



COMMUNITY HEALTH PROFILE 2015



Missoula County



Public Health and Safety Division



Healthy People. Healthy Communities.

Department of Public Health & Human Services

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Methods

Methods for all data analyses are in a separate document, “Health Profile Methodology.”

Demographic Information^a

	Missoula County	Montana
Population, Census, April 1, 2010	109,299	989,415
Population estimates, July 1, 2014	112,684	1,023,579
Population, percent change April 1, 2010–July 1, 2014	3.1%	3.5%
Persons under 5 years, July 1, 2013	5.4%	6.0%
Persons under 18 years, July 1, 2013	19.4%	22.1%
Persons 65 years and over, July 1, 2013	13.1%	16.2%
Female persons, July 1, 2013	49.8%	49.8%
White alone, July 1, 2013	92.4%	89.5%
Black or African American alone, July 1, 2013	0.6%	0.6%
American Indian and Alaska Native alone, July 1, 2013	2.9%	6.5%
Asian alone, July 1, 2013	1.4%	0.8%
Native Hawaiian and Other Pacific Islander alone, July 1, 2013	0.1%	0.1%
Two or more races, July 1, 2013	2.7%	2.5%
Hispanic or Latino, July 1, 2013	2.9%	3.3%
White alone, not Hispanic or Latino, July 1, 2013	90.1%	87.0%
Foreign born persons, 2009–2013	2.8%	2.0%
Language other than English spoken at home, percent of persons age 5 years+, 2009–2013	4.6%	4.4%

^aZ Value greater than zero but less than half unit of measure shown.

Data from <http://quickfacts.census.gov/>

Demographic Information^a

	Missoula County	Montana
High school graduate or higher, percent of persons age 25 years+, 2009–2013	94.5%	92.1%
Bachelor's degree or higher, percent of persons age 25 years+, 2009–2013	39.1%	28.7%
Veterans, 2009–2013	8,903	94,404
With a disability, under age 65 years, 2009–2013	8.4%	9.0%
Mean travel time to work (minutes), workers age 16 years+, 2009–2013	16.7 minutes	18 minutes
Median gross rent, 2009–2013	\$755	\$682
Owner-occupied housing units, 2009–2013	58.8%	68.3%
Persons per household, 2009–2013	2.36	2.39
Median household income, 2009–2013	\$46,117	\$46,230
Persons without health insurance, under age 65 years	19.1%	19.5%
Persons in poverty	17.4%	16.5%
Population per square mile, 2010	42.1	6.8

^aZ Value greater than zero but less than half unit of measure shown.

Data from <http://quickfacts.census.gov/>

Communicable Disease

Table 1. Number and rate of selected communicable diseases — Montana, 2011–2013.

Health Indicator	Missoula County		Large County Data		Montana
	Number	Rate per 100,000 ^a (95% CI)	Number per County	Rate per 100,000 ^a (95% CI)	Rate per 100,000 ^a (95% CI)
Chlamydia	1,207	362.4 (342.5, 383.4)	6,645	348.7 (340.4, 357.1)	366.2 (359.5, 373.1)
Hepatitis C	381	114.4 (103.5, 126.5)	2,047	107.4 (102.9, 112.2)	123.0 (119.1, 127.0)
Pertussis	46	13.8 (10.4, 18.4)	922	48.4 (45.4, 51.6)	44.6 (42.3, 47.0)
Campylobacteriosis	58	17.4 (13.5, 22.5)	399	20.9 (19.0, 23.1)	22.2 (20.6, 24.0)

^aDepartment of Corrections population included in county rate where applicable.

Data provided by the Communicable Disease Epidemiology Section.

Table 2. Up-to-date (UTD) on childhood vaccinations for 24–35 month old children as of March 1st of the year of assessment based on imMTrax data reviewed during Vaccines for Children Program Clinic Reviews conducted every other year — Montana, 2011 and 2014.^a

Health Indicator	Missoula County	Large County Data	Montana
Number assessed 2011 ^b	-	1,419	2,249
Number UTD 2011	-	797	1,305
Percent UTD 2011 ^c	-	56.2	58.7
Number assessed 2014 ^d	1,405	1,573	4,042
Number UTD 2014	882	1,061	2,651
Percent UTD 2014 (95% CI)	62.8 (60.2, 65.3)	67.5 (65.1, 69.8)	65.6 (64.1, 67.1)

^aUTD = 4 DTaP, 3 Polio, 1 MMR, 3/4 HIB, 3 Hep B, 1 Var, 4 PCV by 24 months.

