Weekly COVID-19 Update in Montana (as of 12/17/2021)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of December 17, 2021. Data are provisional and expected to change as more information is received.

Case Data

Table 1. Summary of COVID-19 Activity – Montana, as of 12/17/2021

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	**194,928**	**1,059**	**-22%**
LABORATORY TESTS	**2,237,424**	**24,975**	**-7%**
HOSPITALIZATIONS	**10,291**	**152**	**-17%**
DEATHS	**2,878**	**47**	**-24%**

Figure 1. COVID-19 Cases and Hospitalizations over Time - Montana, as of 12/17/2021

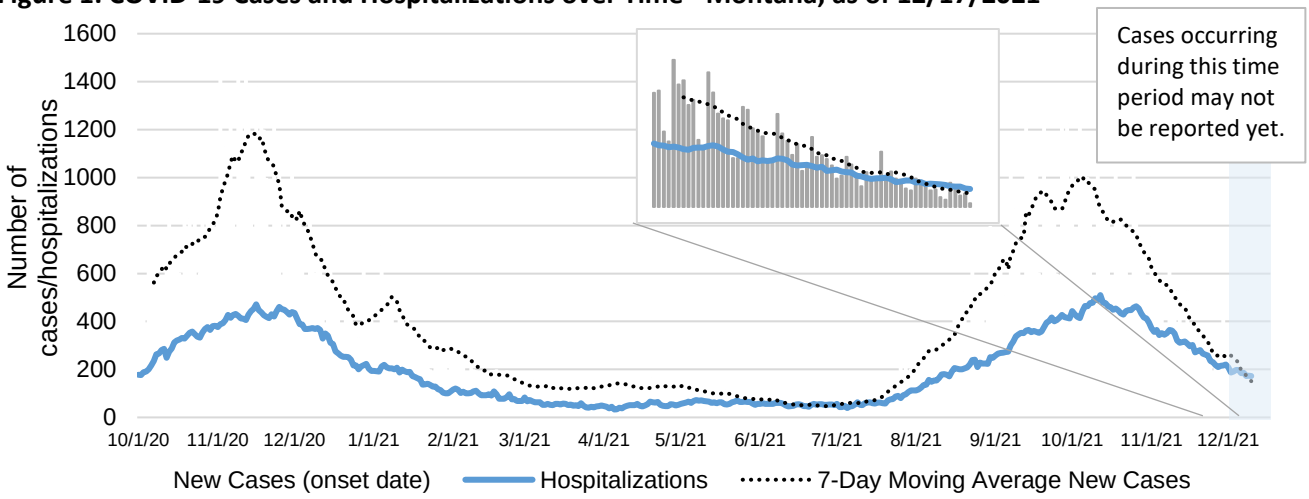
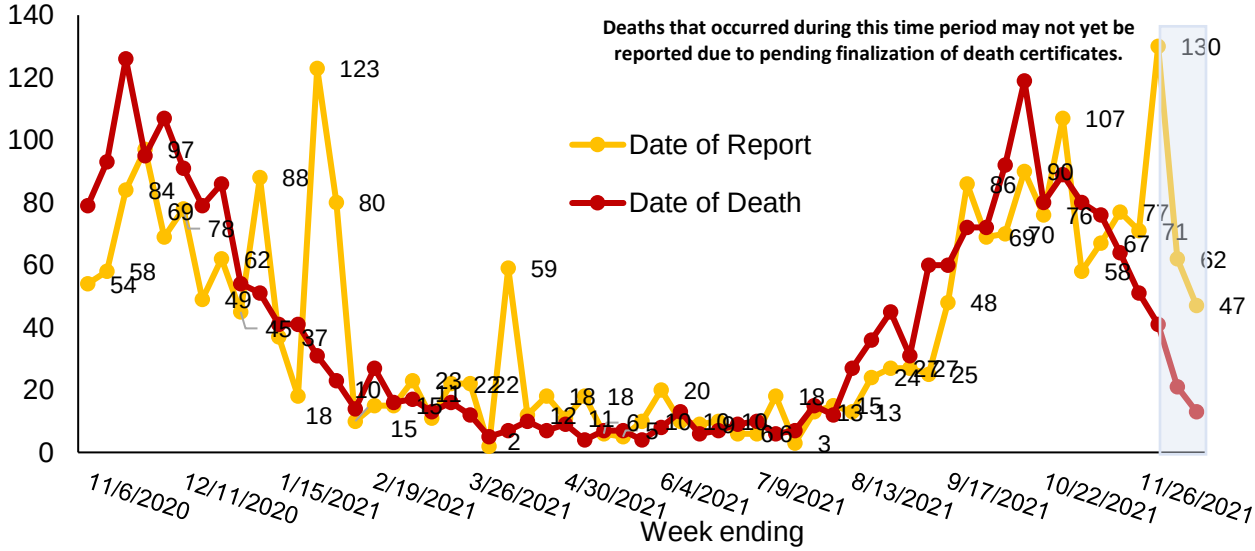


