

HIV EPIDEMIOLOGIC PROFILE ANNUAL UPDATE, 2014

This annual epidemiologic update reflects events that occurred through 2014 and that were reported and recorded in the Montana HIV reporting system by January 15, 2015. The Montana HIV Surveillance Program prepared this report. Please direct correspondences to Helen McCaffrey (hmmaffrey@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.

The Administrative Rules of Montana (ARM) were updated in 2013 to improve HIV surveillance. ARM 37.114.204(7) requires laboratories report to DPHHS all HIV viral load 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, 2014, 1,277 cases of HIV infection have been reported to the DPHHS, and 693 (54%) were Montana residents at the time of diagnosis. Of the total cases reported, more than 450 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 2014, 566 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, 2014

In 2014, 14 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 2010 to 2014 and for all years combined. Most HIV infections reported in Montana continue to be among non-Hispanic, white males. In 2014, men accounted for 11 of the 14 new infections reported, and 9 were non-Hispanic white.

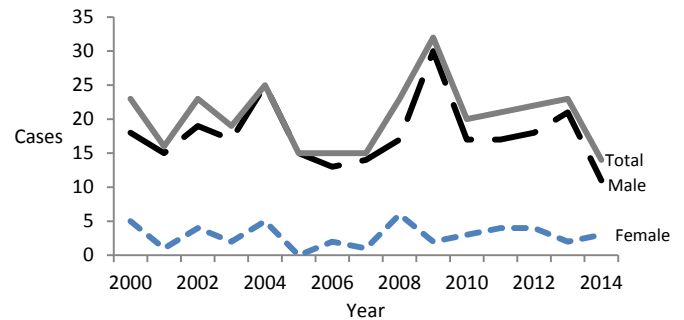
Among men, male-to-male sexual contact (MSM) is the most common transmission category. Transmission category is the likely mode of transmission given a person's reported risk factors. Among women, heterosexual contact with a person with HIV infection, or at high-risk for infection, (HRH) is the most 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 14 persons newly diagnosed with HIV, 3 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.

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.

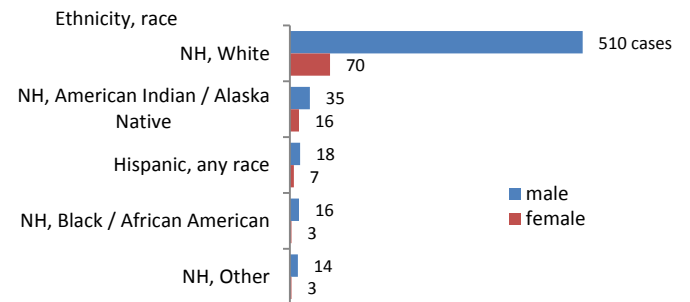
* 21 cases did not have a reported county of residence

Figure 1: Newly diagnosed HIV infections by year and sex — Montana, 2000–2014



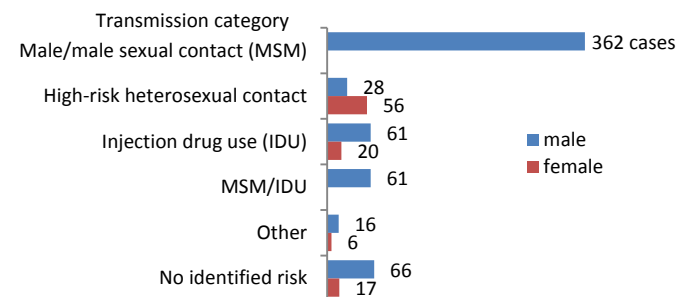
Source: Enhanced HIV/AIDS Reporting System, funded by the CDC

Figure 2: Newly diagnosed HIV infections by ethnicity, race and sex — Montana, 1985–2014



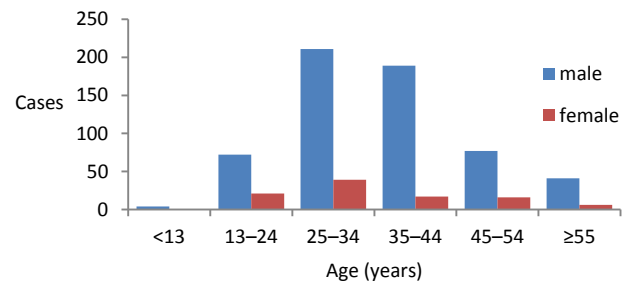
Source: Enhanced HIV/AIDS Reporting System, funded by the CDC