^bIn 2011, chart reviews occurred. Clinics with fewer 50 chart, the review included all available charts. Clinics with more than 50 charts, a sample of charts were reviewed and validated.

^cConfidence interval cannot be calculated because the total number of records reviewed is unknown.

^dIn 2014, all immunization records were reviewed electronically in the Montana Immunization Information System (imMTrax). The precision of each estimate was quantified using 95% confidence intervals.

Data provided by the Immunization Section of the Communicable Disease Bureau.

Chronic Disease

Table 3. Inpatient admissions for selected chronic conditions — Montana, 2011–2013.

Health Indicator	Missoula County		Large County Data		Montana
	Number	Rate per 100,000 ^a (95% CI)	Average Number per County	Rate per 100,000 ^a (95% CI)	Rate per 100,000 ^a (95% CI)
Asthma	120	38.6 (31.7, 46.5)	123.0	46.3 (43.2, 49.6)	47.7 (45.2, 50.3)
Chronic Obstructive Pulmonary Disease (COPD) ^b	2,095	622.1 (594.9, 650.3)	2,220.6	707.9 (696.6, 719.4)	716.8 (708.1, 725.6)
Cardiovascular Disease	2,329	700.6 (671.6, 730.6)	2,330.4	747.4 (735.8, 759.3)	746.7 (737.7, 755.8)
Diabetes (types 1 and 2)	2,463	738.3 (708.4, 769.2)	2,382.6	781.2 (769.0, 793.5)	822.5 (812.8, 832.3)

^aRates are age standardized to the 2000 Projected US Population using Distribution #1 as described in Klein and Schoenborn 2001 and given per 100,000 person years.

^bChronic obstructive pulmonary disease (COPD), includes chronic bronchitis, emphysema, bronchiectasis, and chronic airway obstruction.

‡Does not meet standards of reliability or precision.

Inpatient admission and ED visit data provided courtesy of participating MHA members, collected through the Montana Hospital Discharge Data System (MHDDS).

Table 4. Inpatient admissions for injury by type and mechanism of injury — Montana, 2011–2013.

Health Indicator	Missoula County		Large County Data		Montana
	Number	Rate per 100,000 ^a (95% CI)	Average Number per County	Rate per 100,000 ^a (95% CI)	Rate per 100,000 ^a (95% CI)
All Unintentional Injury	1,499	441.6 (418.7, 465.4)	1,488.1	500.4 (490.6, 510.4)	538.6 (530.6, 546.8)
Falls	833	250.3 (233.1, 268.5)	810.3	263.4 (256.5, 270.5)	268.7 (263.2, 274.3)
Struck by/against	33	11.2 (7.6, 16.0)	42.9	15.6 (13.8, 17.5)	18.0 (16.5, 19.6)
Motor Vehicle	149	40.0 (33.6, 47.5)	132.0	46.8 (43.7, 50.0)	60.6 (57.8, 63.6)
Poisoning	127	37.7 (31.2, 45.3)	107.1	37.7 (35.0, 40.6)	36.3 (34.2, 38.5)
Intentional Self-Harm	268	80.3 (70.6, 91.1)	297.3	114.8 (109.9, 120.0)	106.5 (102.6, 110.5)
Traumatic Brain Injury	241	69.4 (60.6, 79.3)	236.3	81.4 (77.4, 85.5)	91.3 (87.9, 94.8)

^aRates are age standardized to the 2000 Projected US Population using Distribution #1 as described in Klein and Schoenborn 2001 and given per 100,000 person years.

‡Does not meet standards of reliability or precision.

Inpatient admission and ED visit data provided courtesy of participating MHA members, collected through the Montana Hospital Discharge Data System (MHDDS).

