

This annual update was prepared by the Montana HIV and STD Surveillance Programs and is made possible through the cooperative agreement between Montana Department of Public Health and Human Services and the Centers for Disease Control and Prevention. HIV data in this report reflect events through December 31, 2011, that were reported to DPHHS by February 7, 2012. STD data in this report reflect events through December 31, 2011, that were reported to DPHHS by May 2012. HIV data is maintained in the enhanced HIV/AIDS Reporting System, and STD data is maintained in STD\*MIS. Please contact Peter Choi at 406-444-0273 or pchoi@mt.gov with questions or comments.

The HIV Epidemiologic Profile Annual Update characterizes the HIV/AIDS epidemic in Montana and is intended to assist planners of HIV prevention and treatment programs in Montana. The report attempts to quantify the magnitude of HIV/AIDS in Montana, describe the affected population, and show the geographic distribution of the disease.

The Montana Department of Public Health and Human Services (DPHHS) initiated acquired immune deficiency syndrome (AIDS) surveillance in 1985 and formally incorporated human immunodeficiency virus (HIV) surveillance in 2000. Currently, newly diagnosed persons with HIV infection in Montana and previously diagnosed persons who are now Montana residents are required to be reported to the local health jurisdiction and DPHHS.

DPHHS receives reports through passive surveillance, relying on laboratories, local health jurisdictions, health care providers, and Ryan White case managers to provide information. Standardized case reporting allows for systematic data collection. HIV data are managed in the enhanced HIV/AIDS Reporting System (eHARS). This report also summarizes 2011 sexually transmitted disease (STD) surveillance data. STD data are managed in STD\*MIS. Both systems are provided and supported by the Centers for Disease Control and Prevention (CDC).

Only confirmed cases are included in this report. Persons who were initially reported as HIV infected, but who did not have a subsequent HIV test or a physician documentation to confirm an HIV diagnosis have been excluded from the analysis. All STD cases were laboratory confirmed.

This report is subject to several limitations:

- Reporting of HIV cases is biased towards those who seek healthcare. Individuals who are asymptomatic and do not seek healthcare or have limited access to healthcare may go undiagnosed, therefore, are underreported;
- The reported number of HIV case deaths may be underestimated because of delayed- and underreporting of death records;
- Incomplete case reports limit the ability to characterize the HIV/AIDS population in

Montana, and may affect interpretation of the data;

- There is a bias toward reporting sexually transmitted disease cases in women, compared with men, because more women seek reproductive health services that may include STD screening; and
- Small numbers of reported cases limit detailed analysis, particularly in comparing rates. Small case numbers can lead to large fluctuations in case rates year-to-year, which does not necessarily indicate the true disease frequency or burden.

### HIV/AIDS Cases Reported in Montana

As of December 31, 2011, a total of 1,070 cases of HIV infection were reported in Montana, of which 630 (59%) individuals were diagnosed in Montana. Among persons diagnosed in Montana, 72% reported residing in one of the seven most populated counties at the time of diagnosis.\*†

The characteristics of persons reported with HIV/AIDS in Montana have not changed significantly over the years. Table 1 (page 2) outlines the characteristics of all persons reported with HIV infection in Montana, including persons diagnosed in Montana (resident) and outside Montana (non-resident). While there are small differences between the diagnosed-in-Montana and the diagnosed-outside-Montana populations, their characteristics are very similar.

HIV cases in Montana have overwhelmingly been non-Hispanic white males (>75%). And more than half of the cases, regardless of where they were diagnosed, have a transmission category of male sexual contact with another male (MSM).‡ Approximately 70% of persons were 20–39 years of age at the time of diagnosis. Non-Hispanic American Indian (AI) is the largest minority HIV/AIDS population in Montana, with slightly greater

\* 21 cases are missing county of diagnosis

† The seven most populated Montana counties are: Cascade, Flathead, Gallatin, Lewis & Clark, Missoula, Ravalli, and Yellowstone.

‡ Transmission category is a calculated HIV exposure variable, which captures the most likely mode responsible for transmission. The calculation is based on a hierarchical order of likely transmission mode using a person's reported risk behaviors.

proportion having been diagnosed in Montana than out-of-state.

Greater differences are seen in transmission category between the diagnosed-in-Montana and out-of-state populations. A significantly greater proportion of persons diagnosed out-of-state had MSM and injection drug use (IDU) as a transmission category than persons diagnosed in Montana. By contrast, a greater proportion of persons diagnosed in Montana than out-of-state had a transmission category of high-risk heterosexual contact (HRH).