Figure 3: Newly diagnosed HIV infections by transmission category and sex — Montana, 1985–2014



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

Figure 4: Newly diagnosed HIV infections by age at diagnosis and sex — Montana, 1985–2014



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

Table 1. Newly diagnosed cases of HIV disease by select characteristics — Montana, 2014

Year of diagnosis	2010	2011	2012	2013	2014	1982–2014
Total	20	21	22	23	14	693
Sex						
Male	17	17	18	21	11	594 (86%)
Female	3	4	4	2	3	99 (14%)
Age at HIV diagnosis						
<13	--	--	--	--	--	4 (1%)
13–24	5	2	3	3	2	93 (13%)
25–34	5	3	6	8	6	250 (36%)
35–44	9	7	6	5	4	206 (30%)
45–54	1	5	7	4	2	93 (13%)
≥55	--	4	--	3	--	47 (7%)
Ethnicity, race						
Non-Hispanic:						
White	17	19	14	13	11	580 (84%)
American Indian/Alaska Native	2	1	3	2	1	51 (7%)
Black/African American	--	--	1	1	--	19 (3%)
Other	--	--	2	5	1	17 (2%)
Hispanic, any race	1	1	2	1	1	25 (4%)
Transmission category*						
Male only:						
Male/Male sex (MSM)	15	11	10	16	5	362 (61%)
Injection drug use (IDU)	--	2	1	1	1	61 (10%)
MSM/IDU	1	1	1	1	2	61 (10%)
Heterosexual contact †	1	1	2	--	1	28 (5%)
Other ‡	--	--	--	--	--	16 (3%)
No identified risk	--	2	4	3	2	66 (11%)
Female only:						
Heterosexual contact †	1	2	--	2	3	56 (57%)
Injection drug use (IDU)	1	1	1	--	--	20 (20%)
Other ‡	--	--	--	--	--	6 (6%)
No identified risk	1	1	3	--	--	17 (17%)

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

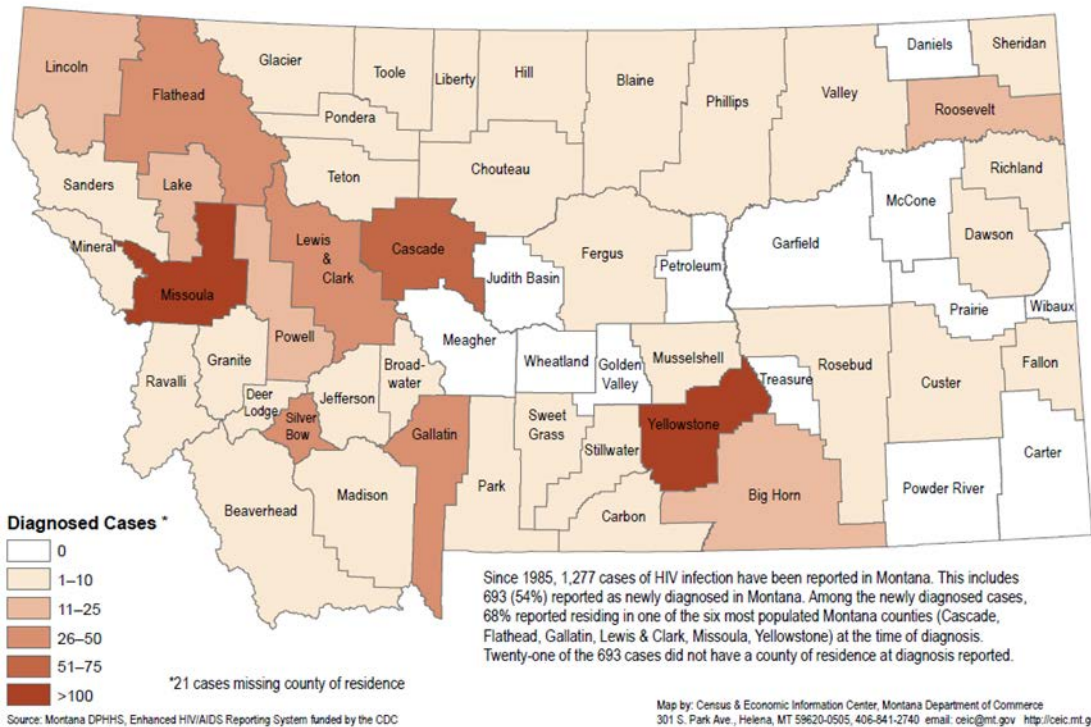
† Heterosexual contact with a person known to have, or to be at high risk for, HIV infection

