



COMMUNITY HEALTH PROFILE 2015



Big Horn County



Public Health and Safety Division



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Methods

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

Demographic Information^a

	Big Horn County	Montana
Population, Census, April 1, 2010	12,865	989,415
Population estimates, July 1, 2014	13,282	1,023,579
Population, percent change April 1, 2010–July 1, 2014	3.2%	3.5%
Persons under 5 years, July 1, 2013	10.3%	6.0%
Persons under 18 years, July 1, 2013	33.4%	22.1%
Persons 65 years and over, July 1, 2013	10.9%	16.2%
Female persons, July 1, 2013	50.3%	49.8%
White alone, July 1, 2013	31.6%	89.5%
Black or African American alone, July 1, 2013	0.4%	0.6%
American Indian and Alaska Native alone, July 1, 2013	64.8%	6.5%
Asian alone, July 1, 2013	0.5%	0.8%
Native Hawaiian and other Pacific Islander alone, July 1, 2013	Z	0.1%
Two or more races, July 1, 2013	2.7%	2.5%
Hispanic or Latino, July 1, 2013	5.0%	3.3%
White alone, not Hispanic or Latino, July 1, 2013	29.7%	87.0%
Foreign born persons, 2009–2013	1.2%	2.0%
Language other than English spoken at home, percent of persons age 5+, 2009–2013	29.9%	4.4%

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

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

Demographic Information^a

	Big Horn County	Montana
High school graduate or higher, percent of persons age 25 years+, 2009–2013	84.5%	92.1%
Bachelor’s degree or higher, percent of persons age 25 years+, 2009–2013	15.5%	28.7%
Veterans, 2009–2013	630	94,404
With a disability, under age 65 years, 2009–2013	8.0%	9.0%
Mean travel time to work (minutes), workers age 16 years+, 2009–2013	18.6 minutes	18 minutes
Median gross rent, 2009–2013	\$594	\$682
Owner-occupied housing unit rate, 2009–2013	67.4%	68.3%
Persons per household, 2009–2013	3.70	2.39
Median household income, 2009–2013	\$39,966	\$46,230
Persons without health insurance, under age 65 years	28.5%	19.5%
Persons in poverty	27.6%	16.5%
Population per square mile, 2010	2.6	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	Big Horn 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	435	1114.38 (1012.0, 1223.0)	3,344	484.99 (468.9, 501.7)	366.24 (359.5, 373.1)
Hepatitis C	49	125.53 (92.7, 166.3)	1,185	171.86 (162.4, 181.9)	122.95 (119.1, 127.0)
Pertussis	40	102.47 (73.3, 139.4)	253	36.69 (32.4, 41.5)	44.60 (42.3, 47.0)
Campylobacteriosis	7	17.93 (7.0, 36.6)	169	24.51 (21.1, 28.5)	22.23 (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	Big Horn County	Medium County Data	Montana
Number assessed 2011 ^b	-	731	2,249
Number UTD 2011	-	471	1,305
Percent UTD 2011 ^c	-	64.4	58.7
Number assessed 2014 ^d	309	1536	4,042
Number UTD 2014	181	987	2,651
Percent UTD 2014 (95% CI)	58.6 (52.9, 64.1)	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	Big Horn 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	22	62.7 (38.7, 98.2)	26.6	52.0 (46.7, 57.9)	47.7 (45.2, 50.3)
Chronic Obstructive Pulmonary Disease (COPD) ^b	299	915.6 (811.4, 1030.7)	536.2	819.0 (800.0, 838.3)	716.8 (708.1, 725.6)
Cardiovascular Disease	396	1176.2 (1059.1, 1304.1)	518.6	807.9 (788.8, 827.4)	746.7 (737.7, 755.8)
Diabetes (types 1 and 2)	801	2,275.0 (2114.6, 2445.8)	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	Big Horn 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	416	1,172.2 (1058.6, 1296.2)	369.7	671.1 (652.1, 690.7)	538.6 (530.6, 546.8)
Falls	135	410.8 (342.0, 490.7)	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	95	259.3 (208.7, 320.5)	42.2	93.6 (86.0, 101.8)	60.6 (57.8, 63.6)
Poisoning	18	‡ ‡	19.6	36.8 (32.3, 41.8)	36.3 (34.2, 38.5)
Intentional Self-Harm	59	168.9 (127.6, 221.0)	42.4	100.1 (92.0, 108.8)	106.5 (102.6, 110.5)
Traumatic Brain Injury	78	216.5 (169.9, 273.8)	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	Big Horn County	Medium County Data		Montana
	Number	Rate per 100,000 ^a (95% CI)	Average Number per County	Rate per 100,000 ^a (95% CI)
Asthma	135	342.2 (284.2, 410.5)	138.3	305.8 (292.0, 320.2)
Chronic Obstructive Pulmonary Disease (COPD) ^b	392	1107.0 (995.8, 1228.7)	700.7	1,204.0 (1179.2, 1229.3)
Cardiovascular Disease	132	397.9 (330.9, 475.9)	349.1	563.3 (547.1, 580.1)
Diabetes (types 1 and 2)	969	2,780.5 (2603.4, 2967.8)	952.3	1,688.5 (1658.3, 1719.2)