**Table 5. Emergency Department visits for selected chronic conditions —
Montana, 2011–2013.**

Health Indicator	Missoula County	Large County Data		Montana
	Number	Rate per 100,000 ^a (95% CI)	Average Number per County	Rate per 100,000 ^a (95% CI)
Asthma	863	266.6 (248.3, 285.9)	652.7	254.4 (247.0, 262.1)
Chronic Obstructive Pulmonary Disease (COPD) ^b	2,320	690.5 (661.7, 720.3)	2,016.4	673.8 (662.4, 685.3)
Cardiovascular Disease	1,146	343.5 (323.3, 364.8)	877.3	285.0 (277.7, 292.4)
Diabetes (types 1 and 2)	4,294	1,310.5 (1270.2, 1351.9)	3,365.7	1,152.0 (1136.9, 1167.4)

^aRates are age standardized to the 2000 Projected US Population using Distribution #1 as described in Klein and Schoenborn 2001 and given per 100,000 person years.

^bChronic obstructive pulmonary disease (COPD), includes chronic bronchitis, emphysema, bronchiectasis, and chronic airway obstruction.

‡Does not meet standards of reliability or precision.

Inpatient admission and ED visit data provided courtesy of participating MHA members, collected through the Montana Hospital Discharge Data System (MHDDS).

Table 6. Emergency department visits for injury by type and mechanism of injury — Montana, 2011–2013.

Health Indicator	Missoula County		Large County Data		Montana
	Number	Rate per 100,000 ^a (95% CI)	Average Number per County	Rate per 100,000 ^a (95% CI)	Rate per 100,000 ^a (95% CI)
All Unintentional Injury	19,653	6,083.5 (5995.4, 6172.6)	14,697.0	5,520.6 (5486.1, 5555.2)	5,901.8 (5873.1, 5930.4)
Falls	7,104	2,219.6 (2166.5, 2273.8)	5,266.0	1,926.7 (1906.6, 1946.9)	2,020.0 (2003.7, 2036.5)
Struck by/against	2,636	848.0 (814.7, 882.4)	1,925.1	752.9 (740.0, 765.9)	820.2 (809.4, 831.1)
Motor Vehicle	1,800	519.5 (494.7, 545.4)	1,398.7	520.7 (510.2, 531.3)	520.0 (511.5, 528.6)
Poisoning	198	63.1 (54.4, 73.0)	241.1	93.2 (88.8, 97.9)	95.4 (91.8, 99.1)
Intentional Self-Harm	353	105.9 (94.6, 118.2)	243.7	94.6 (90.1, 99.3)	104.5 (100.6, 108.4)
Traumatic Brain Injury	2,089	659.7 (630.6, 689.8)	1,776.9	669.9 (658.0, 682.1)	649.9 (640.5, 659.5)

^aRates are age standardized to the 2000 Projected US Population using Distribution #1 as described in Klein and Schoenborn 2001 and given per 100,000 person years.

‡Does not meet standards of reliability or precision.

Inpatient admission and ED visit data provided courtesy of participating MHA members, collected through the Montana Hospital Discharge Data System (MHDDS).

Table 7. Cancer incidence — Montana, 2011–2013.

Health Indicator	Missoula County		Large County Data		Montana
	Number	Rate per 100,000 (95% CI)	Average Number per County	Rate per 100,000 (95% CI)	Rate per 100,000 (95% CI)
All Cancer	1,416	407.8 (386.1, 430.5)	1412.7	444.5 (435.6, 453.7)	439.8 (432.9, 446.8)
Prostate (males)	180	100.7 (85.9, 117.7)	193.7	118.3 (111.9, 125.0)	112.8 (108.1, 117.8)
Breast (female)	198	113.2 (97.4, 131.2)	193.0	118.9 (112.4, 125.7)	115.7 (110.8, 120.9)
Lung and Bronchus	172	51.5 (43.8, 60.2)	175.7	55.5 (52.4, 58.8)	56.4 (54.0, 58.9)
Colon and Rectum	125	36.1 (29.9, 43.4)	109.4	34.7 (32.2, 37.3)	36.9 (35.0, 39.0)
Corpus Uteri (female)	41	21.0 (14.9, 29.4)	41.9	23.9 (21.2, 27.0)	25.4 (23.2, 27.9)
Melanoma	85	24.7 (19.5, 30.9)	82.3	26.6 (24.4, 29.0)	24.9 (23.2, 26.7)

‡Does not meet standards of reliability or precision.