‡ 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

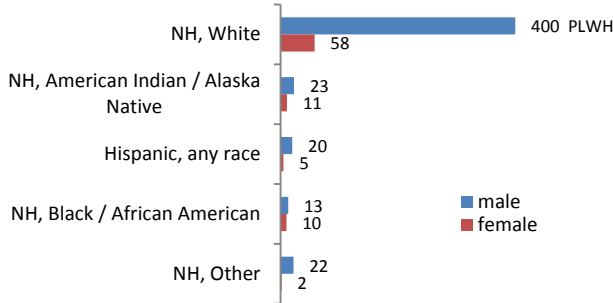
Figure 5: New HIV infection diagnoses by county of residence — Montana, 1985–2014



Persons living with HIV/AIDS as of December 31, 2014

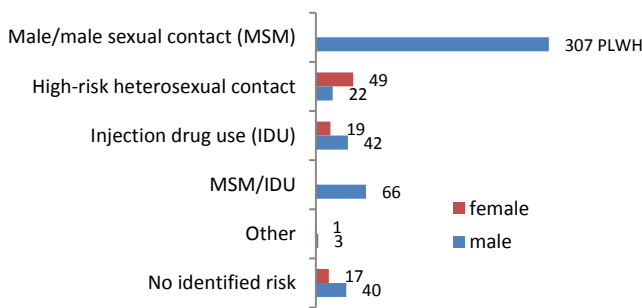
As of December 31, 2014, 566 persons living with HIV (PLWH) were reported in Montana, which includes persons diagnosed in Montana and out-of-state. Of the 566 PLWH, 337 (60%) ever had an AIDS diagnosis. The demographic profile of PLWH is similar to that of persons diagnosed in Montana (Table 2). Figures 6–8 graphically presents select characteristics of PLWH in Montana in 2014 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, 2014



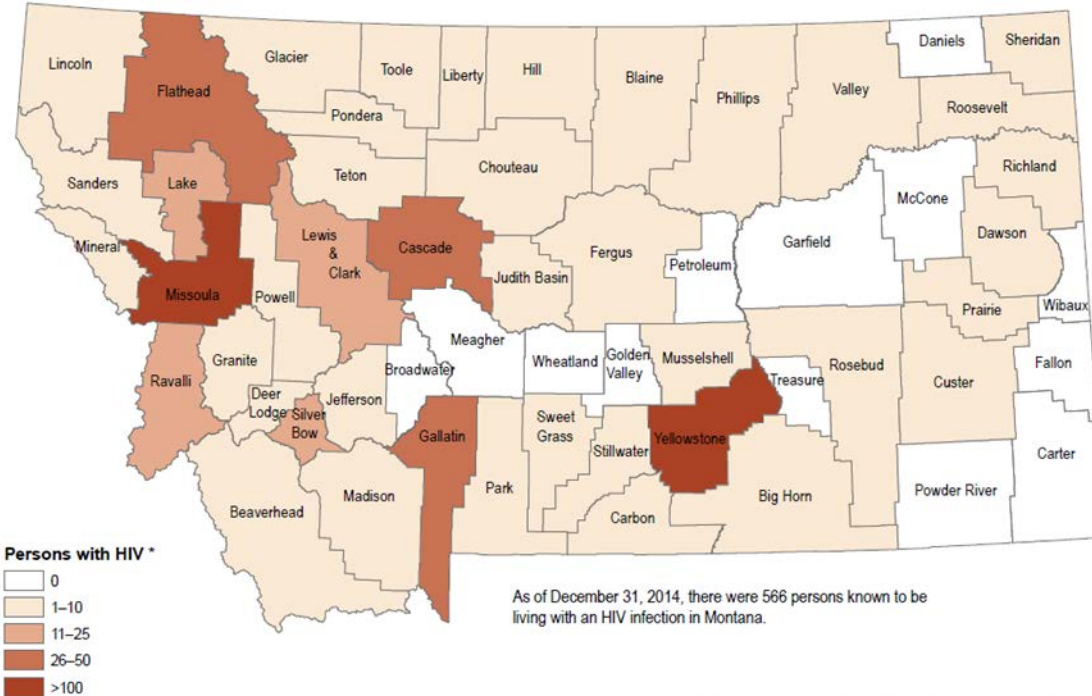
Source: Enhanced HIV/AIDS Reporting System, funded by the CDC

