

- 2010 HIV/AIDS Summary
- 2010 Tuberculosis Epidemiology Report
- Summary of Selected Reportable Conditions

## 2010 HIV/AIDS Summary

North Dakota ranks near the bottom for incidence of HIV/AIDS in the United States. According to the U.S. Centers for Disease Control and Prevention, estimated state-specific AIDS incidence rates per 100,000 people ranged from 1.1 in Vermont to 24.6 in New York for 2009. North Dakota was ranked 47<sup>th</sup> with a rate of 2.2 per 100,000 people. Similar comparisons for HIV (non-AIDS) incidence rates are not possible because some states require only AIDS case reporting.

A total of 25 HIV/AIDS cases were reported to the North Dakota Department of Health (NDDoH) in 2010, which includes newly diagnosed cases and cases previously diagnosed in other states who moved to North Dakota during 2010.

In 2010, 13 North Dakota residents were diagnosed with HIV/AIDS and reported to the NDDoH. Three of the newly diagnosed HIV cases were advanced enough to meet the case definition for AIDS at the time of diagnosis. **Table 1** summarizes newly diagnosed HIV and AIDS cases for 2010 and compares data to the same time period in 2009.

### Cumulative (1984-2010) HIV/AIDS Cases, North Dakota

HIV and AIDS have been reportable conditions in North Dakota since 1984. The cumulative reported infections include cases newly diagnosed in the state, as well as cases diagnosed elsewhere who moved to North Dakota. As of Dec. 31, 2010, a cumulative total of 500 HIV/AIDS cases had been reported in North Dakota; 305 of which are AIDS cases and 195 are HIV (non-AIDS) cases. Of the cumulative total HIV/AIDS cases, 227 are known to still be living in North Dakota.

Of the 227 HIV/AIDS cases still living in North Dakota:

- 78 percent were male; 22 percent female.
- 68 percent were between the ages of 25 and 44 at diagnosis.

- 67 percent were white, 8 percent were American Indian, 19 percent were black and 4 percent were Hispanic (all races).
- The most frequently indicated risk factors were male-to-male sexual contact at, 45 percent; heterosexual contact at, 33 percent; and injection drug use at, 8 percent.

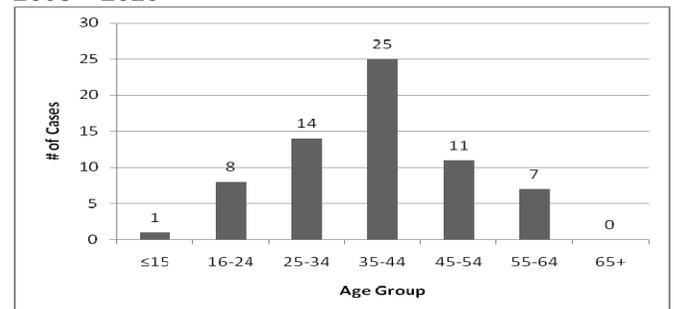
**Table 1** summarizes the cumulative HIV/AIDS cases still living in North Dakota.

### HIV/AIDS Incidence 2006-2010

HIV/AIDS incidence refers to cases that were diagnosed in North Dakota within a given time frame. The AIDS cases reported in this section met the criteria for AIDS at HIV diagnosis. From 2006 to 2010, 66 HIV/AIDS cases were diagnosed in North Dakota. Thirty-five percent met the criteria for AIDS at HIV diagnosis, while 65 percent were diagnosed as HIV (non-AIDS). Eighty-two percent were male and 18 percent were female.

**Figure 1** shows the age groups of HIV/AIDS cases diagnosed in North Dakota between 2006 and 2010. HIV/AIDS seems to infect young adults more frequently than other age groups; however, infections among older adults are increasing. The 35- to 44-year-old age group made up the largest proportion of the HIV/AIDS cases diagnosed during that time period. Seventy-six percent of the cases were between the ages of 25 and 54.

**Figure 1. Age of HIV/AIDS cases diagnosed in N.D. 2006 – 2010**



**Table 1. New HIV and AIDS Diagnoses by Race/Ethnicity, Gender, Exposure Risk, and Age at Diagnosis, North Dakota 2009-2010**