Figure 2. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 12/17/2021



Vaccine Data

Montana began vaccinating individuals in mid-December 2020 with a phased process: Phase 1A on December 14, 2020, Phase 1B on January 19, 2021, and Phase 1B+ on March 8, 2021. Vaccinations were opened to all Montanans age 16+ on April 1, 2021 and expanded to all Montanans age 12+ on May 10th, 2021. Most recently, the Pfizer vaccine was approved for the 5-11 year old age group on October 29th, 2021. To date, 1,298,710 doses have been given across the state and 52% of the eligible population is considered fully vaccinated (table 3).

Table 2: COVID-19 Vaccine Doses Administered for the 12 and older population – Montana, as of 12/17/2021

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 12/3	WEEK ENDING 12/10	WEEK ENDING 12/17
TOTAL DOSES ADMINISTERED	**1,274,988**		24,540	20,652	**16,146**
DOSE 1 ADMINISTERED	**589,037**	**64%**	3,827	2,902	**2,330**
FULLY VACCINATED INDIVIDUALS	**524,991**	**57%**	2,552	2,173	**1,755**

*the data for the most recent week are preliminary and are expected to be an underestimate of the doses administered during the week, due to a reporting lag.

Table 3: COVID-19 Vaccine Doses Administered for the 5 and older population – Montana, as of 12/17/2021

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 12/3	WEEK ENDING 12/10	WEEK ENDING 12/17
TOTAL DOSES ADMINISTERED	**1,298,710**		29,909	25,224	**18,473**
DOSE 1 ADMINISTERED	**603,558**	**59%**	5,225	4,120	**3,016**
FULLY VACCINATED INDIVIDUALS	**534,185**	**52%**	6,520	5,526	**3,393**

*the data for the most recent week are preliminary and are expected to be an underestimate of the doses administered during the week, due to a reporting lag.

Figure 3. COVID-19 Vaccine Doses Administered by Week, 5+ Years – Montana, as of 12/17/2021