HRH is heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

The proportion of HIV diagnoses among non-Hispanic whites and non-Hispanic American Indians, 86% and 6% respectively, mirror their representation among the State's overall population. However, non-Hispanic black/African Americans account for a greater proportion of the reported HIV/AIDS case population, 3% (36 cases), than their representation among the general Montana population (0.4%).

Table 1: Characteristics of all persons (resident and non-resident) reported with HIV/AIDS — Montana, 1985–2011<sup>1</sup>

Characteristic	All HIV/AIDS cases (n=1070)		Diagnosed in MT (n=630)		Diagnosed outside MT (n=440)	
<b>Sex</b>						
Male	936	87%	542	86%	394	90%
Female	134	13%	88	14%	46	10%
<b>Age at diagnosis (years)</b>						
<13	6	1%	4	1%	2	1%
13–19	32	3%	12	2%	20	5%
20–29	327	31%	189	30%	138	31%
30–39	408	38%	232	37%	176	40%
40–49	189	18%	113	18%	76	17%
50–59	83	8%	58	9%	25	6%
>59	24	2%	21	3%	3	1%
<b>Ethnicity, Race</b>						
Non-Hispanic, white	918	86%	540	86%	378	86%
Non-Hispanic, American Indian	65	6%	46	7%	19	4%
Non-Hispanic, black/African American	36	3%	18	3%	18	4%
Hispanic, any race	33	3%	18	3%	15	3%
Non-Hispanic, Other <sup>2</sup>	14	1%	6	1%	9	2%
<b>Transmission Category<sup>3</sup></b>						
MSM <sup>4</sup>	572	53%	331	53%	241	55%
IDU <sup>5</sup>	136	13%	78	12%	58	13%
MSM & IDU	133	12%	56	9%	77	18%
High-risk Heterosexual contact <sup>6</sup>	105	10%	75	12%	30	7%
NRR/NIR <sup>7</sup>	97	9%	68	11%	29	7%
Other <sup>8</sup>	27	3%	22	3%	5	1%

<sup>1</sup> Section total may not sum to overall total due to missing information and percent totals may not equal 100% due to rounding

<sup>2</sup> Non-Hispanic, other is all other races including mixed races.

<sup>3</sup> Transmission category is a calculated HIV exposure variable, which captures the most likely mode responsible for transmission. The calculation is based on a hierarchical order of likely transmission mode using a person's reported risk behaviors.

<sup>4</sup> Male sexual contact with another male

<sup>5</sup> Injection drug use

<sup>6</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection

<sup>7</sup> NRR/NIR includes risk factor not reported or not identified

<sup>8</sup> Other includes hemophilia, blood transfusion, and perinatal exposure

HIV/AIDS cases diagnosed in Montana in 2011  
 Montana is considered a low incidence HIV/AIDS state; 1070 cases reported since 1985 is a relatively small figure compared to most other jurisdictions in the U.S. Based on state-reported data, the CDC estimates that in 2010, there were 2.6 HIV cases per 100,000 population in Montana compared to 31.2 per 100,000 in Florida (highest rate) and 2.0 per 100,000 in North Dakota (lowest rate).<sup>§\*\*</sup> Montana also had an estimated 2.1 AIDS cases per 100,000 population in 2010, compared with 112.5 per 100,000 in the District of Columbia (highest rate) and 0.5 per 100,000 in Vermont (lowest rate).

In 2011, 21 newly diagnosed HIV cases were reported to DPHHS, a rate of 2.1 cases per 100,000 population. Since 2000, the HIV case rate in Montana has ranged from 1.7 to 3.2 cases per 100,000 population. Table 2 describes the characteristics of the 21 newly diagnosed cases in 2011. Seventeen of the 21 cases were male. Nearly half of the cases were between 40–49 years of age at the time of diagnosis, which is an older range than previous years. Six of the 21 cases were diagnosed with AIDS concurrently or within one year of HIV diagnosis, indicating a late diagnosis of HIV and a need for earlier and regular testing of individuals at risk for HIV infection. The remaining 11 cases were somewhat evenly distributed in the age groups surrounding the 40–49 years of age group. Nearly all of the cases were identified as non-Hispanic white. Seventeen of the 21 cases resided in one of the seven most populated counties at the time of diagnosis.

MSM was the most common transmission category. Eleven cases reported MSM and one case reported MSM and IDU as a transmission category. IDU alone was the second most reported transmission category (n=2) among men, followed by HRH (n=1). Among women, one case was identified as having an HRH contact and another case was identified as IDU.