Figure 7: PLWH by transmission category and sex — Montana, 2014



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

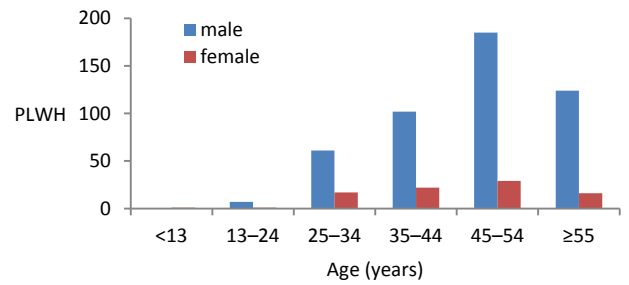
Figure 10: Number of persons living with HIV by current county of residence — Montana, 2014



Source: Montana Department of Public Health & Human Services, DPHHS. (2014).

Map by: Census & Economic Information Center, Montana Department of Commerce
301 S. Park Ave., Helena, MT 59620-0505, 406-841-2740 email: ceic@mt.gov http://ceic.mt.gov

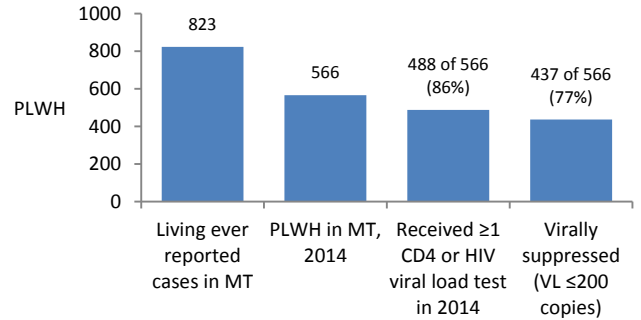
Figure 8: PLWH by current age and sex — Montana, 2014



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=823) to PLWH who had a suppressed viral load (n=437) (Figure 9). A suppressed viral load reduces the chances of HIV transmission.

Figure 9: Continuum of care — Montana, 2014



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

Table 2. Persons living with HIV infection by select characteristics — Montana, 2014

Diagnostic status	HIV (not AIDS)	AIDS *	HIV/AIDS
Total	229	337	566
Sex			
Male	186 (81%)	294 (87%)	480 (85%)
Female	43 (19%)	43 (13%)	86 (15%)
Current age			
<13	1 (<1%)	--	1 (<1%)
13–24	7 (3%)	1 (<1%)	8 (1%)
25–34	57 (25%)	21 (6%)	78 (14%)
35–44	59 (26%)	65 (19%)	124 (22%)
45–54	60 (26%)	154 (46%)	214 (38%)
≥55	44 (19%)	96 (28%)	140 (25%)
Ethnicity, race			
Non-Hispanic:			
White	186 (82%)	272 (81%)	458 (81%)
American Indian/Alaska Native	8 (4%)	26 (8%)	34 (6%)
Black/African American	6 (3%)	17 (5%)	23 (4%)
Other/Unknown	14 (6%)	11 (3%)	25 (4%)
Hispanic, any race	14 (6%)	11 (3%)	25 (4%)
Transmission category †			
Male only:			
Male/Male sex (MSM)	127 (68%)	180 (61%)	307 (64%)
Injection drug use (IDU)	11 (6%)	31 (11%)	42 (9%)
MSM/IDU	20 (11%)	46 (16%)	66 (14%)
Heterosexual contact §	7 (4%)	15 (5%)	22 (5%)
Other ¶	2 (1%)	1 (<1%)	3 (1%)
No identified risk	19 (10%)	21 (7%)	40 (8%)
Female only:			
Heterosexual contact §	23 (53%)	26 (60%)	49 (57%)
Injection drug use (IDU)	6 (14%)	13 (30%)	19 (22%)
Other ¶	1 (2%)	--	1 (1%)
No identified risk	13 (30%)	4 (9%)	17 (20%)

* 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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