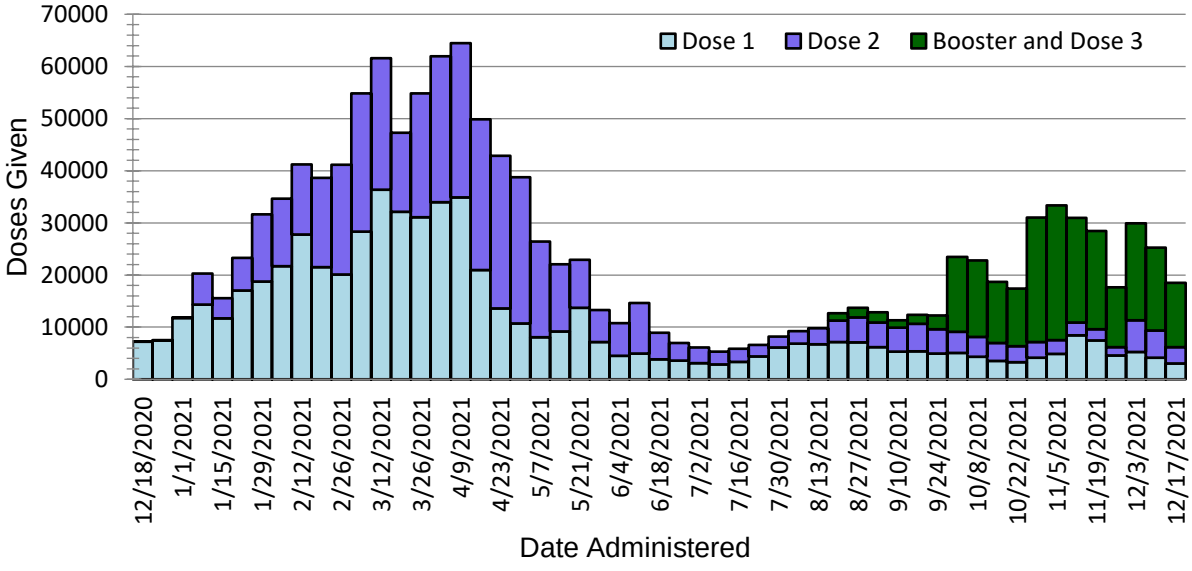
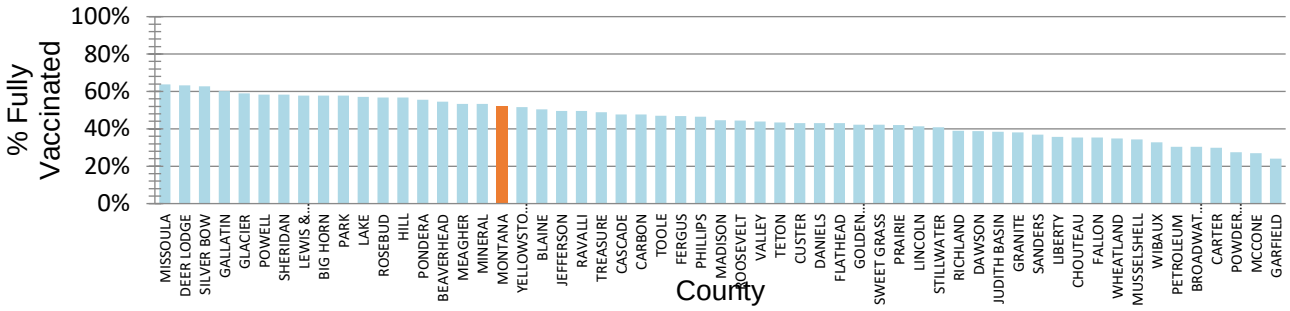


Figure 4. Percent of Eligible Montanans (5+ years) Fully Vaccinated by County – Montana, 12/17/2021



Variant and Breakthrough Cases

Figure 6 displays the percentage of the most common SARS-CoV-2 lineages detected each week, of all Montana samples sequenced that were collected that week. There were 8,533 samples from Montana that were sequenced and their lineages were reported to GISAID since September 2020; figure 5 displays the number of specimens sequenced by week. A variant is a lineage that has one or more mutations that differentiate it from other lineages in circulation. Currently, Delta and Omicron are the only Variants of Concern circulating. **There have been 3 cases infected with Omicron variants reported in Montana as of 12/21/2021.**

Of specimens collected and sequenced in the past 8 weeks, 1275/1279 (99%) are Delta. Last week, 3/18 (17%) specimens that were collected and sequenced were Omicron, the remaining 15 were Delta. The overall trends in SARS-CoV-2 variants shows that, March through June 2021, the Alpha variant (light yellow) was predominant. Beginning in July 2021, the Delta variant (dark orange) became the dominant variant in Montana. Omicron is displayed in dark brown on the chart below.

Figure 5. Number of COVID-19 samples sequenced by collection date, Montana 12/21/2021