	New HIV/AIDS cases <sup>1</sup>				Total HIV/AIDS Cases Living in ND <sup>2</sup>	
	2010		2009		Number	Percent*
	Number	Percent*	Number	Percent*		
<b>Diagnosis</b>						
HIV	10	77%	9	56%	115	51%
AIDS	3	23%	7	44%	112	49%
<b>Race/Ethnicity</b>						
American Indian	0	0%	2	13%	19	8%
Black	4	31%	4	25%	43	19%
Hispanic (all races)	3	23%	0	0%	10	4%
Asian/Pacific Islander	1	8%	0	0%	2	1%
White	5	38%	10	63%	152	67%
Multi-race (non-Hispanic)	0	0%	0	0%	1	0%
<b>Gender</b>						
Male	9	69%	15	94%	175	77%
Female	4	31%	1	6%	52	23%
<b>Risk</b>						
Heterosexual contact	7	54%	5	31%	34	15%
Injecting drug use (IDU)	1	8%	1	6%	19	8%
Male-to-male sexual contact (MSM)	4	31%	7	44%	102	45%
MSM/IDU	0	0%	1	6%	9	4%
Perinatal transmission	0	0%	0	0%	0	0%
Other	0	0%	1	6%	2	1%
Risk not specified/not reported	1	8%	1	6%	61	25%
<b>Age Group</b>						
≤15	0	0%	0	0%	2	1%
15-24	4	31%	2	13%	11	5%
25-34	2	15%	4	25%	27	12%
35-44	4	31%	6	38%	76	33%
45-54	1	8%	3	19%	73	32%
55-64	2	15%	1	6%	31	14%
65+	0	0%	0	0%	7	3%
<b>Total</b>	<b>13</b>		<b>16</b>		<b>227</b>	

\*Due to rounding, totals may not equal 100%.

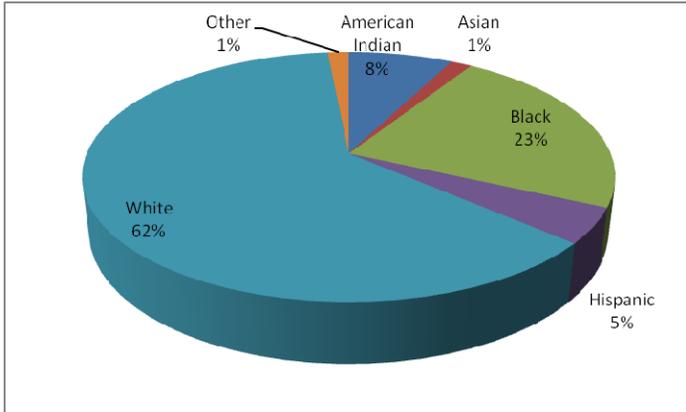
<sup>1</sup>New HIV/AIDS cases reflect newly diagnosed cases in North Dakota during the listed time period. These cases include those classified as AIDS cases at initial diagnosis.

<sup>2</sup>Total HIV/AIDS cases living in N.D. reflect HIV/AIDS cases that were alive and residing in North Dakota as of February 16, 2011.

**Race/Ethnicity of HIV/AIDS Cases Diagnosed in North Dakota 2006-2010**

Racial and ethnic minorities disproportionately continue to be affected by HIV in the United States. Twenty-three percent of HIV/AIDS cases diagnosed in North Dakota between 2006 and 2010 were black. Eight percent of HIV/AIDS cases diagnosed in North Dakota between 2006 and 2010 were American Indian (Figure 2).

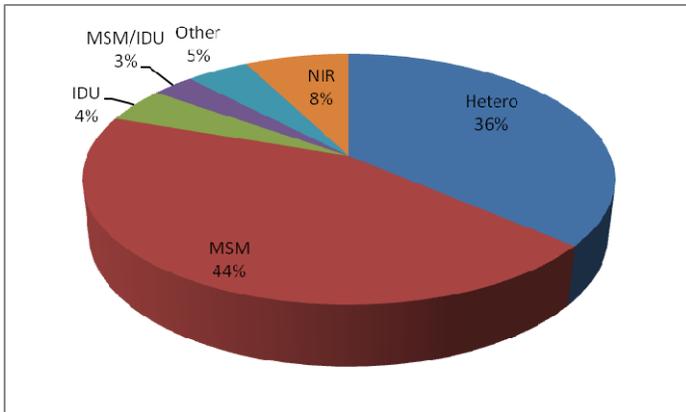
**Figure 2. Race/Ethnicity of HIV/AIDS cases diagnosed in N.D. 2009-2010**



**Risk Factors of HIV/AIDS Cases Diagnosed in North Dakota 2006-2010**

Male-to-male sex continues to be the most frequently reported risk factor among HIV/AIDS cases diagnosed in North Dakota. Forty-four percent of the cases diagnosed between 2006 and 2010 claimed to have male-to-male sexual relations. Thirty-seven percent of the cases diagnosed during this time period reported having heterosexual relations. Five percent of the cases claimed to have used intravenous drugs, and 3 percent claimed to have used intravenous drugs and had male-to-male sexual relations (Figure 3).

