



COMMUNITY HEALTH PROFILE 2015



Hill 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

	Hill County	Montana
Population, Census, April 1, 2010	16,096	989,415
Population estimates, July 1, 2014	16,596	1,023,579
Population, percent change April 1, 2010–July 1, 2014	3.1%	3.5%
Persons under 5 years, July 1, 2013	8.2%	6.0%
Persons under 18 years, July 1, 2013	27.0%	22.1%
Persons 65 years and over, July 1, 2013	13.5%	16.2%
Female persons, July 1, 2013	49.5%	49.8%
White alone, July 1, 2013	72.3%	89.5%
Black or African American alone, July 1, 2013	0.5%	0.6%
American Indian and Alaska Native alone, July 1, 2013	22.9%	6.5%
Asian alone, July 1, 2013	0.6%	0.8%
Native Hawaiian and Other Pacific Islander alone, July 1, 2013	0.1%	0.1%
Two or more races, July 1, 2013	3.6%	2.5%
Hispanic or Latino, July 1, 2013	3.1%	3.3%
White alone, not Hispanic or Latino, July 1, 2013	70.6%	87.0%
Foreign born persons, 2009–2013	1.6%	2.0%
Language other than English spoken at home, percent of persons age 5 years+, 2009–2013	6.2%	4.4%

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

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

Demographic Information^a

	Hill County	Montana
High school graduate or higher, percent of persons age 25 years+, 2009–2013	91.6%	92.1%
Bachelor's degree or higher, percent of persons age 25 years+, 2009–2013	22.6%	28.7%
Veterans, 2009–2013	1,353	94,404
With a disability, under age 65 years, 2009–2013	9.1%	9.0%
Mean travel time to work (minutes), workers age 16 years+, 2009–2013	14.5 minutes	18 minutes
Median gross rent, 2009–2013	\$516	\$682
Owner-occupied housing units, 2009–2013	67.8%	68.3%
Persons per household, 2009–2013	2.58	2.39
Median household income, 2009–2013	\$43,726	\$46,230
Persons without health insurance, under age 65 years	22.5%	19.5%
Persons in poverty	18.5%	16.5%
Population per square mile, 2010	5.6	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	Hill County		Medium 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	599	1213.0 (1119.0, 1314.0)	3,344	485.0 (468.9, 501.7)	366.2 (359.5, 373.1)
Hepatitis C	60	121.5 (92.6, 156.2)	1,185	171.9 (162.4, 181.9)	123.0 (119.1, 127.0)
Pertussis	5	10.1 (3.5, 23.5)	253	36.7 (32.4, 41.5)	44.6 (42.3, 47.0)
Campylobacteriosis	9	18.2 (8.3, 34.6)	169	24.5 (21.1, 28.5)	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	Hill County	Medium County Data	Montana
Number assessed 2011 ^b	204	731	2,249
Number UTD 2011	150	471	1,305
Percent UTD 2011 ^c	73.5	64.4	58.7
Number assessed 2014 ^d	-	1,536	4,042
Number UTD 2014	-	987	2,651
Percent UTD 2014 (95% CI)	-	64.3 (61.8, 66.7)	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	Hill County		Medium 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	105	218.6 (178.0, 266.9)	26.6	52.0 (46.7, 57.9)	47.7 (45.2, 50.3)
Chronic Obstructive Pulmonary Disease (COPD) ^b	517	969.8 (886.1, 1060.6)	536.2	819.0 (800.0, 838.3)	716.8 (708.1, 725.6)
Cardiovascular Disease	548	1035.8 (949.0, 1129.8)	518.6	807.9 (788.8, 827.4)	746.7 (737.7, 755.8)
Diabetes (types 1 and 2)	635	1,237.0 (1139.8, 1341.4)	608.0	1,000.7 (978.5, 1023.4)	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	Hill County		Medium 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	320	650.6 (579.5, 729.1)	369.7	671.1 (652.1, 690.7)	538.6 (530.6, 546.8)
Falls	141	278.5 (233.6, 330.9)	189.5	312.1 (299.9, 324.7)	268.7 (263.2, 274.3)
Struck by/against	13	‡ ‡	12.4	24.6 (20.9, 28.9)	18.0 (16.5, 19.6)
Motor Vehicle	41	87.7 (62.4, 121.1)	42.2	93.6 (86.0, 101.8)	60.6 (57.8, 63.6)
Poisoning	43	89.1 (64.0, 122.4)	19.6	36.8 (32.3, 41.8)	36.3 (34.2, 38.5)
Intentional Self-Harm	133	290.7 (242.2, 347.2)	42.4	100.1 (92.0, 108.8)	106.5 (102.6, 110.5)
Traumatic Brain Injury	58	119.2 (90.0, 156.4)	59.1	117.5 (109.2, 126.2)	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	Hill County		Medium 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	151	311.6 (262.8, 368.0)	138.3	305.8 (292.0, 320.2)	260.0 (254.0, 266.2)
Chronic Obstructive Pulmonary Disease (COPD) ^b	381	730.0 (656.8, 810.7)	700.7	1,204.0 (1179.2, 1229.3)	804.9 (795.2, 814.8)
Cardiovascular Disease	302	572.7 (508.4, 644.1)	349.1	563.3 (547.1, 580.1)	372.7 (366.2, 379.3)
Diabetes (types 1 and 2)	703	1,396.1 (1291.1, 1508.4)	952.3	1,688.5 (1658.3, 1719.2)	1,235.6 (1223.3, 1248.0)