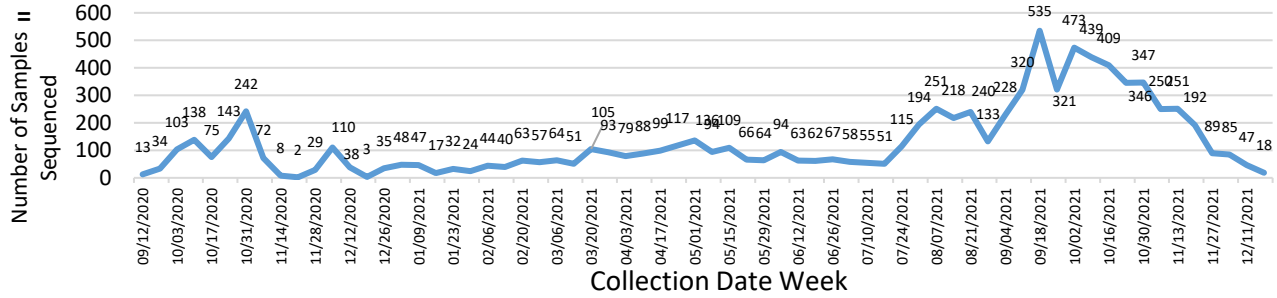
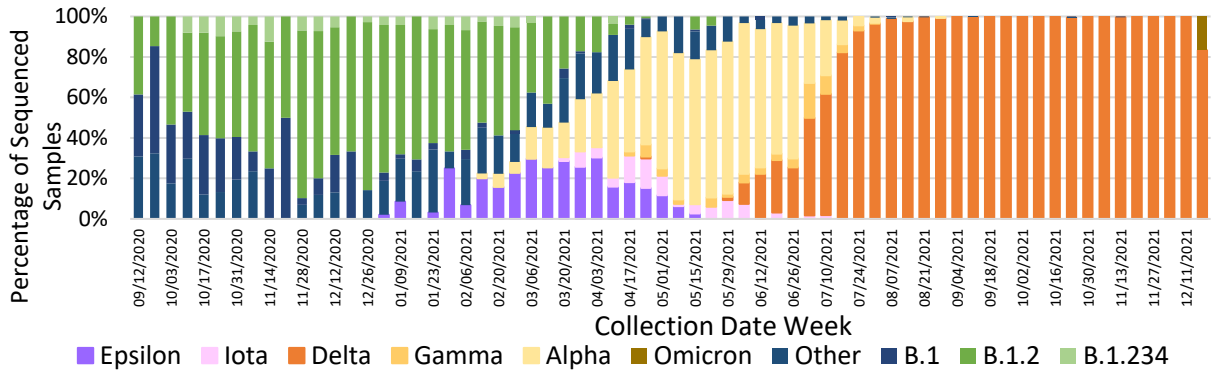


Figure 6. Percent of COVID-19 variants in sequenced samples by collection date, Montana 12/21/2021



A breakthrough COVID-19 infection is defined as a positive SARS-CoV-2 specimen collected ≥14 days after completing the primary COVID-19 vaccine series of an FDA-authorized COVID-19 vaccine. Depending on the specific vaccine administered, completion of series could be one or two doses of vaccine. As of 12/17/21, Montana reports 15,909 cases of confirmed breakthrough disease, which includes 908 hospitalizations and 282 deaths. Over the past 8 weeks (October 23 – December 17) the number of cases among unvaccinated individuals was 3.8 times higher than the number of cases among vaccinated individuals; the number of hospitalizations and deaths among unvaccinated individuals were 4.4 and 3.2 times higher, respectively, compared to vaccinated individuals.

Hospitalizations and Deaths and Vaccination Status

COVID-19-related hospitalizations and deaths were analyzed between **April 1 and December 17** to review vaccination status. Since the beginning of April this year, 83% of Montanans who were hospitalized and 78% of those who died were unvaccinated at the time of infection (Table 4). Of the 5,443 individuals who were hospitalized during this time period, 91 (2%) were <18 years old, 790 (15%) were 18 to 44 years old, 1,885 (35%) were 45 to 64 years old and 2,677 (49%) were ≥65 years old.

Additionally, COVID-19-related hospitalization and death data from **October 23 – December 17** (last 8 weeks) were analyzed to review vaccination status. Eighty-two percent of Montanans who were hospitalized and 76% of those who died had not received a COVID-19 vaccine (Table 5). Of the 1,323 individuals who were hospitalized during this time period, 29 (2%) were <18 years old, 143 (11%) were 18 to 44 years old, 457 (35%) were 45 to 64 years old and 694 (52%) were ≥65 years old.

