

This annual epidemiologic update reflects events that occurred from 1982–2013 and that were reported and recorded in the Montana HIV reporting system by January 27, 2014. Only laboratory confirmed and physician documented cases are included in this report. This report was prepared by the Montana HIV Surveillance Program 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. Please direct correspondences to Peter Choi ([pchoi@mt.gov](mailto:pchoi@mt.gov)).

The HIV Epidemiologic Profile Annual Update characterizes the HIV/AIDS epidemic 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 immunodeficiency syndrome (AIDS) surveillance in 1985 and formally incorporated human immunodeficiency virus (HIV) surveillance in 2000.

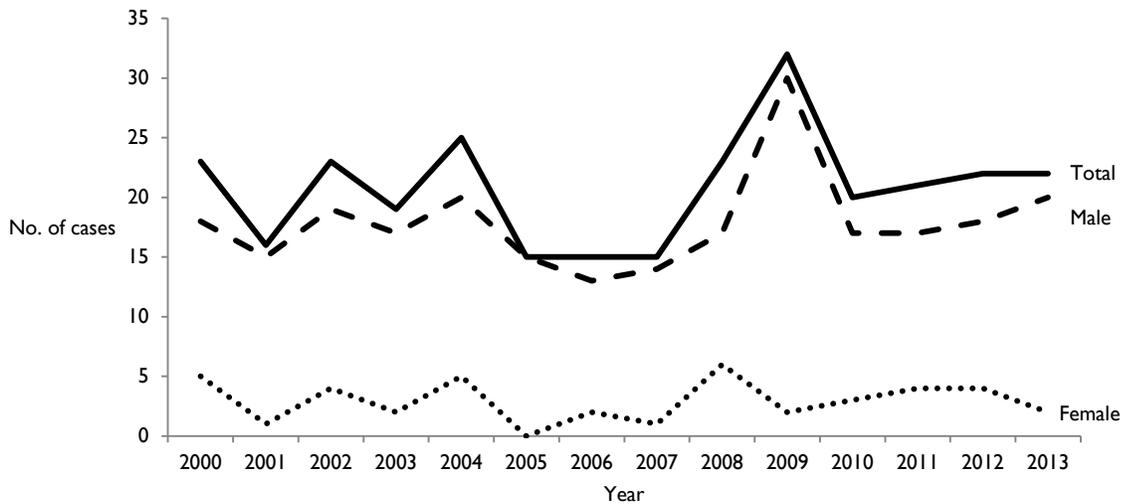
The Administrative Rules of Montana (ARM) were revised in 2013 to enhance HIV surveillance. In addition to reporting tests confirming HIV infection, ARM 37.114.204(7) requires laboratories to report to DPHHS all HIV viral load test results and all CD4 T-lymphocyte test results, unless it is known that the test was performed in association with a disease other than HIV infection.

### Overview of HIV in Montana

As of December 31, 2013, 1,225 cases of HIV infection have been reported in Montana, of which more than 400 persons are known to have died. Of the total cases reported, 681 (56%) were among Montana residents at the time of diagnosis, with 68% from the 6 most populous counties (i.e., Cascade, Flathead, Gallatin, Lewis & Clark, Missoula, and Yellowstone).<sup>\*</sup> There were more than 600 persons reported to be living in Montana with HIV infection at the end of 2013. This includes persons diagnosed in Montana and those diagnosed out-of-state but who have moved to Montana.

In 2013, 75 cases of HIV were reported to DPHHS. Of the 75 cases, 22 (29%) were newly diagnosed in Montana. Since 2000, 15–32 new cases have been reported each year (Figure 1). Most HIV infections reported in Montana continue to be among non-Hispanic, white males. In 2013, men accounted for 20 of the 22 new infections reported, and 12 were non-Hispanic whites (Table 1). Among men, male-to-male sexual contact (MSM) is the most common transmission category. Transmission category is the likely mode of transmission given a person’s reported risk factors. Among women, heterosexual contact with a person with HIV infection, or at high-risk for infection, is the most common transmission category. Injection drug use (IDU) is the second most common transmission category among women, and third among men. The second most common transmission category among men is MSM and IDU. Of the 22 persons newly diagnosed with HIV, 5 were diagnosed with AIDS at the same time, or within 30 days of HIV diagnosis, indicating a delayed recognition of HIV infection or not being linked to medical care. Table 1 outlines HIV cases reported to DPHHS in 2013 and historically by select characteristics.

Figure 1: Newly diagnosed HIV infections by year and sex — Montana, 2000–2013



Source: Enhanced HIV/AIDS Reporting System, funded by the Centers for Disease Control and Prevention

<sup>\*</sup> 21 cases did not have a reported county of residence

Table 1: Newly reported persons diagnosed with HIV infection by select characteristics — Montana, 1985–2013

