more information about this survey, contact Tracy Miller at 701.328.2378, toll-free at 800.472.2180 or at tkmiller@nd.gov.

Reporting HBV Surface Antigen-Positive Pregnant Women

Documented HBsAg-positive mothers often are not screened, especially during later pregnancies, and are therefore not reported to the NDDoH. As a result, many at-risk infants may be missed.

To report HBV surface antigen-positive pregnant women, call 1.800.472.2180 or go on line at www.ndhealth.gov/disease/ and click on “Disease Reporting.”

Thanks *Gracias* *Merci*

We would like to extend a special thanks to Allison Dolajack and Sarah Perius for their dedication to the perinatal project. It would not have been completed without their efforts.

Contributing Authors:
 Tracy Miller, Senior Epidemiologist
 Kim Weis, STD and hepatitis program manager
 Melissa Casteel, HIV/TB program manager
 Krissie Mayer, HIV surveillance coordinator
 Erin Fox, surveillance epidemiologist
 Sarah Perius, epidemiologist intern
 Allison Dolajack, epidemiologist intern

Summary of Selected Reportable Conditions

North Dakota, 2005-2006

Reportable Condition	July – September 2006*	January- September 2006*	July – September 2005	January - September 2005
Campylobacteriosis	27	79	23	85
Chlamydia	394	1,274	414	1,195
Cryptosporidiosis	6	14	1	5
<i>E. coli</i> , shiga toxin positive (non-O157) <i>E. coli</i> , shiga toxin positive (non-O157)	7	10	1	1
<i>E. coli</i> O157:H7	6	9	13	16
Enterococcus, Vancomycin-resistant (VRE)	75	134	7	15
Giardiasis	12	25	9	20
Gonorrhea	33	88	32	76
Haemophilus influenzae (invasive)	2	4	2	3
Acute Hepatitis A	2	3	3	3
Acute Hepatitis B	1	1	0	0
Acute Hepatitis C	0	0	0	1
HIV/AIDS	7	15	5	13
Legionellosis	0	0	1	3
Lyme Disease	0	1	0	1
Malaria	0	2	0	0
Meningitis, bacterial ¹ (non meningococcal)	1	1	1	4
Meningococcal disease	1	4	0	1
Mumps	2	15	1	2
Pertussis	12	39	47	133
Q fever	1	1	0	0
Rabies (animal)	3	16	8	30
Salmonellosis	25	46	21	67
Shigellosis	150	156	2	5
<i>Staphylococcus aureus</i> , Methicillin-resistant (MRSA)	385	976	417	1,111
Streptococcal disease, Group A ² (invasive)	2	13	3	10
Streptococcal disease, Group B ² (infant < 3 months of age)	1	3	3	3
Streptococcal disease, Group B ² (invasive ³)	8	27	7	21
Streptococcal disease, other ² (invasive)	4	10	5	16
Streptococcal pneumoniae ² , (invasive, children < 5 years of age)	2	7	3	7
Streptococcal pneumoniae ² (invasive ⁴)	10	53	11	41
<i>Streptococcus pneumoniae</i> ² , drug-resistant	0	0	0	0
Tuberculosis	0	4	0	6
West Nile Virus Infection	134	135	85	86

*Provisional data

¹ Meningitis caused by *Staphylococcus aureus* and *Streptococcus pneumoniae*.

² Includes invasive infections caused by streptococcal disease not including those classified as meningitis.

³ Includes invasive infections of streptococcal, Group B, disease in persons ≥ 3 months of age.

⁴ Includes invasive infections caused by *Streptococcus pneumoniae* in persons ≥ 5 years of age.