Community Health Profile 2015

Powell County

Public Health and Safety Division

MONTANA DPHHS

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]

	Powell County	Montana
Population, Census, April 1 2010	7,027	989,415
Population estimates, July 1, 2014	6,909	1,023,579
Population, percent change April 1, 2010-July 1, 2014	-1.7%	3.5%
Persons under 5 years, July 1, 2013	4.4%	6.0%
Persons under 18 years, July 1, 2013	16.0%	22.1%
Persons 65 years and over, July 1, 2013	17.9%	16.2%
Female persons, July 1, 2013	38.4%	49.8%
White alone, July 1, 2013	92.4%	89.5%
Black or African American alone, July 1, 2013	1.1%	0.6%
American Indian and Alaska Native alone, July 1, 2013	4.6%	6.5%
Asian alone, July 1, 2013	0.5%	0.8%
Native Hawaiian and other Pacific Islander alone, July 1, 2013	0.1%	0.1%
Two or more races, July 1, 2013	1.4%	2.5%
Hispanic or Latino, July 1, 2013	2.3%	3.3%
White alone, not Hispanic or Latino, July 1, 2013	90.5%	87.0%
Foreign born persons, 2009-2013	0.4%	2.0%
Language other than English spoken at home, percent of persons age 5 years+, 2009-2013	5.0%	4.4%

[a]Z Value greater than zero but less than half unit of measure shown.
Data from http://quickfacts.census.gov/

Demographic Information[a]

	Powell County	Montana
High school graduate or higher, percent of persons age 25 years+, 2009-2013	90.3%	92.1%
Bachelor's degree or higher, percent of persons age 25 years+, 2009-2013	17.8%	28.7%
Veterans, 2009-2013	907	94,404
With a disability, under age 65 years, 2009-2013	11.6%	9.0%
Mean travel time to work (minutes), workers age 16+, 2009-2013	14.9 minutes	18 minutes
Median gross rent, 2009-2013	$493	$682
Owner-occupied housing unit rate, 2009-2013	71.5%	68.3%
Persons per household, 2009-2013	2.31	2.39
Median household income, 2009-2013	$40,802	$46,230
Persons without health insurance, under age 65 years	22.2%	19.5%
Persons in poverty	20.0%	16.5%
Population per square mile, 2010	3.0	6.8

[a]Z 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.

	Powell County		Small County Data		Montana
Health Indicator	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	39	184.40 (131.5, 251.8)	911	291.02 (272.7, 310.5)	366.24 (359.5, 373.1)
Hepatitis C	185	874.70 (753.8, 1010.0)	429	137.04 (124.7, 150.6)	122.95 (119.1, 127.0)
Pertussis	2	9.46 (0.89, 34.3)	152	48.56 (41.4, 56.9)	44.60 (42.3, 47.0)
Campylobacteriosis	7	33.10 (13.2, 67.8)	53	16.93 (13.0, 22.1)	22.23 (20.6, 24.0)

[a]Department 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	Powell County	Small County Data	Montana
Number assessed 2011[b]	-	99	2,249
Number UTD 2011	-	35	1,305
Percent UTD 2011	-	35.4	58.7
Number assessed 2014[c]	-	727	4,042
Number UTD 2014	-	541	2,651
Percent UTD 2014	-	74.4	65.6
(95% CI)	-	(71.1, 77.6)	(64.1, 67.1)

[a]UTD = 4 DTaP, 3 Polio, 1 MMR, 3/4 HIB, 3 Hep B, 1 Var, 4 PCV by 24 months.
[b]In 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.
[c]Confidence interval cannot be calculated because the total number of records reviewed is unknown.
[d]In 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.