Four persons, two males and two females, did not have an identified risk and, therefore, were not classified under a transmission category. HRH is not considered as a transmission category for persons who identify heterosexual contact as a potential exposure, but do not identify their contact person(s)

as infected or at high risk for HIV infection. These cases are classified as having an unknown/unreported transmission category (NIR/NRR). Cases are also classified as NIR/NRR if no exposure of any kind was reported.

Table 2: Montana residents newly diagnosed with HIV — Montana, 2011

Characteristic	Cases (n=21)
<b>Status</b>	
HIV (not AIDS)	15
AIDS	6
<b>Sex</b>	
Male	17
Female	4
<b>Age at diagnosis (years)</b>	
20–29	4
30–39	2
40–49	10
50–59	2
>59	3
<b>Ethnicity, race</b>	
Non-Hispanic, white	19
Non-Hispanic, American Indian	1
Unknown	1
<b>Transmission category<sup>1</sup></b>	
MSM <sup>2</sup>	11
NIR/NRR <sup>3</sup>	4
IDU <sup>4</sup>	3
HRH <sup>5</sup>	2
MSM/IDU	1

<sup>1</sup> Transmission category is a calculated HIV exposure variable, which captures the most likely mode responsible for transmission. The calculation is based on a hierarchical order of likely transmission mode using a person's reported risk behaviors

<sup>2</sup> Male sexual contact with another male

<sup>3</sup> NIR/NRR includes risk factor not reported or not identified

<sup>4</sup> Injection drug use

<sup>5</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection

### HIV/AIDS cases diagnosed in Montana

The figures in table 3 (page 3) outline the characteristics of the 630 persons who have been diagnosed with HIV infection in Montana as of December 31, 2011. Of the 630 persons, 462 have been diagnosed with AIDS and 258 persons are known to have died.

The majority of persons diagnosed with HIV in Montana have been non-Hispanic white (86%), male (86%), and between 20 and 39 years of age at the time of diagnosis (67%).

<sup>§</sup> Estimated numbers resulted from statistical adjustment that accounted for reporting delays, but not for incomplete reporting.

\*\* Centers for Disease Control and Prevention. *HIV Surveillance Report, 2010*; vol. 22.

<http://www.cdc.gov/hiv/topics/surveillance/resources/reports/>. Published March 2012. Accessibility verified 9/19/12.

Table 3: Characteristics of Montana residents diagnosed with HIV/AIDS — Montana, 1985–2011<sup>1,2</sup>

Characteristics	Cases (n=630; male n=542 (86%), female n=88 (14%))				
<b>Status</b>	Cases		Deaths		
HIV (not AIDS)	168	27%	17	7%	
AIDS	462	73%	241	93%	
<b>Age at diagnosis (years)</b>	Male		Female		Total
<13	4	1%	0	--	4 1%
13–19	9	2%	3	3%	12 2%
20–29	160	30%	29	33%	189 30%
30–39	202	37%	30	34%	232 37%
40–49	98	18%	15	17%	113 18%
50–59	51	9%	7	8%	58 9%
>59	17	3%	4	5%	21 3%
<b>Ethnicity, race</b>	Cases		MT population <sup>3</sup>		
Non-Hispanic, white	540	86%	87.8%		
Non-Hispanic, American Indian	46	7%	6.1%		
Non-Hispanic, black/African American	18	3%	0.4%		
Hispanic, any race	18	3%	2.9%		
Non-Hispanic, other	6	1%	3.0%		
<b>Transmission category<sup>4</sup></b>	Male		Female		Total
MSM <sup>5</sup>	331	61%	--	--	331 53%
IDU <sup>6</sup>	59	11%	19	22%	78 12%
HRH <sup>7</sup>	26	5%	49	56%	75 12%
NIR/NRR <sup>8</sup>	54	10%	14	16%	68 11%
MSM/IDU	56	10%	--	--	56 9%
Other <sup>9</sup>	16	3%	6	7%	22 3%

<sup>1</sup> Section totals may not sum to overall total of cases due to missing information and percent totals may not equal 100% due to rounding

<sup>2</sup> Includes all persons reported through 2011, including persons diagnosed before 1985

<sup>3</sup> US Census Bureau. Montana population estimate 2010. Available at:

[http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_DP\\_DPDP1](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1). Accessibility verified 2/15/13.

<sup>4</sup> Transmission category is a calculated HIV exposure variable, which captures the most likely mode responsible for transmission. The calculation is based on a hierarchical order of likely transmission mode using a person's reported risk behaviors.