Cancer incidence data are from the Montana Central Tumor Registry.

Figure 1: Age-adjusted cancer incidence rates by cancer site — Montana, 2011–2013.

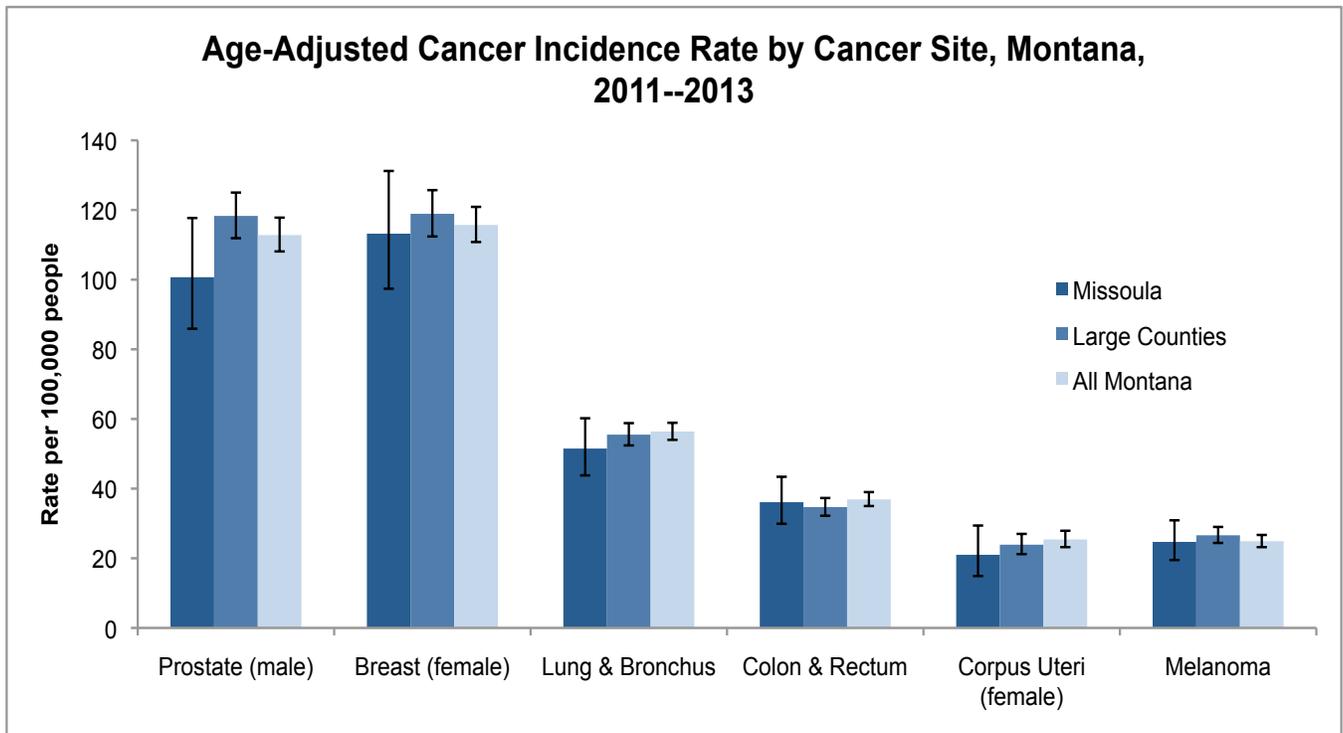


Table 8. Tobacco retailers by county, Montana 2013.

Health Indicator	Missoula County
Retailer Number	80
Retailers per 1,000 population	0.71

Data from: <http://dphhs.mt.gov/Portals/85/Documents/MTUPPapp/index.html>

Maternal and Child Health

Table 9. Total births occurring in Missoula County, 2011–2013.

Health Indicator	Missoula County	Montana
Number of births	3,689	35,881

Data about births were tabulated from birth certificates of infants to Montana-resident mothers who delivered in Montana, 2011–2013, covering more than 95% of all births.