	Powell County		Small County Data		Montana
Health Indicator	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	13	‡ ‡	11.8	56.4 (47.8, 66.2)	47.7 (45.2, 50.3)
Chronic Obstructive Pulmonary Disease (COPD)[b]	144	487.5 (409.0, 584.5)	207.5	656.6 (632.4, 681.8)	716.8 (708.1, 725.6)
Cardiovascular Disease	140	492.8 (412.2, 592.1)	216.0	696.5 (671.0, 722.9)	746.7 (737.7, 755.8)
Diabetes (types 1 and 2)	149	511.7 (430.1, 611.8)	236.6	795.7 (767.5, 824.9)	822.5 (812.8, 832.3)

[a]Rates 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.
[b]Chronic 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.

	Powell County		Small County Data		Montana
Health Indicator	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	113	465.2 (379.3, 571.1)	146.6	568.4 (542.6, 595.2)	538.6 (530.6, 546.8)
Falls	55	210.2 (156.4, 284.4)	76.0	257.7 (241.8, 274.7)	268.7 (263.2, 274.3)
Struck by/against	<5	‡ ‡	4.1	17.9 (13.4, 23.7)	18.0 (16.5, 19.6)
Motor Vehicle	14	‡ ‡	17.9	85.1 (74.5, 97.0)	60.6 (57.8, 63.6)
Poisoning	<5	‡ ‡	8.4	36.4 (29.8, 44.3)	36.3 (34.2, 38.5)
Intentional Self-Harm	7	‡ ‡	17.8	92.8 (81.3, 105.5)	106.5 (102.6, 110.5)
Traumatic Brain Injury	18	‡ ‡	25.3	109.3 (97.6, 122.2)	91.3 (87.9, 94.8)

[a]Rates 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.

	Powell County		Small County Data		Montana
Health Indicator	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	11	‡ ‡	44.1	220.3 (202.8, 239.2)	260.0 (254.0, 266.2)
Chronic Obstructive Pulmonary Disease (COPD)[b]	78	303.0 (235.1, 391.2)	228.7	809.5 (780.3, 839.7)	804.9 (795.2, 814.8)
Cardiovascular Disease	39	133.9 (94.2, 194.0)	130.5	431.4 (411.1, 452.8)	372.7 (366.2, 379.3)
Diabetes (types 1 and 2)	93	341.3 (273.0, 429.0)	275.6	955.3 (923.8, 987.8)	1,235.6 (1223.3, 1248.0)

[a]Rates 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.

[b]Chronic 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.

	Powell County		Small County Data		Montana
Health Indicator	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	405	2,041.3 (1836.3, 2267.4)	1,177.3	5,427.5 (5341.5, 5514.6)	5,901.8 (5873.1, 5930.4)
Falls	129	610.2 (503.6, 738.0)	429.3	1,809.1 (1761.4, 1857.9)	2,020.0 (2003.7, 2036.5)
Struck by/against	65	366.6 (278.3, 478.2)	159.3	789.0 (755.8, 823.5)	820.2 (809.4, 831.1)
Motor Vehicle	47	244.7 (176.7, 335.4)	90.4	441.1 (416.4, 467.1)	520.0 (511.5, 528.6)
Poisoning	12	‡ ‡	15.9	75.6 (65.7, 86.8)	95.4 (91.8, 99.1)
Intentional Self-Harm	<5	‡ ‡	18.6	95.6 (84.1, 108.5)	104.5 (100.6, 108.4)
Traumatic Brain Injury	47	237.8 (171.6, 326.6)	118.0	552.6 (525.3, 581.1)	649.9 (640.5, 659.5)

[a]Rates 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.

	Powell County		Small County Data		Montana
Health Indicator	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 Cancer	103	346.3 (280.8, 429.0)	130.3	423.1 (403.2, 444.1)	439.8 (432.9, 446.8)
Prostate (males)	12	‡ ‡	18.9	110.3 (97.1, 125.4)	112.8 (108.1, 117.8)
Breast (female)	11	‡ ‡	16.9	109.7 (95.5, 126.1)	115.7 (110.8, 120.9)
Lung and Bronchus	21	‡ ‡	19.2	59.3 (52.3, 67.3)	56.4 (54.0, 58.9)
Colon and Rectum	9	‡ ‡	14.0	45.7 (39.3, 53.1)	36.9 (35.0, 39.0)
Corpus Uteri (female)	<5	‡ ‡	3.7	23.8 (17.5, 32.6)	25.4 (23.2, 27.9)
Melanoma	5	‡ ‡	5.6	21.1 (16.4, 26.9)	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.