<sup>5</sup> Male sexual contact with another male

<sup>6</sup> Injection drug use

<sup>7</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection

<sup>8</sup> NRR/NIR includes risk factor not reported or not identified

<sup>9</sup> Other includes hemophilia, blood transfusion, and perinatal exposure

The most common transmission category for persons diagnosed with HIV in Montana has been MSM. HRH contact and IDU were the second most common transmission categories. Sixty-eight persons (11%) did not have a transmission category identified or reported. Among women, HRH contact was the most common transmission category (56%) followed by IDU (22%).

Table 4 lists the county of residence at the time of diagnosis for persons diagnosed in Montana. Seventy-seven percent of cases diagnosed in Montana reported their residence as one of the seven most populous counties. Thirty-six other counties have been reported as the resident county at the time of diagnosis. Figure 1 (page 5) shows the distribution of HIV cases diagnosed in Montana by county.

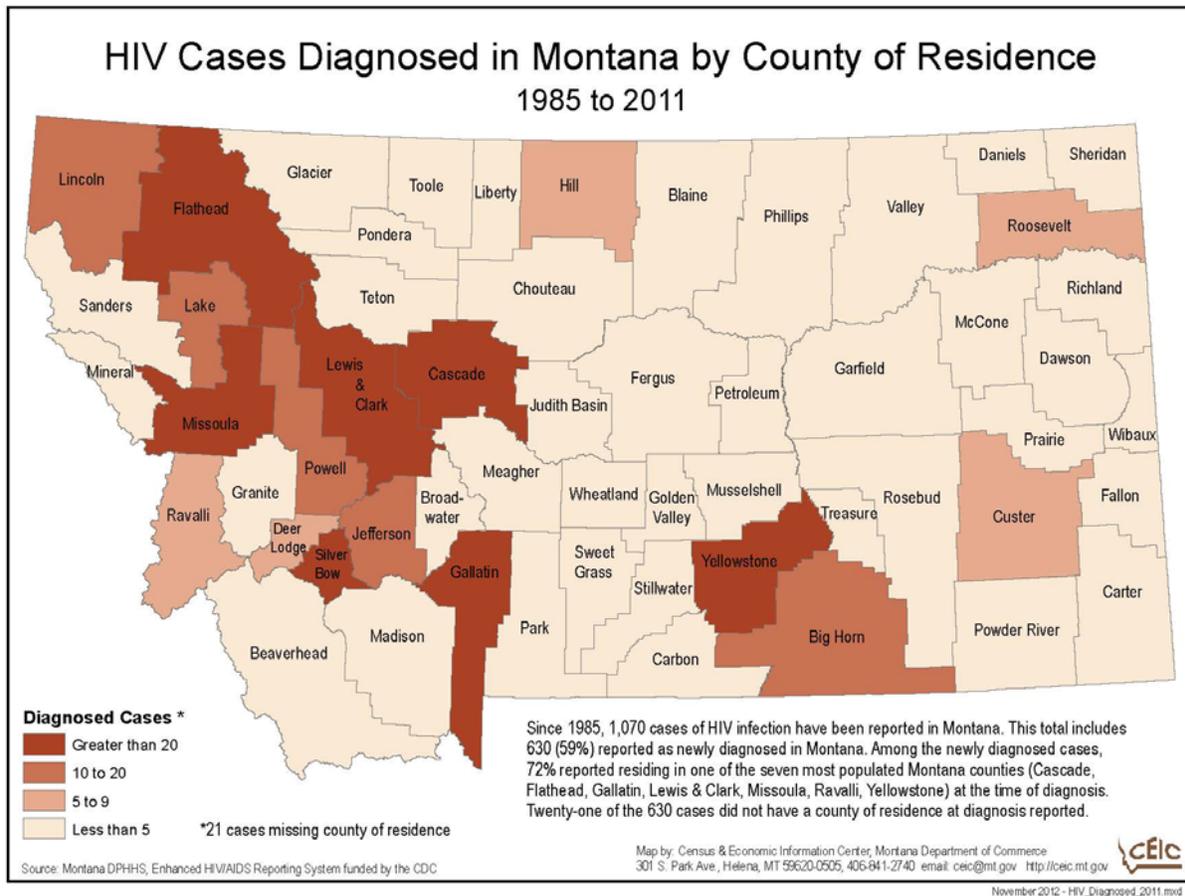
Table 4: Montana resident HIV/AIDS cases by county of residence at time of diagnosis — Montana, 1985–2011<sup>1,2</sup>

County	Cases	
Yellowstone	168	28%
Missoula	95	16%
Cascade	57	9%
Lewis and Clark	38	6%
Silver Bow	38	6%
Gallatin	36	6%
Flathead	34	6%
36 counties	<15	23%
<b>Total</b>	<b>609</b>	