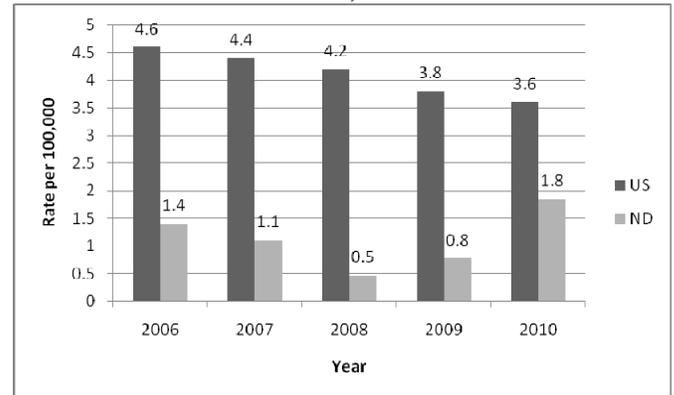
**Figure 3. Risk factors of HIV/AIDS cases diagnosed in N.D. 2006-2010**



**Tuberculosis in North Dakota – 2010**

In 2010, it was estimated that more than 9 million people became sick with Tuberculosis (TB) disease throughout the world. In the U.S., that number was approximately 11,181. North Dakota had 12 cases of active TB in 2010, corresponding with an incidence rate of 1.8 new cases for every 100,000 people. North Dakota’s incidence rate historically has been lower than the national rate (Figure 4).

**Figure 4. United States and North Dakota Tuberculosis Disease Rates, 2006-2010.**



Of the 12 cases, six were pulmonary and four were extra-pulmonary. Two cases were both pulmonary and extra-pulmonary. Two cases were part of the same cluster as evidenced by genotyping.

The TB cases ranged in age from 19 to 84 with a median age of 37. Six cases were male and six were female.

Risk factors associated with the TB cases in North Dakota in 2010 included being part of a racial minority, being foreign-born and homelessness. There was one TB-related death in 2010.

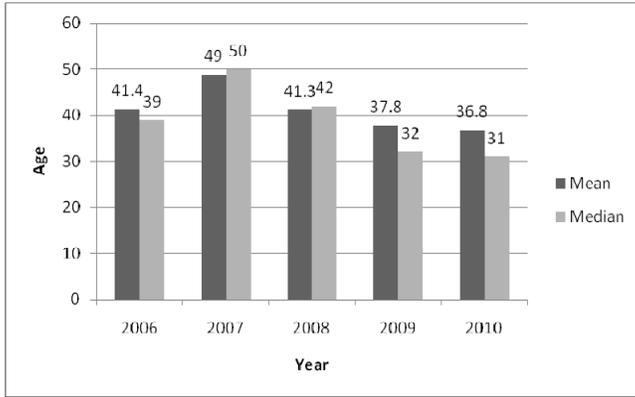
**Tuberculosis in North Dakota: 2006-2010**

Between 2006 to 2010, there have been thirty-seven cases of reported, active TB. The annual reporting range is from three to 12 cases. The annual incidence rate for the past five years is 0.5 and 1.8 per 100,000.

In the last five years, 20 of the 37 cases were pulmonary (54%), 14 were extra-pulmonary (38%) and 3 were both pulmonary/extra-pulmonary (8%). The mean age for TB cases in the last five years was 41. The median age was 36 (Figure 5).

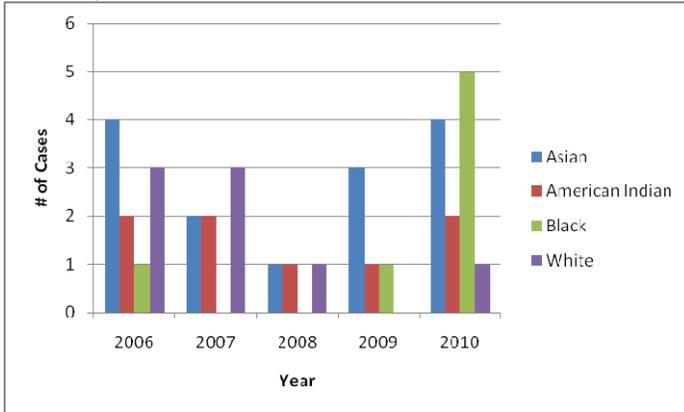
Both men and women were affected by TB in North Dakota during the last five years. There were 18 male cases and 19 female cases.

**Figure 5. Tuberculosis by Age, North Dakota, 2006-2010.**



In 2009, 91.1 percent of the population of North Dakota was estimated to be identified as white. TB data from the previous five years shows that individuals of racial and ethnic minorities to be disproportionately affected by TB (Figure 6).

