

HIV EPIDEMIOLOGIC PROFILE ANNUAL UPDATE, 2015

This annual epidemiologic update reflects events that occurred through 2015 and that were reported and recorded in the Montana HIV reporting system by January 4, 2016. The Montana HIV Surveillance Program prepared this report. Please direct correspondences to Peter Choi (pchoi@mt.gov).

The HIV Epidemiologic Profile Annual Update 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. In 2013, Administrative Rule of Montana 37.114.204(7) was changed to require laboratories to report all HIV viral load and all CD4 T-lymphocyte test results to DPHHS, which has improved reporting.

Overview of HIV in Montana

As of December 31, 2015, 1,353 cases of HIV infection have been reported to the DPHHS, and 706 (52%) were Montana residents at the time of diagnosis. Of the total cases reported, more than 467 persons are known to have died. Most of the Montana resident cases (68%) are from the six most populous counties (i.e., Cascade, Flathead, Gallatin, Lewis & Clark, Missoula, and Yellowstone).^{*} As of the end of 2015, 595 persons were reported to be living with HIV in Montana. This includes persons diagnosed out-of-state but who later established residency in Montana.

New HIV diagnoses in Montana Residents, 2015

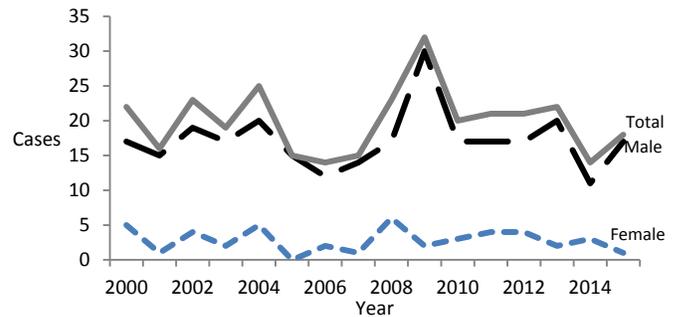
In 2015, 18 newly diagnosed HIV cases were reported in Montana. Since 2000, 14–32 new cases have been reported each year (Figure 1). Table 1 summarizes new HIV diagnoses among Montana residents for select characteristics by year from 2011 to 2015 and for all years combined. Most HIV infections reported in Montana continue to be among non-Hispanic, white males. The leading transmission categories among men are male-to-male sexual contact (MSM) and injection drug use (IDU). Among women, high-risk heterosexual contact (HRH), sexual contact with a person known to have, or to be at high risk for, HIV infection, is the leading transmission category followed by IDU. Transmission category is the likely mode of transmission given a person's reported risk factors.

In 2015, men accounted for 17 of the 18 new infections reported, and 14 were non-Hispanic white. Among men, MSM and IDU were the most common transmission categories. Thirteen of the 17 men reported MSM or IDU as their risk. No risk was identified for one woman and three men in 2015.

Seven of the 18 persons newly diagnosed with HIV were also diagnosed with AIDS in 2015, indicating a delayed diagnosis of HIV infection or not being linked to medical care.

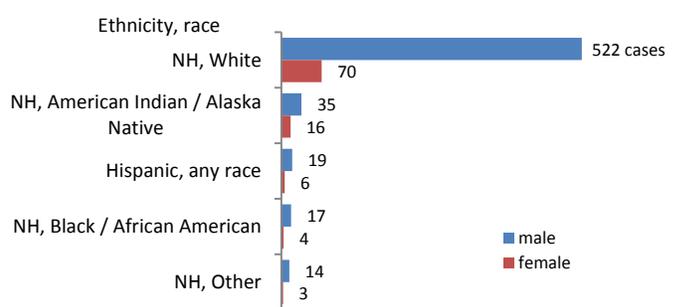
Figures 2–4 graphically presents select characteristics of newly diagnosed HIV reported among Montana residents since 1985. Figure 5 maps the county of residence at the time of diagnosis.

Figure 1: Newly diagnosed HIV infections by year and sex — Montana, 2000–2015



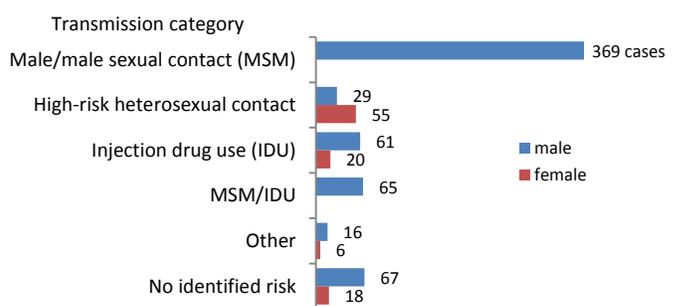
Source: Enhanced HIV/AIDS Reporting System, funded by the CDC