<sup>1</sup> 21 cases missing county of residence at diagnosis

<sup>2</sup> Includes all persons reported through 2011, including persons diagnosed before 1985

Figure 1: Distribution of HIV/AIDS cases diagnosed in Montana by county — Montana, 1985–2011



**HIV/AIDS prevalence in Montana in 2011**  
HIV/AIDS prevalence in 2011 is determined by the prevalent population as of December 31, 2011. Prevalent data only reflects persons who are last known to be residing in Montana as of December 31. Accordingly, 529 HIV-infected persons were known to be living in Montana for 2011. This figure includes persons who were originally diagnosed out-of-state and are now residing in Montana. Of the 529 persons living with HIV (PLWH), 338 (64%) also have been diagnosed with AIDS.

Nationally, the CDC estimates that “[a]t the end of 2008, approximately 20% of the persons living with HIV [age 13 years and older] had an undiagnosed infection.”<sup>††</sup> This 20% figure cannot be used to extrapolate the number of undiagnosed HIV-infected persons in Montana, but it is an indicator that the prevalence of HIV cases in Montana is likely to be

greater than 529. Table 5 (page 6) outlines the characteristics of persons living with HIV/AIDS in Montana in 2011.

Most persons in Montana living with HIV infection are male (85%). This proportion is greater than the national rate of 75%.<sup>‡‡</sup> The ethnic and racial make-up of HIV cases generally mirrors the state-wide demographics. Non-Hispanic whites (84%) compose the greatest proportion of HIV cases, followed by non-Hispanic American Indians (6%). The proportion of black/African Americans with HIV is greater than their representation in the state population (4% vs. 0.4%).<sup>§§</sup> Minorities constitute a larger proportion of cases among females than among males. While non-Hispanic whites still represent the majority of cases

†† Centers for Disease Control and Prevention. *Morbidity and Mortality Weekly Report*, 2012; vol. 61 (02):57–64. <http://www.cdc.gov/mmwr/preview/mmwrhtml/su6102a10.htm>. Accessibility verified 2/20/13.

‡‡ Centers for Disease Control and Prevention. *Morbidity and Mortality Weekly Report*, 2012; vol. 61 (02):57–64.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/su6102a10.htm>. Accessibility verified 2/20/13.

§§ US Census Bureau. Montana population estimate 2010. Available at: [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_DP\\_DPDP1](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1). Accessibility verified 2/15/13.

(69%), 12% of women with HIV are American Indian and 10% are black/African American.

Nearly 70% of persons living with HIV in Montana were diagnosed between the ages 20–39 and nearly 20% were 40–49 years of age. The leading transmission category among males with HIV infection in Montana is MSM (65%). The next two most common transmission categories are MSM/IDU (14%) and IDU (9%). Among the 79 females living with HIV infection in Montana, the most common transmission category is HRH contact (n=45; 57%). The second leading transmission category is IDU (n=22; 28%). Finally, 45 (9%) persons living with HIV, male and female, did not have a specific transmission category. Among the 45 persons without a

transmission category, there are those who reported heterosexual contact, but did not identify their partner(s) as being infected with, or at high risk for, HIV. Furthermore, additional follow-up is needed during case investigations to identify risk factor information for those cases that fall under NIR/NRR. Identification would provide a more accurate understanding of the modes of transmission among Montana HIV/AIDS cases.

Figure 2 (page 7) illustrates the geographic distribution of persons living with HIV in Montana. Health planning regions that are home to the most populated counties in Montana, where the majority of the HIV/AIDS diagnoses have occurred, are also the areas with the greatest number of PLWH.

Table 5: Characteristics of persons known to be living with HIV infection — Montana, 2011<sup>1</sup>

Characteristic	Male (n=450)		Female (n=79)		Total (n=529)	
<b>Status</b>						
HIV (not AIDS)	154	34%	37	47%	191	36%
AIDS	296	66%	42	53%	338	64%
<b>Age at diagnosis (years)</b>						
<13	2	<1%	0	--	2	<1%
13–19	15	3%	7	9%	22	4%
20–29	139	31%	25	32%	164	31%
30–39	167	37%	26	33%	193	36%
40–49	84	19%	16	20%	100	19%
50–59	36	8%	4	5%	40	8%
>59	7	2%	1	1%	8	2%
<b>Ethnicity/Race</b>						
Non-Hispanic, white	389	87%	54	69%	443	84%
Non-Hispanic, American Indian	23	5%	9	12%	32	6%
Non-Hispanic, black/African American	12	3%	8	10%	20	4%
Hispanic, any race	15	3%	4	5%	19	4%
Non-Hispanic, Other	10	2%	3	4%	13	2%
<b>Transmission category<sup>2</sup></b>						
MSM <sup>3</sup>	293	65%	--	--	293	55%
MSM/IDU	64	14%	--	--	64	12%
IDU <sup>4</sup>	42	9%	22	28%	64	12%
HRH <sup>5</sup>	14	3%	45	57%	59	11%
NIR/NRR <sup>6</sup>	34	8%	11	14%	45	9%
Other <sup>7</sup>	3	1%	1	1%	4	1%