Characteristic	2013				1985–2013			
	Reported cases diagnosed in Montana (n=22)		All reported cases (n=75)		Reported cases diagnosed in Montana (n=681)		All reported cases (n=1225)	
	male	female	male	female	male	female	male	female
<b>Diagnostic status</b>								
HIV only	13	2	40	4	154	39	280	57
HIV and AIDS	7	0	30	1	431	57	787	101
Total	20 (91%)	2 (9%)	70 (93%)	5 (7%)	585 (86%)	96 (14%)	1067 (87%)	158 (13%)
<b>Age at diagnosis (years)</b>								
≤14	0	0	1 (1%)	1	4 (1%)	0	6 (1%)	4 (3%)
15–24	2 (10%)	1	12 (18%)	1	71 (12%)	21 (22%)	151 (14%)	33 (21%)
25–34	7 (35%)	1	21 (31%)	2	209 (36%)	37 (39%)	415 (39%)	60 (38%)
35–44	5 (25%)	0	19 (28%)	1	185 (32%)	17 (18%)	314 (30%)	31 (20%)
45–54	4 (20%)	0	11 (16%)	0	76 (13%)	15 (16%)	125 (12%)	21 (13%)
55–64	2 (10%)	0	4 (6%)	0	32 (5%)	1 (1%)	42 (4%)	3 (2%)
≥65	0	0	0	0	8 (1%)	5 (5%)	9 (1%)	5 (3%)
<b>Ethnicity, race</b>								
Non-Hispanic (NH), White	12 (60%)	1	50 (71%)	4	504 (86%)	68 (71%)	919 (87%)	113 (72%)
NH, American Indian / Alaska Native	1 (5%)	1	3 (4%)	1	35 (6%)	16 (17%)	53 (5%)	21 (13%)
NH, Black	1 (5%)	0	2 (3%)	0	16 (3%)	4 (4%)	30 (3%)	12 (8%)
Hispanic, any race	1 (5%)	0	5 (7%)	0	17 (3%)	6 (6%)	35 (3%)	9 (6%)
NH, Other*	4 (20%)	0	6 (9%)	0	12 (2%)	2 (2%)	23 (2%)	3 (2%)
Unknown	1 (5%)	0	4 (6%)	0	1	0	1	0
<b>Transmission category<sup>†</sup></b>								
Male-to-male sexual contact (MSM)	14 (70%)	--	40 (57%)	--	357 (61%)	--	645 (60%)	--
Injection drug use (IDU)	1 (5%)	0	7 (10%)	0	61 (10%)	20 (21%)	110 (10%)	39 (25%)
MSM and IDU	1 (5%)	--	9 (13%)	--	59 (10%)	--	156 (15%)	--
Heterosexual contact <sup>‡</sup>	0	2	2 (3%)	3	27 (5%)	53 (55%)	41 (4%)	82 (52%)
Other <sup>¶</sup>	0	0	0	0	16 (3%)	6 (6%)	19 (2%)	10 (6%)
No risk reported	4 (20%)	0	12 (17%)	2	65 (11%)	17 (18%)	96 (9%)	27 (17%)

\* Non-Hispanic, other is all other races including multiple races

† Transmission category summarizes the likely risk factors by which a person may have acquired HIV based on a hierarchical order of probability

‡ Heterosexual contact with a person known to have, or to be at high risk for, HIV infection

¶ Other includes hemophilia, blood transfusion, and perinatal exposure

Section total may not sum to overall total due to missing information

Source: enhanced HIV/AIDS Reporting System, funded by the CDC

Figure 2 displays the geographic distribution in Montana by county of residence at the time of HIV diagnosis. Reflecting their larger populations, 68% of patients diagnosed in Montana had a reported residence as one of the six most populous counties (i.e., Cascade, Flathead, Gallatin, Lewis & Clark, Missoula, and Yellowstone). However, regardless of county population size, persons diagnosed with HIV infection have resided throughout Montana. Since 1985, 43 of Montana's 56 counties have been reported as the county of residence at the time of diagnosis.

#### HIV prevalence in Montana

As of December 31, 2013, 606 persons were reported to be living in Montana. Table 2 outlines the characteristics of persons living with HIV (PLWH) in Montana, which include persons diagnosed in Montana and out-of-state. Of the 606 PLWH, 364 (60%) have been diagnosed with AIDS. The demographic profile of PLWH, including likely HIV transmission risk factors, in Montana are similar to those of persons diagnosed in Montana. The most populous counties in Montana, where the majority of the HIV/AIDS diagnoses have occurred, are also the counties with the greatest number of PLWH (Figure 3).

Table 2: Persons living with HIV infection by select characteristics — Montana, 2013

	male (n=519)	female (n=87)
<b>Diagnostic status</b>		
HIV only	199 (38%)	43 (49%)
HIV and AIDS	320 (62%)	44 (51%)
<b>Current age (years)</b>		
≤14	0	1 (1%)
15–24	5 (1%)	5 (6%)
25–34	60 (12%)	10 (11%)
35–44	120 (23%)	26 (30%)
45–54	201 (39%)	27 (31%)
55–64	101 (20%)	12 (14%)
≥65	27 (5%)	6 (7%)
<b>Ethnicity, race</b>		
Non-Hispanic (NH), White	440 (85%)	58 (67%)
NH, American Indian/Alaska Native	25 (5%)	13 (15%)
Hispanic, any race	18 (3%)	4 (5%)
NH, Other*	17 (3%)	2 (2%)
NH, Black	15 (3%)	10 (11%)
Unknown	4 (1%)	0
<b>Transmission category<sup>†</sup></b>		
Male-to-male sexual contact (MSM)	329 (63%)	--
Injection drug use (IDU)	44 (8%)	20 (23%)
MSM and IDU	77 (15%)	--
Heterosexual contact <sup>‡</sup>	19 (4%)	48 (55%)
Other <sup>¶</sup>	4 (1%)	2 (2%)
No risk reported <sup>‡</sup>	46 (9%)	17 (20%)

\* Non-Hispanic, other is all other races including multiple races

† Transmission category summarizes the likely risk factors by which a person may have acquired HIV based on a hierarchical order of probability

‡ Heterosexual contact with a person known to have, or to be at high risk for, HIV infection

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