^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	Big Horn 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	2,113	5,609.0 (5362.5, 5865.4)	3,487.3	7,504.0 (7435.4, 7573.1)	5,901.8 (5873.1, 5930.4)
Falls	801	2,176.4 (2021.3, 2341.7)	1,236.1	2,495.5 (2457.0, 2534.5)	2,020.0 (2003.7, 2036.5)
Struck by/against	228	571.3 (496.8, 655.9)	470.5	1057.0 (1031.2, 1083.5)	820.2 (809.4, 831.1)
Motor Vehicle	240	638.8 (558.2, 729.6)	262.4	589.3 (569.9, 609.3)	520.0 (511.5, 528.6)
Poisoning	46	111.8 (80.2, 154.1)	56.4	119.8 (111.3, 128.8)	95.4 (91.8, 99.1)
Intentional Self-Harm	22	62.7 (38.7, 98.2)	62.3	148.1 (138.2, 158.5)	104.5 (100.6, 108.4)
Traumatic Brain Injury	304	834.6 (740.0, 939.6)	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	Big Horn 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	159	441.4 (373.2, 520.3)	290.1	442.1 (428.1, 456.6)	439.8 (432.9, 446.8)
Prostate (males)	27	132.3 (85.7, 203.9)	36.4	103.0 (94.0, 113.0)	112.8 (108.1, 117.8)
Breast (female)	26	144.3 (93.1, 217.4)	38.0	113.9 (104.0, 124.8)	115.7 (110.8, 120.9)
Lung and Bronchus	12	‡ ‡	38.2	56.7 (51.9, 62.0)	56.4 (54.0, 58.9)
Colon and Rectum	17	‡ ‡	25.2	37.9 (33.9, 42.4)	36.9 (35.0, 39.0)
Corpus Uteri (female)	5	‡ ‡	10.4	29.8 (25.0, 35.7)	25.4 (23.2, 27.9)
Melanoma	7	‡ ‡	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.