<sup>1</sup> Section totals may not sum to overall total because of missing data and percent totals may not equal 100% due to rounding

<sup>2</sup> Transmission category is a calculated HIV exposure variable, which captures the most likely mode responsible for transmission. The calculation is based on a hierarchical order of likely transmission mode using a person's reported risk behaviors.

<sup>3</sup> Male sexual contact with another male

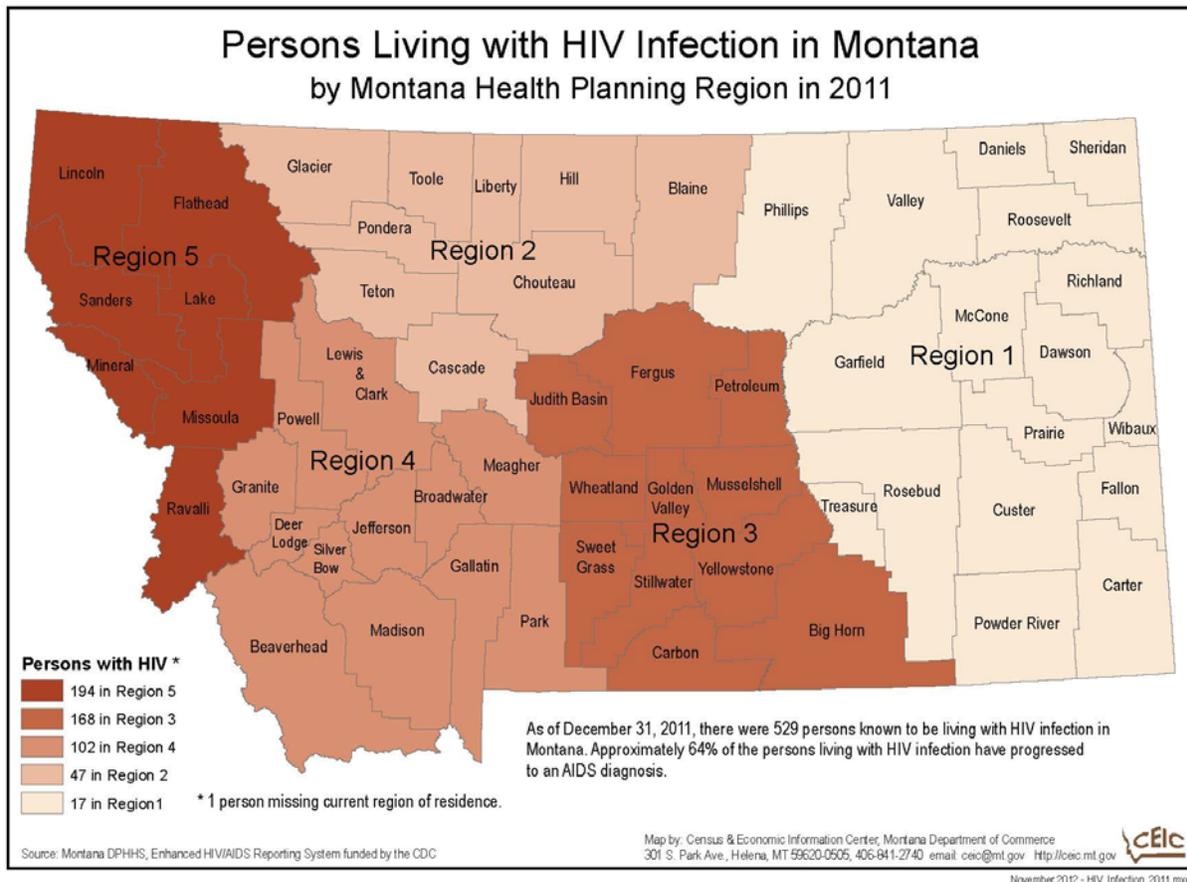
<sup>4</sup> Injection drug use

<sup>5</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection

<sup>6</sup> NIR/NRR includes risk factor not reported or not identified

<sup>7</sup> Other includes hemophilia, blood transfusion, and perinatal exposure

Figure 2: Persons currently living with HIV infection in Montana by Health Planning Region — Montana, 2011



### STD Surveillance Report \*\*\*

In addition to HIV surveillance, surveillance is also conducted for other sexually transmitted diseases (STD) such as chlamydia, gonorrhea, and syphilis infections. The presence of other STD infections may indicate an increased risk for HIV infection.