**Figure 6. Tuberculosis Cases by Race/Ethnicity, North Dakota, 2006-2010.**



**Drug-Resistant Tuberculosis**

Some forms of TB can develop resistance to certain anti-TB medications. This drug resistant TB (DR-TB) can be much more complicated and costly to treat than drug susceptible TB, especially if it is a form of multi-drug resistant TB (MDR-TB). MDR-TB is resistant to the two most commonly used anti-TB drugs, isoniazid and rifampicin.

In North Dakota in 2010, there was one case of TB that showed some resistance to one form of anti-TB medication. There were no instances of MDR-TB.

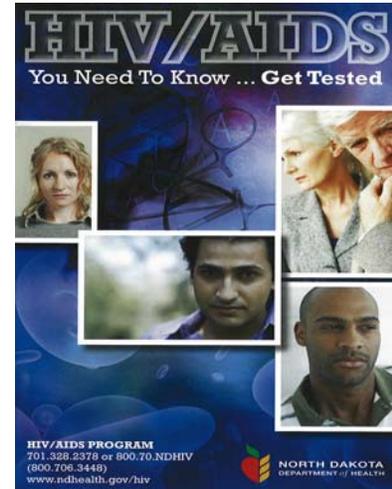
**Latent Tuberculosis Infection**

Latent Tuberculosis Infection (LTBI) is an infection of TB in which the disease is in a dormant state. One third of the global population has TB infection with most of these having LTBI. Individuals with LTBI are not infectious and do not have symptoms of TB disease. Certain methods (such as skin testing) are available to determine if an individual has LTBI. The number of latent tuberculosis

infections reported in North Dakota over the past five years is shown in Table 2.

**Table 2. Reported Cases of LTBI North Dakota, 2006-2010.**

2006	2007	2008	2009	2010
367	322	430	564	574



To obtain copies of this brochure or other HIV/AIDS materials, you can call the NDDoH at 701.328.2376 or visit [www.ndhealth.gov/HIV/Resources/resources.htm](http://www.ndhealth.gov/HIV/Resources/resources.htm) to obtain a copy of the materials order form that can be printed and either faxed or mailed to the NDDoH.

**What's New!**

know  
**YOURr+sk**  
HIV/STD/VIRAL HEPATITIS RISK ASSESSMENT

The NDDoH HIV, STD and Hepatitis Programs created an online risk assessment. The assessment asks about risky behaviors of HIV, STDs and viral hepatitis. Individuals will have a resource available to determine if they are at-risk for HIV, STDs or viral hepatitis that is both free and confidential.

The NDDoH is in the process of creating educational materials and campaigns around this online risk assessment.

**[www.ndhealth.gov/knowyourrisk](http://www.ndhealth.gov/knowyourrisk)**

**Contributing Authors:**

Krissie Guerard, HIV/AIDS/TB Program manager  
 Craig Steffens, HIV/AIDS surveillance coordinator/TB coordinator

Summary of Selected Reportable Conditions			
North Dakota, 2010-2011			
Reportable Condition	January-March 2011*		January-March 2010*
Campylobacteriosis	14		8
Chickenpox	11		18
Chlamydia	412		469
Cryptosporidiosis	7		6
<i>E. coli</i> , shiga toxin positive (non-O157)	3		3
<i>E. coli</i> O157:H7	1		0
Enterococcus, Vancomycin-resistant (VRE)	12		75
Giardiasis	11		7
Gonorrhea	38		43
Haemophilus influenzae (invasive)	1		5
Acute Hepatitis A	0		1
Acute Hepatitis B	0		0
Acute Hepatitis C	0		0
HIV/AIDS <sup>1</sup>	6		7
Influenza	1803		31
Legionellosis	0		2
Listeria	0		0
Lyme Disease	0		0
Malaria	0		0
Meningococcal disease <sup>2</sup>	0		0
Mumps	2		1
Pertussis	13		3
Q fever	0		0
Rabies (animal)	4		2
Rocky Mountain spotted fever	0		0
Salmonellosis	9		10
Shigellosis	0		0
Staphylococcus aureus, Methicillin-resistant (MRSA)	5		15
Streptococcal pneumoniae <sup>3</sup> , (invasive, children < 5 years of age)	0		0
Syphilis, Primary and Secondary	0		0
Trichinosis	0		0
Tuberculosis	1		3
Tularemia	0		0
Typhoid fever	0		0
West Nile Virus Infection	0		0

\*Provisional data

<sup>1</sup> Includes newly diagnosed cases and cases diagnosed previously in other states who moved to North Dakota.

<sup>2</sup> Includes confirmed, probable and suspect meningococcal meningitis cases.

<sup>3</sup> Includes invasive infections caused by streptococcal disease not including those classified as meningitis.