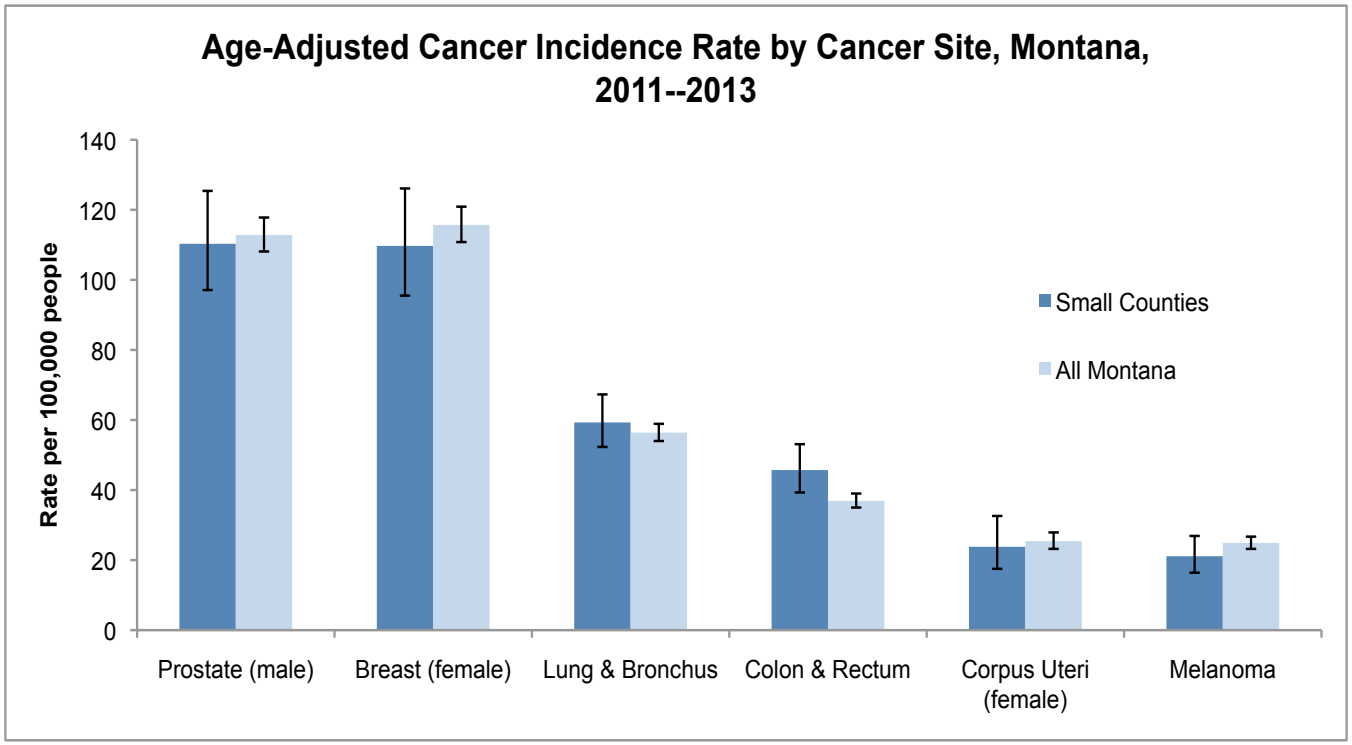

Table 8. Tobacco retailers by county, Montana 2013.

Health Indicator	Powell County
Retailer Number	8
Retailers per 1,000 population	1.13

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

Maternal and Child Health

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

Health Indicator	Powell County	Montana
Number of births	142	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	Powell County	Montana
Teen birth rate per 1,000	30.3	32.0

[a]Due 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.
[b]Full 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.