### Syphilis

Syphilis is a genital ulcerative STD caused by *Treponema pallidum*. Syphilis is characterized into stages for the purposes of treatment and follow-up. Since 2000, 10 or fewer cases of syphilis (all stages) have been reported in Montana each year. In 2011, nine cases of syphilis were reported. The cases ranged in age from 18 to 48 years. Seven cases were male. A syphilis sore can facilitate the transmission of HIV infection, with two to five times increased likelihood of HIV transmission when sores are

present.††† In 2011, three patients were HIV positive at the time of syphilis diagnosis.

### Chlamydia

*Chlamydia trachomatis* infection is the most commonly reported STD in Montana and the U.S. Since 2000, the number of cases and the incidence rate have approximately doubled in Montana. In 2011, there were 3,406 chlamydia cases reported in Montana, 326 more than in 2010. The incidence rate of chlamydia infection increased by 8.9% from 316 cases to 344 cases per 100,000 population (Figure 4). The national rate of chlamydia in 2011 was 458 cases per 100,000 population, an 8.0% increase from 2010.†††

Table 6 (page 8) outlines the cases of chlamydia reported to the Montana STD Program during the period of January 1, 2011, through December 31,

\*\*\* Rates calculated using census data from: US Census Bureau. Montana population estimate 2010. Available at: [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_DP\\_DPDP1](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1). Accessibility verified 2/15/13.

††† Centers for Disease Control and Prevention. Syphilis – CDC Fact Sheet. Available at: <http://www.cdc.gov/std/syphilis/stdfact-syphilis.htm>. Accessibility verified 2/21/13.

††† Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2011*. Atlanta: U.S. Department of Health and Human Services; 2012.

2011, by age, sex, and race. Figure 3 shows the increasing chlamydia incidence rate trend since 2001.

In 2011, there were more than two times the number of chlamydia cases reported among females than males. The greater proportion of cases among females may be attributable to females seeking medical care at greater rates than males, and therefore being tested more often.

In 2011, the highest chlamydia incidence rates occurred among persons aged 15–19 years and 20–24 years. Nearly 90% of chlamydia cases occurred among persons 15–29 years of age. While the disease burden is probably highest among these age groups, the high disease incidence is also attributable to STD screening recommendations that all sexually active females aged 25 years and younger who present for routine healthcare visits undergo screening for chlamydia and gonorrhea.

In 2011, the chlamydia incidence rate for persons classified as American Indian (AI) was more than five times greater than those classified as white. However, because of the larger percentage of Montana residents classified as white, the number of chlamydia cases among white persons is greater. The incidence rates could change significantly with

further follow-up and reporting, as 226 (6.6%) chlamydia cases did not have a race classification. Assignment of a race classification to these cases could increase or decrease the incidence rate ratio between whites and American Indians.

Moreover, broadly targeted STD screening practices among American Indians may contribute to the higher reported chlamydia incidence rate in this population. However, the specific magnitude of the contribution has not been measured.

Figure 3: Chlamydia incidence rate — Montana, 2001–2011

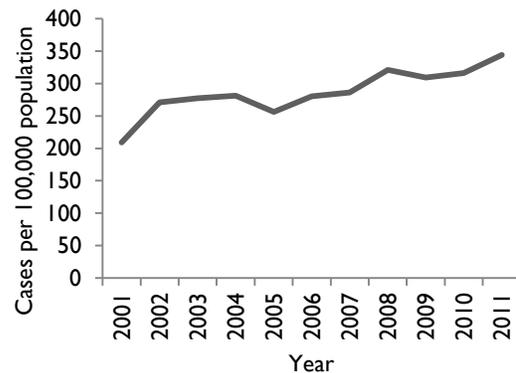


Table 6: Chlamydia cases by age, sex, and race — Montana, 2011<sup>1</sup>

Age (years)	Chlamydia										Total
	Female					Male					
	American Indian	White	Other <sup>2</sup>	Missing	Total	American Indian	White	Other <sup>2</sup>	Missing	Total	
0–14	13	16	0	0	29	3	0	0	0	3	32
15–19	220	577	30	62	889	86	122	16	10	234	1123
20–24	215	654	23	69	961	80	287	28	24	419	1380
25–29	77	202	12	20	311	33	131	16	15	195	506
30–34	38	70	4	9	121	17	52	5	4	78	199
35–39	19	15	2	4	40	10	24	3	2	39	79
≥ 40	10	24	2	2	38	15	26	3	5	49	87
<b>Total</b>	<b>592</b>	<b>1558</b>	<b>73</b>	<b>166</b>	<b>2389</b>	<b>244</b>	<b>642</b>	<b>71</b>	<b>60</b>	<b>1017</b>	<b>3406</b>