Figure 2: Newly diagnosed HIV infections by ethnicity, race and sex — Montana, 1985–2015



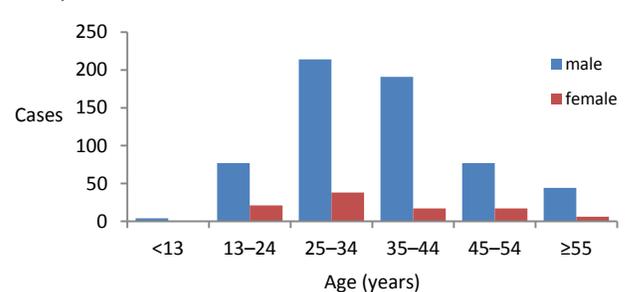
Source: Enhanced HIV/AIDS Reporting System, funded by the CDC

Figure 3: Newly diagnosed HIV infections by transmission category and sex — Montana, 1985–2015



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

Figure 4: Newly diagnosed HIV infections by age at diagnosis and sex — Montana, 1985–2015



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

^{*} 20 cases did not have a reported county of residence

Table 1. Newly diagnosed cases of HIV disease by select characteristics — Montana, 2015

Year of diagnosis	2011	2012	2013	2014	2015	1982–2014
Total	21	21	22	14	18	706
Sex						
Male	17	17	20	11	17	607 (86%)
Female	4	4	2	3	1	99 (14%)
Age at HIV diagnosis						
<13	--	--	--	--	--	4 (1%)
13–24	2	3	3	2	5	98 (14%)
25–34	3	6	7	6	5	252 (36%)
35–44	7	5	5	4	4	208 (29%)
45–54	5	7	4	2	1	94 (13%)
≥55	4	--	3	--	3	50 (7%)
Ethnicity, race						
Non-Hispanic:						
White	19	14	13	11	15	592 (84%)
American Indian/Alaska Native	1	3	2	1	--	51 (7%)
Black/African American	--	1	1	--	1	21 (3%)
Other	--	2	5	1	--	17 (2%)
Hispanic, any race	1	1	1	1	2	25 (4%)
Transmission category*						
Male only:						
Male/Male sex (MSM)	11	10	17	5	8	369 (61%)
Injection drug use (IDU)	2	1	--	1	1	61 (10%)
MSM/IDU	1	1	1	2	4	65 (11%)
Heterosexual contact †	1	2	--	1	1	29 (5%)
Other ‡	--	--	--	--	--	16 (3%)
No identified risk	2	3	2	2	3	67 (11%)
Female only:						
Heterosexual contact †	2	--	2	3	--	55 (56%)
Injection drug use (IDU)	1	1	--	--	--	20 (20%)
Other ‡	--	--	--	--	--	6 (6%)
No identified risk	1	3	--	--	1	18 (18%)

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

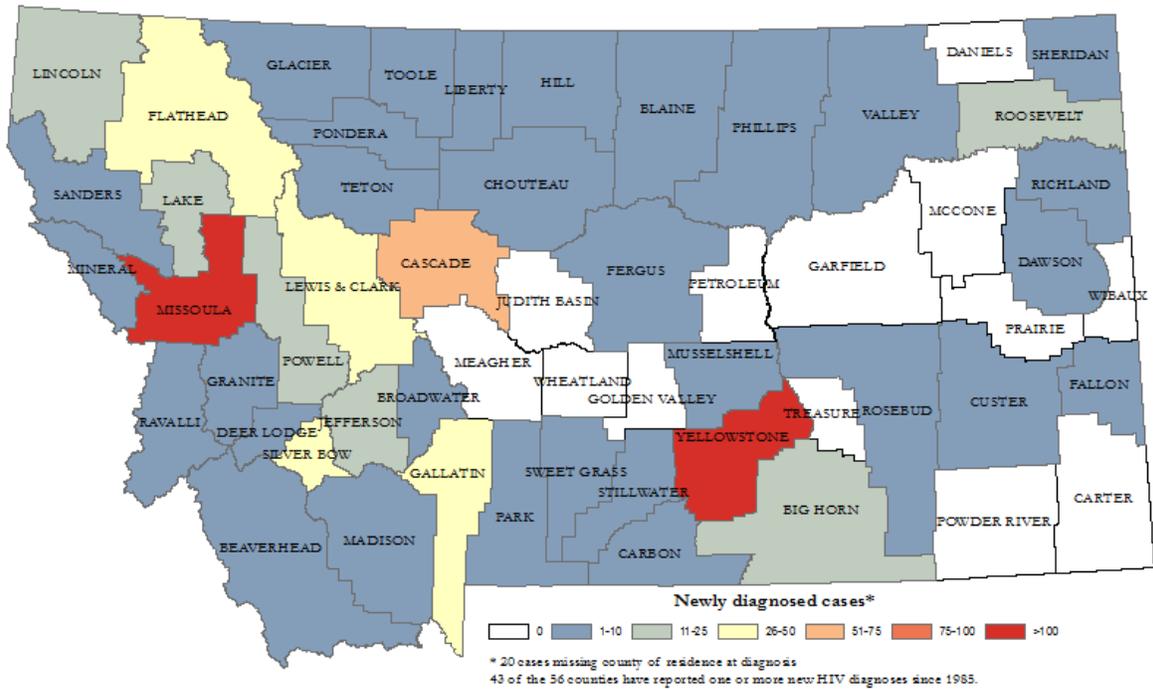
† Heterosexual contact with a person known to have, or to be at high risk for, HIV infection