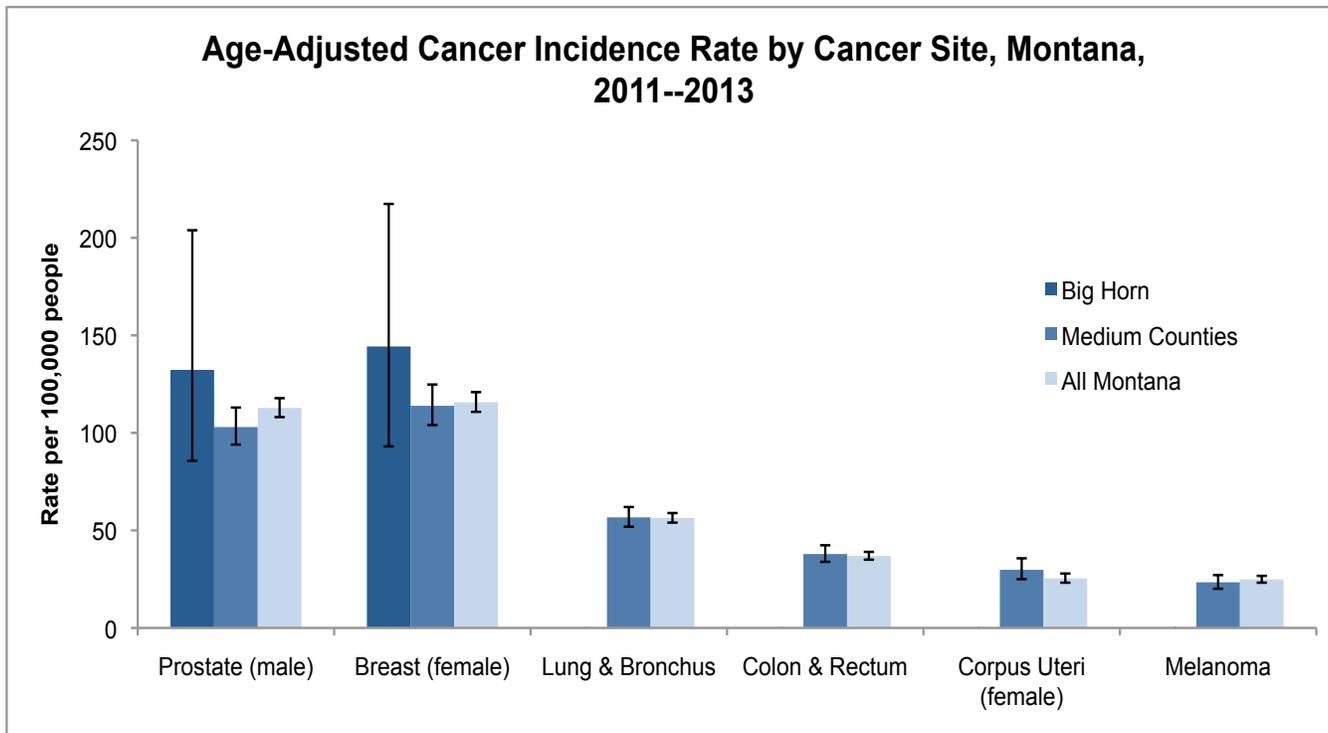


Table 8. Tobacco retailers by county, Montana 2013.

Health Indicator	Big Horn County
Retailer Number	25
Retailers per 1,000 population	1.90

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

Maternal and Child Health

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

Health Indicator	Big Horn County	Montana
Number of births	803	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	Big Horn County	Montana
Teen birth rate per 1,000	103.0	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		
	Big Horn County	Data	Montana
	Percent	Percent	Percent
Children (2–5 years of age) overweight or obese	36.1	31.8	27.9
Initiate breastfeeding	65.5	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 Big Horn County, 2011–2013.^a

Health Indicator	Big Horn County		Medium County Data		Montana	
	Number	Percent (95% CI)	Number	Percent (95% CI)	Number	Percent (95% CI)
Born less than 37 weeks	73	9.1 (7.2, 11.3 0)	820	9.7 (9.1, 10.4)	3,265	9.1 (8.8, 9.4)
Born weighing less than 2,500 grams	45	5.6 (4.1, 7.4)	634	7.5 (6.9, 8.1)	2,619	7.3 (7.0, 7.6)
Women entering prenatal care after first trimester	474	59.0 (55.5, 62.5)	2,823	33.4 (32.4, 34.4)	9,580	26.7 (26.2, 27.2)
Women whose Kotelchuk Index is $\geq 80\%$ ^b	317	39.5 (36.1, 43.0)	5,527	65.4 (64.4, 66.4)	26,911	75.0 (74.6, 75.5)
Smoking during pregnancy	99	12.3 (10.1, 14.8)	1,893	22.4 (21.5, 23.3)	5,849	16.3 (15.9, 16.7)
Education less than high school graduate	238	29.6 (26.5, 32.9)	1,528	18.1 (17.3, 18.9)	4,281	12.0 (11.6, 12.3)
Any insurance	†	‡	7,826	92.6 (92.0, 93.2)	33,118	92.3 (92.0, 92.6)
Receiving WIC	474	59.0 (55.5, 62.5)	3,794	44.9 (43.8, 46.0)	12,415	34.6 (34.1, 35.1)
Breastfeeding at discharge	640	79.7 (76.8, 82.4)	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	Big Horn County		Medium County Data		Montana	
	Male	Female	Male	Female	Male	Female
White	70.5	83.0	75.0	82.0	76.0	83.0
American Indian	59.0	62.5	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	Big Horn County		Similar Sized County		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	363	1,122.0 (1005.4, 1249.6)	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	39	‡	512	71.3 (65.0, 78.2)	1,726	53.3 (50.7, 56.0)
Motor vehicle Accidents	25	‡	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	Big Horn 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	47	‡	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	67	‡	1,599	177.3 (168.5, 186.5)	5,757	152.4 (148.5, 156.5)
All Liver	24	‡	212	‡	566	16.3 (14.9, 17.8)
Alcohol-Related Liver Disease	21	‡	115	‡	292	8.6 (7.6, 9.7)
Diabetes	30	‡	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	†	‡	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>