<sup>1</sup>Race classification is irrespective of ethnicity (Hispanic or non-Hispanic)

<sup>2</sup> Other includes persons of more than one race, black/African American, and Asian/Pacific Islander

### Gonorrhea

*Neisseria gonorrhoeae* infections are the second most commonly reported STD in Montana and the U.S. There were 85 cases reported in Montana in 2011, 16 fewer than in 2010. Montana’s gonorrhea incidence rate of 8.6 cases per 100,000 population is one of the lowest in the U.S. The national rate is 104 cases per 100,000 population, and Vermont had the lowest rate of 7.7.<sup>§§§</sup> Since 2000, the gonorrhea

incidence rate in Montana has ranged between 7 and 20 cases per 100,000 population, which has been lower than the U.S. rates.

Table 7 (page 9) outlines the cases of gonorrhea reported to the Montana STD Program during the period of January 1, 2011, through December 31, 2011, by age, sex, and race. Figure 4 (page 9) shows the fluctuating gonorrhea incidence rate over the years.

§§§ Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2011*. Atlanta: U.S. Department of Health and Human Services; 2012.

Since 2001, 80 to 191 gonorrhea cases have been reported in Montana each year. In 2011, eighty-five cases were reported, a 17.5% decrease from the 103 cases reported in 2010. Persons aged 20–24 years accounted for nearly 40% of reported gonorrhea cases. Nearly 80% of cases were among persons 15–29 years of age. As with chlamydia, the high disease incidence rate in this age category may be attributable to routine STD screening practices for sexually active women 25 years of age and younger (60% of gonorrhea cases).

In 2011, the gonorrhea incidence rate was highest among persons who had a race classification of American Indian (30.4/100,000 population). Similar to chlamydia, this rate is more than five times greater than those classified as white (5.6/100,000 population). However, because of the larger percentage of Montana residents classified as white, the number of gonorrhea cases among white persons is greater. The incidence rates could change significantly with further follow-up and reporting, as 10 (12%) gonorrhea cases did not have a race classification. Assignment of a race classification to these cases could increase or decrease the incidence rate ratio between whites and American Indians.

Moreover, broadly targeted STD screening practices among American Indians may contribute to the higher reported gonorrhea incidence rate in this population. However, the specific magnitude of the contribution has not been measured.

Figure 4: Gonorrhea incidence rate — Montana, 2001–2011

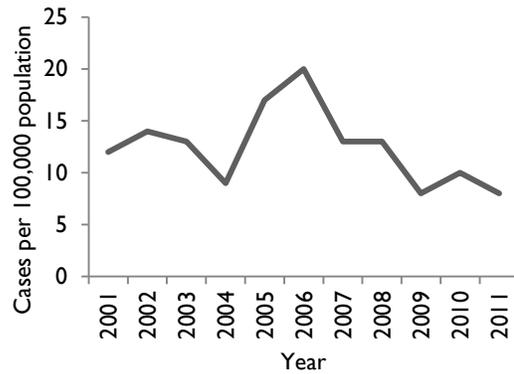


Table 7: Gonorrhea cases by age, sex, and race — Montana, 2011<sup>1</sup>

Age (years)	Gonorrhea										Total
	Female					Male					
	American Indian	White	Other	Missing	Total	American Indian	White	Other	Missing	Total	
0–14	0	0	0	0	0	0	0	0	0	0	0
15–19	6	4	0	2	12	1	4	1	0	6	18
20–24	4	13	1	3	21	4	6	0	2	12	33
25–29	0	9	0	1	10	0	3	2	1	6	16
30–34	1	2	0	0	3	2	2	1	0	5	8
35–39	0	0	1	0	1	0	1	0	0	1	2
≥ 40	1	3	0	0	4	0	3	0	1	4	8
<b>Total</b>	12	31	2	6	51	7	19	4	4	34	85

<sup>1</sup>Race classification is irrespective of ethnicity (Hispanic or non-Hispanic)

<sup>2</sup> Other includes persons of more than one race, black/African American, and Asian/Pacific Islander