‡ 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

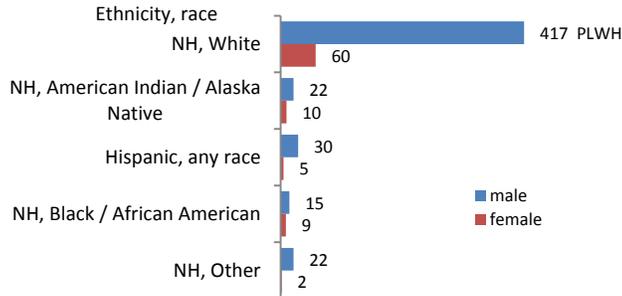
Figure 5: New HIV infection diagnoses by county of residence — Montana, 1985–2015



Persons living with HIV/AIDS as of December 31, 2015

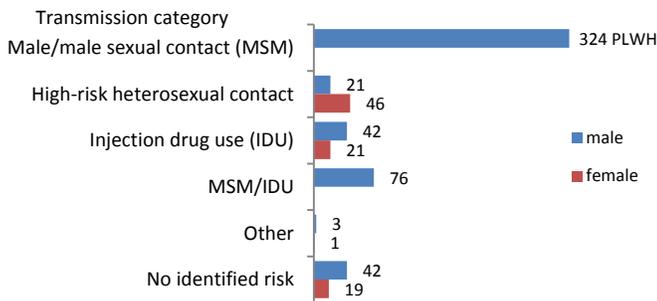
As of December 31, 2015, 595 persons living with HIV (PLWH) were reported in Montana, which includes persons diagnosed in Montana and out-of-state. Of the 595 PLWH, 352 (60%) ever had an AIDS diagnosis. The demographic profile of PLWH is similar to that of persons diagnosed in Montana (Table 2). Figures 6–8 graphically presents select characteristics of PLWH in Montana in 2015 by sex. The most populous counties in Montana are also the counties with the greatest number of PLWH (Figure10).

Figure 6: PLWH by ethnicity, race and sex — Montana, 2015



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

Figure 7: PLWH by transmission category and sex — Montana, 2015



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

Figure 10: Number of persons living with HIV by current county of residence — Montana, 2015

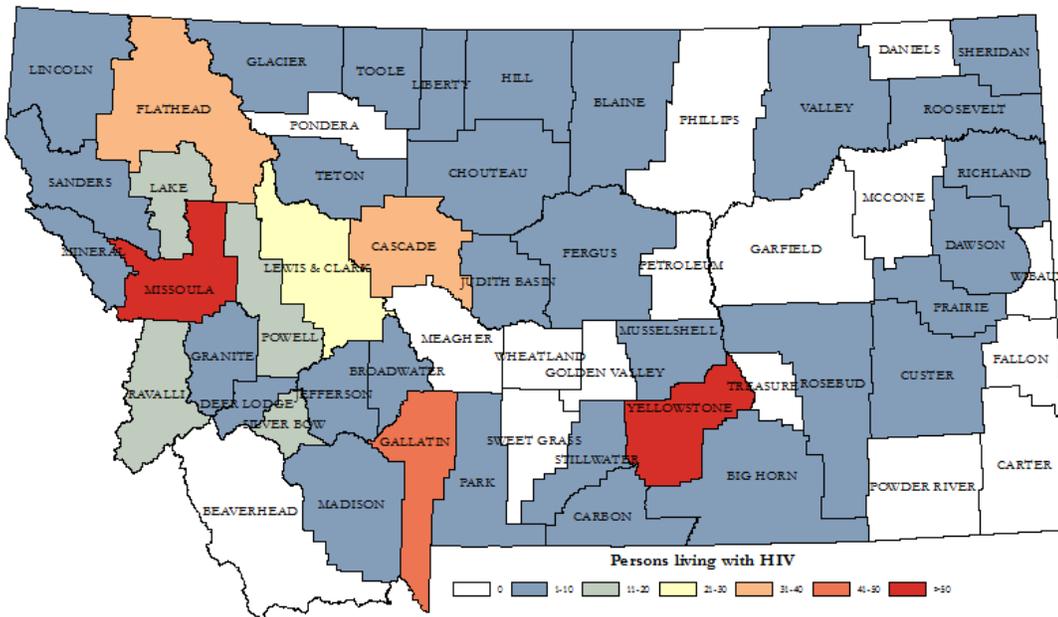
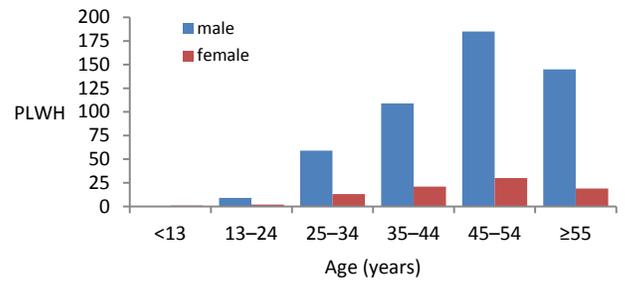