^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	Hill County		Medium 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	5,988	12,409.0 (12088.7, 12736.8)	3,487.3	7,504.0 (7435.4, 7573.1)	5,901.8 (5873.1, 5930.4)
Falls	2,121	4,323.7 (4136.9, 4517.9)	1,236.1	2,495.5 (2457.0, 2534.5)	2,020.0 (2003.7, 2036.5)
Struck by/against	832	1,719.5 (1602.4, 1844.0)	470.5	1057.0 (1031.2, 1083.5)	820.2 (809.4, 831.1)
Motor Vehicle	460	970.7 (881.8, 1067.2)	262.4	589.3 (569.9, 609.3)	520.0 (511.5, 528.6)
Poisoning	92	180.8 (145.0, 224.3)	56.4	119.8 (111.3, 128.8)	95.4 (91.8, 99.1)
Intentional Self-Harm	105	218.6 (178.0, 266.9)	62.3	148.1 (138.2, 158.5)	104.5 (100.6, 108.4)
Traumatic Brain Injury	279	585.3 (517.2, 661.0)	320.4	690.4 (669.7, 711.5)	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	Hill County		Medium 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	233	432.7 (377.6, 495.0)	290.1	442.1 (428.1, 456.6)	439.8 (432.9, 446.8)
Prostate (males)	24	85.1 (53.7, 132.3)	36.4	103.0 (94.0, 113.0)	112.8 (108.1, 117.8)
Breast (female)	39	144.6 (101.7, 203.2)	38.0	113.9 (104.0, 124.8)	115.7 (110.8, 120.9)
Lung and Bronchus	25	47.7 (30.7, 72.7)	38.2	56.7 (51.9, 62.0)	56.4 (54.0, 58.9)
Colon and Rectum	24	40.7 (25.8, 63.5)	25.2	37.9 (33.9, 42.4)	36.9 (35.0, 39.0)
Corpus Uteri (female)	7	‡ ‡	10.4	29.8 (25.0, 35.7)	25.4 (23.2, 27.9)
Melanoma	10	‡ ‡	14.6	23.4 (20.1, 27.1)	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.