	Powell County	Small County Data	Montana
Health Indicator	Percent	Percent	Percent
Children (2-5 years of age) overweight or obese	23.7	28.5	27.9
Initiate breastfeeding	†	81.9	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 Powell County, 2011–2013.[a]

	Powell County		Small County Data		Montana	
Health Indicator	Number	Percent (95% CI)	Number	Percent (95% CI)	Number	Percent (95% CI)
Born less than 37 weeks	†	† ‡	312	9.3 (8.3, 10.3)	3,265	9.1 (8.8, 9.4)
Born weighing less than 2,500 grams	†	† ‡	251	7.5 (6.6, 8.4)	2,619	7.3 (7.0, 7.6)
Women entering prenatal care after first trimester	38	26.5 (19.7, 34.8)	1,096	32.7 (31.1, 34.3)	9,580	26.7 (26.2, 27.2)
Women whose Kotelchuk Index is ≥ 80%[b]	92	64.7 (56.3, 72.6)	2,216	66.1 (64.5, 67.7)	26,911	75.0 (74.6, 75.5)
Smoking during pregnancy	33	22.9 (16.6, 31.1)	590	17.6 (16.3, 18.9)	5,849	16.3 (15.9, 16.7)
Education less than high school graduate	†	† ‡	503	15.0 (13.8, 16.3)	4,281	12.0 (11.6, 12.3)
Any insurance	†	† ‡	3,065	91.4 (90.4, 92.3)	33,118	92.3 (92.0, 92.6)
Receiving WIC	69	48.7 (40.1, 57.1)	1,261	37.6 (36.0, 39.2)	12,415	34.6 (34.1, 35.1)
Breastfeeding at discharge	†	† ‡	2,910	86.8 (85.6, 87.9)	31,898	88.9 (88.6, 89.2)

[a]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. Demographic information on the birth certificates is self-reported by parents; medical information is abstracted from medical records.

[b]Kotelchuk 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.

	Powell County		Small County Data		Montana	
Health Indicator	Male	Female	Male	Female	Male	Female
White	70.0	79.0	77.0	83.0	76.0	83.0
American Indian	†	†	59.0	62.0	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.

	Powell County		Small County Data		Montana	
Health Indicator	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	221	‡ ‡	3,234	759.5 (732.6, 787.3)	27,334	744.8 (735.8, 753.9)
Homicide	†	‡ ‡	†	‡ ‡	80	‡ ‡
Suicide	†	‡ ‡	80	‡ ‡	688	22.3 (20.6, 24.1)
All injuries	20	‡ ‡	208	‡ ‡	1,726	53.3 (50.7, 56.0)
Motor vehicle Accidents	†	‡ ‡	93	‡ ‡	603	19.8 (18.2, 21.5)

[a]Confidence 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.

	Powell County		Small County Data		Montana	
Health Indicator	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	†	‡ ‡	†	‡ ‡	87	2.7 (2.2, 3.4)
All Cancer	38	‡ ‡	667	151.9 (140.4, 164.5)	5,902	156.2 (152.1, 160.3)
Cerebrovascular	†	‡ ‡	159	‡ ‡	1,339	35.8 (33.9, 37.9)
Heart Disease	39	‡ ‡	733	162.6 (150.9, 175.2)	5,757	152.4 (148.5, 156.5)
All Liver	†	‡ ‡	68	‡ ‡	566	16.3 (14.9, 17.8)
Alcohol-Related Liver Disease	†	‡ ‡	32	‡ ‡	292	8.6 (7.6, 9.7)
Diabetes	†	‡ ‡	126	‡ ‡	729	19.8 (18.4, 21.4)
Pneumonia and Influenza	†	‡ ‡	73	‡ ‡	517	13.8 (12.6, 15.1)
Chronic Lower Respiratory Disease and Asthma	24	‡ ‡	199	‡ ‡	1,881	50.6 (48.3, 53.0)

[a]Confidence 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