Table 10. Teen birth rate per 1,000 females age 15–19 years, 2009–2013.^{a,b}

Health Indicator	Missoula County	Montana
Teen birth rate per 1,000	17.3	32.0

^aDue to the small number of events in some counties, five year rates have been used to include more counties with at least 20 events over the five years. Not all counties had enough events to be included.

^bFull report can be found at:

<http://dphhs.mt.gov/Portals/85/publichealth/documents/WMH/2014%20Teen%20Birth%20and%20Pregnancy%20Report%20Final.pdf>

†Denominator less than 20; rates based on fewer than 20 events are not statistically reliable.

Table 11. WIC data by county — Montana, 2011–2013.

Health Indicator	Large County		
	Missoula County	Data	Montana
	Percent	Percent	Percent
Children (2–5 years of age) overweight or obese	23.1	25.1	27.9
Initiate breastfeeding	97.5	89.7	84.7

†Denominator less than 20; rates based on fewer than 20 events are not statistically reliable.

Data provided by the WIC Program in the Family and Community Health Bureau.

Table 12. Births to Montana resident mothers occurring in Missoula County, 2011–2013.^a

Health Indicator	Missoula County		Large County Data		Montana	
	Number	Percent (95% CI)	Number	Percent (95% CI)	Number	Percent (95% CI)
Born less than 37 weeks	295	8.0 (7.1, 8.9)	2,036	8.8 (8.4, 9.2)	3,265	9.1 (8.8, 9.4)
Born weighing less than 2,500 grams	225	6.1 (5.3, 6.9)	1,642	7.1 (6.8, 7.4)	2,619	7.3 (7.0, 7.6)
Women entering prenatal care after first trimester	871	23.6 (22.3, 25.0)	5,413	23.4 (22.9, 24.0)	9,580	26.7 (26.2, 27.2)
Women whose Kotelchuk Index is $\geq 80\%$ ^b	2911	78.9 (77.6, 80.2)	18,482	79.9 (79.4, 80.4)	26,911	75.0 (74.6, 75.5)
Smoking during pregnancy	432	11.7 (10.7, 12.8)	3,238	14.0 (13.6, 14.5)	5,849	16.3 (15.9, 16.7)
Education less than high school graduate	238	6.5 (5.7, 7.3)	2,136	9.2 (8.9, 9.6)	4,281	12.0 (11.6, 12.3)
Any insurance	3457	93.7 (92.9, 94.5)	21,397	92.5 (92.2, 92.8)	33,118	92.3 (92.0, 92.6)
Receiving WIC	1291	35.0 (33.5, 36.6)	7,240	31.1 (30.7, 31.9)	12,415	34.6 (34.1, 35.1)
Breastfeeding at discharge	3482	94.4 (93.6, 95.1)	21,281	92.0 (91.6, 92.3)	31,898	88.9 (88.6, 89.2)

^aData about births were tabulated from birth certificates of infants to Montana-resident mothers who delivered in Montana, 2011–2013, covering more than 95% of all births. Demographic information on the birth certificates is self-reported by parents; medical information is abstracted from medical records.

^bKotelchuk Index: computed index of adequacy of prenatal care, function of early initiation and enough visits, 80% or greater is defined as adequate.

†Too few events to report or complimentary suppression of corresponding cell.

‡Does not meet standards of reliability or precision.

Mortality

Table 13. Median age at death in years by race and sex — Montana, 2011–2013.

Health Indicator	Missoula County		Large County Data		Montana	
	Male	Female	Male	Female	Male	Female
White	75.0	83.0	75.0	83.0	76.0	83.0
American Indian	†	†	59.0	60.0	62.5	63.5

†Too few events to report or complimentary suppression of corresponding cell.

Table 14. Frequency and age-adjusted rates of selected causes of death by county all cause Montana residents, 2011–2013.