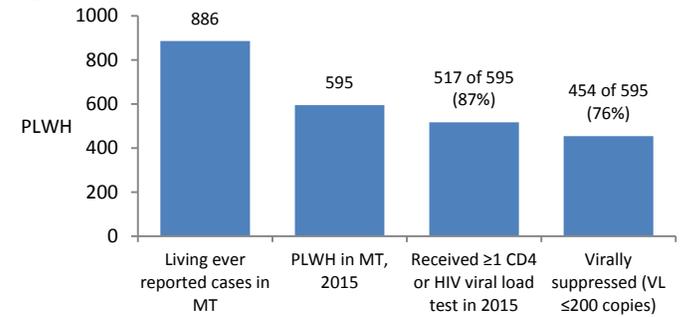
Figure 8: PLWH by current age and sex — Montana, 2015



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

The HIV continuum of care is the series of steps from a person’s HIV diagnosis to successful treatment to achieve viral suppression. Montana’s continuum progresses from the number of persons ever reported in Montana and alive (n=886) to PLWH who had a suppressed viral load (n=454) (Figure 9). A suppressed viral load reduces the chances of HIV transmission.

Figure 9: Continuum of care — Montana, 2015



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

Table 2. Persons living with HIV infection by select characteristics — Montana, 2015

Diagnostic status	HIV (not AIDS)	AIDS *	HIV/AIDS
Total	243	352	595
Sex			
Male	201 (83%)	307 (87%)	508 (85%)
Female	42 (17%)	45 (13%)	87 (15%)
Current age			
<13	1 (<1%)	--	1 (<1%)
13–24	9 (4%)	2 (1%)	11 (2%)
25–34	52 (22%)	20 (6%)	72 (12%)
35–44	62 (26%)	68 (19%)	130 (22%)
45–54	66 (27%)	149 (42%)	215 (36%)
≥55	51 (21%)	113 (32%)	164 (28%)
Ethnicity, race			
Non-Hispanic:			
White	197 (82%)	280 (80%)	477 (80%)
American Indian/Alaska Native	8 (3%)	24 (7%)	32 (5%)
Black/African American	7 (3%)	17 (5%)	24 (4%)
Other/Unknown	11 (5%)	14 (4%)	25 (4%)
Hispanic, any race	18 (7%)	17 (5%)	35 (6%)
Transmission category †			
Male only:			
Male/Male sex (MSM)	136 (68%)	188 (61%)	324 (64%)
Injection drug use (IDU)	11 (5%)	31 (10%)	42 (8%)
MSM/IDU	25 (12%)	51 (17%)	76 (15%)
Heterosexual contact §	7 (3%)	14 (5%)	21 (4%)
Other ¶	2 (1%)	1 (<1%)	3 (1%)
No identified risk	20 (10%)	22 (7%)	42 (8%)
Female only:			
Heterosexual contact §	22 (52%)	24 (53%)	46 (53%)
Injection drug use (IDU)	6 (14%)	15 (33%)	21 (24%)
Other ¶	1 (2%)	--	1 (1%)
No identified risk	13 (31%)	6 (13%)	19 (22%)

* Ever diagnosed as AIDS (met AIDS case definition)

† Likely mode of HIV transmission based on a hierarchical order of probability of reported risk factors

§ 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

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