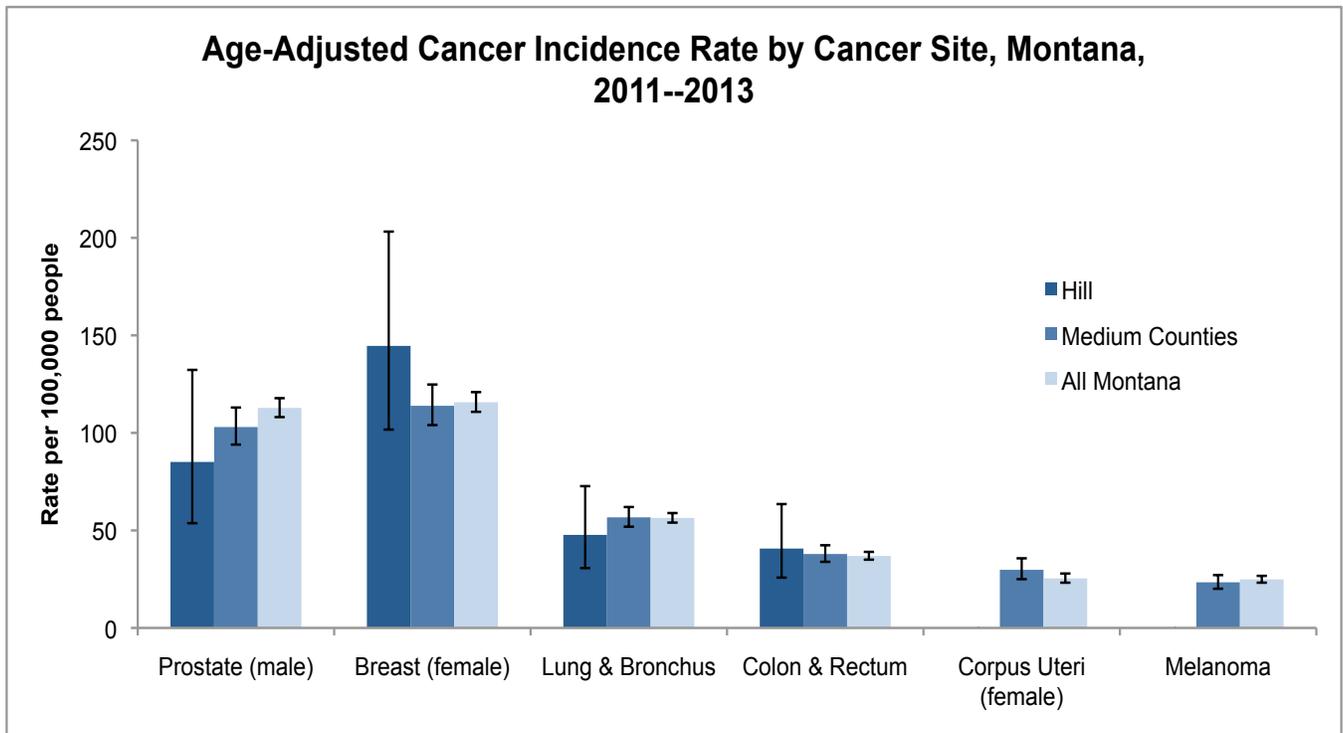


Table 8. Tobacco retailers by county, Montana 2013.

Health Indicator	Hill County
Retailer Number	17
Retailers per 1,000 population	1.05

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

Maternal and Child Health

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

Health Indicator	Hill County	Montana
Number of births	879	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	Hill County	Montana
Teen birth rate per 1,000	62.4	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	Medium County		
	Hill County	Data	Montana
	Percent	Percent	Percent
Children (2–5 years of age) overweight or obese	37.9	31.8	27.9
Initiate breastfeeding	70.4	76.7	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 Hill County, 2011–2013.^a

Health Indicator	Hill County		Medium County Data		Montana	
	Number	Percent (95% CI)	Number	Percent (95% CI)	Number	Percent (95% CI)
Born less than 37 weeks	94	10.7 (8.7, 12.9)	820	9.7 (9.1, 10.4)	3,265	9.1 (8.8, 9.4)
Born weighing less than 2,500 grams	66	7.5 (5.9, 9.5)	634	7.5 (6.9, 8.1)	2,619	7.3 (7.0, 7.6)
Women entering prenatal care after first trimester	366	41.6 (38.4, 45.0)	2,823	33.4 (32.4, 34.4)	9,580	26.7 (26.2, 27.2)
Women whose Kotelchuk Index is $\geq 80\%$ ^b	511	58.1 (54.8, 61.4)	5,527	65.4 (64.4, 66.4)	26,911	75.0 (74.6, 75.5)
Smoking during pregnancy	230	26.2 (23.3, 29.2)	1,893	22.4 (21.5, 23.3)	5,849	16.3 (15.9, 16.7)
Education less than high school graduate	154	17.5 (15.1, 20.2)	1,528	18.1 (17.3, 18.9)	4,281	12.0 (11.6, 12.3)
Any insurance	799	90.9 (88.8, 92.7)	7,826	92.6 (92.0, 93.2)	33,118	92.3 (92.0, 92.6)
Receiving WIC	413	47.0 (43.6, 50.4)	3,794	44.9 (43.8, 46.0)	12,415	34.6 (34.1, 35.1)
Breastfeeding at discharge	663	75.4 (72.4, 78.2)	6,871	81.3 (80.5, 82.1)	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	Hill County		Medium County Data		Montana	
	Male	Female	Male	Female	Male	Female
White	79.0	83.0	75.0	82.0	76.0	83.0
American Indian	62.0	70.0	59.0	65.0	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	Hill County		Medium 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	429	823.2 (746.1, 907.4)	7,201	832.4 (812.7, 852.6)	27,334	744.8 (735.8, 753.9)
Homicide	†	‡	25	‡	80	‡
Suicide	†	‡	171	‡	688	22.3 (20.6, 24.1)
All injuries	24	‡	512	71.3 (65.0, 78.2)	1,726	53.3 (50.7, 56.0)
Motor vehicle Accidents	†	‡	202	‡	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	Hill County		Medium 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	†	‡	31	‡	87	2.7 (2.2, 3.4)
All Cancer	88	‡	1,490	161.4 (153.1, 170.1)	5,902	156.2 (152.1, 160.3)
Cerebrovascular	†	‡	338	37.8 (33.8, 42.2)	1,339	35.8 (33.9, 37.9)
Heart Disease	113	‡	1,599	177.3 (168.5, 186.5)	5,757	152.4 (148.5, 156.5)
All Liver	†	‡	212	‡	566	16.3 (14.9, 17.8)
Alcohol-Related Liver Disease	†	‡	115	‡	292	8.6 (7.6, 9.7)
Diabetes	†	‡	198	‡	729	19.8 (18.4, 21.4)
Pneumonia and Influenza	†	‡	137	‡	517	13.8 (12.6, 15.1)
Chronic Lower Respiratory Disease and Asthma	30	‡	490	54.4 (49.6, 59.6)	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>