Health Indicator	Missoula County		Large County Data		Montana	
	Number	Age-adjusted Rate per 100,000 (95% CI) ^a	Number	Age-adjusted Rate per 100,000 (95% CI) ^a	Number	Age-adjusted Rate per 100,000 (95% CI) ^a
All Causes	2,377	721.7 (692.4, 752.0)	15,555	713.6 (702.3, 725.1)	27,334	744.8 (735.8, 753.9)
Homicide	†	‡	43	‡	80	‡
Suicide	81	‡	416	21.2 (19.1, 23.4)	688	22.3 (20.6, 24.1)
All injuries	175	‡	918	45.2 (42.2, 48.3)	1,726	53.3 (50.7, 56.0)
Motor vehicle Accidents	53	‡	277	14.2 (12.5, 16.0)	603	19.8 (18.2, 21.5)

^aConfidence Intervals (95%) For The Age Adjusted Rate Are Computed Using the Fay-Feuer (1997) Method National Center for Health Statistics. Vintage 2013 postcensal estimates of the resident population of the United States (April 1, 2010, July 1, 2010–July 1, 2013), by year, County, single-year of age (0, 1, 2, ..., 85 years and over), bridged race, Hispanic origin, and sex. Prepared under a collaborative arrangement with the U.S. Census Bureau. Available from: http://www.cdc.gov/nchs/nvss/bridged_race.htm as of June 26, 2014, following release by the U.S. Census Bureau of the unbridged Vintage 2013 postcensal estimates by 5-year age group on June 26, 2014.

†Too few events to report or complimentary suppression of corresponding cell.

‡Does not meet standards of reliability or precision.

Data provided by the Office of Epidemiology and Scientific Support.

Table 15. Frequency and age-adjusted rates of selected causes of death by county all cause Montana residents, 2011–2013.

Health Indicator	Missoula County		Large County Data		Montana	
	Number	Age-adjusted Rate per 100,000 (95% CI) ^a	Number	Age-adjusted Rate per 100,000 (95% CI) ^a	Number	Age-adjusted Rate per 100,000 (95% CI) ^a
Deaths Attributed to Drugs	†	‡	44	‡	87	2.7 (2.2, 3.4)
All Cancer	516	153.7 (140.4, 168.1)	3,440	154.9 (149.6, 160.2)	5,902	156.2 (152.1, 160.3)
Cerebrovascular	113	‡	779	35.7 (33.2, 38.3)	1,339	35.8 (33.9, 37.9)
Heart Disease	450	134.9 (122.5, 148.4)	3,109	140.1 (135.2, 145.2)	5,757	152.4 (148.5, 156.5)
All Liver	32	‡	264	‡	566	16.3 (14.9, 17.8)
Alcohol-Related Liver Disease	†	‡	130	‡	292	8.6 (7.6, 9.7)
Diabetes	47	‡	342	15.7 (14.0, 17.5)	729	19.8 (18.4, 21.4)
Pneumonia and Influenza	49	‡	284	12.8 (11.3, 14.4)	517	13.8 (12.6, 15.1)
Chronic Lower Respiratory Disease and Asthma	162	‡	1,098	50.8 (47.8, 54.0)	1,881	50.6 (48.3, 53.0)

^aConfidence Intervals (95%) For The Age Adjusted Rate Are Computed Using the Fay-Feuer (1997) Method National Center for Health Statistics. Vintage 2013 postcensal estimates of the resident population of the United States (April 1, 2010, July 1, 2010–July 1, 2013), by year, County, single-year of age (0, 1, 2, ..., 85 years and over), bridged race, Hispanic origin, and sex. Prepared under a collaborative arrangement with the U.S. Census Bureau. Available from: http://www.cdc.gov/nchs/nvss/bridged_race.htm as of June 26, 2014, following release by the U.S. Census Bureau of the unbridged Vintage 2013 postcensal estimates by 5-year age group on June 26, 2014.

†Too few events to report or complimentary suppression of corresponding cell.

‡Does not meet standards of reliability or precision.

Data provided by the Office of Epidemiology and Scientific Support.

Behavioral Risk Factors

Because of the small numbers in Montana, behavioral risk factor health indicators are reported by Montana's Health Planning Regions as demonstrated below. Here is the link to the 2013 annual report, regional comparisons of 2013 health indicators start on page 32:

<http://dphhs.mt.gov/Portals/85/publichealth/documents/BRFSS/Annual%20Reports/2013%20Annual/2013MTBRFSSAnnualReport.pdf>