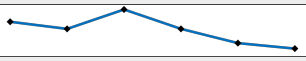
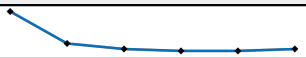
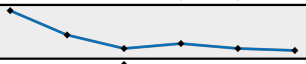
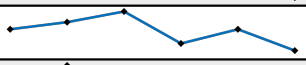
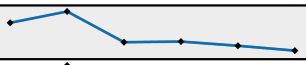
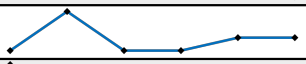
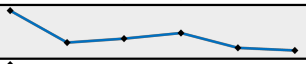
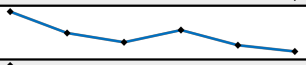
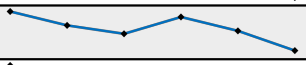
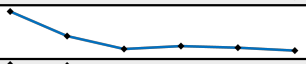
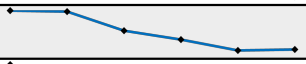
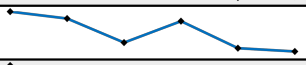
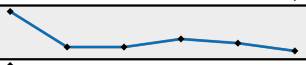
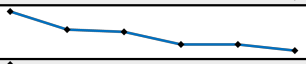
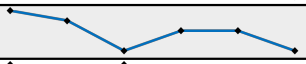
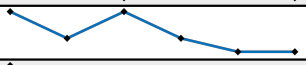
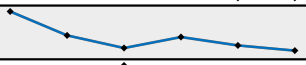
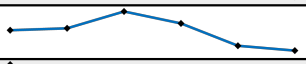
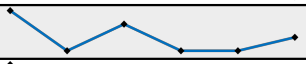
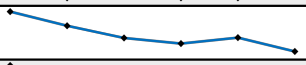
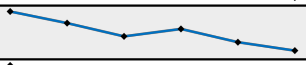
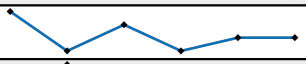
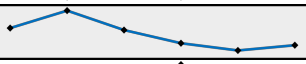
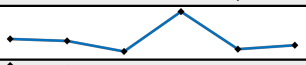
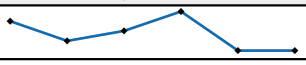
Table 4. Vaccination status of COVID-19 hospitalizations and deaths – April 1 to December 17, 2021

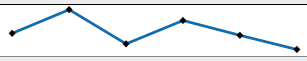
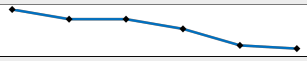
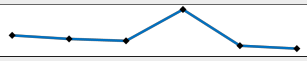
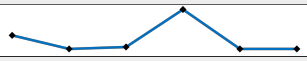
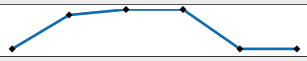
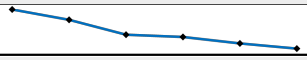
	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	**5,443**	**1277**
UNVACCINATED	4,543 (83%)	999 (78%)
VACCINATED (BREAKTHROUGH CASE)	900 (17%)	278 (22%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**<1-102 (62)**	**22-103 (71)**
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**16-101 (74)**	**20-101 (81)**

Table 5. Vaccination status of COVID-19 hospitalizations and deaths – October 23 to December 17, 2021

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	**1,323**	**276**
UNVACCINATED	1,080 (82%)	211 (76%)
VACCINATED (BREAKTHROUGH CASE)	243 (18%)	65 (24%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**<1-99 (64)**	**23-102 (70)**
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**17-101 (72)**	**20-101 (80)**

Reported COVID-19 Cases by County with Trendline – Montana, past 6 weeks

County	12 Nov	19 Nov	26 Nov	3 Dec	10 Dec	17 Dec	change from previous week*	Trendline
Beaverhead	22	35	15	12	10	4	-6	
Big Horn	138	174	16	11	18	11	-7	
Blaine	6	43	15	19	9	8	-1	
Broadwater	26	22	33	22	14	11	-3	
Carbon	58	41	40	15	15	16	1	
Carter	21	4	1	0	0	1	1	
Cascade	562	272	114	171	112	90	-22	
Chouteau	8	10	13	4	8	2	-6	
Custer	49	65	21	22	16	9	-7	
Daniels	1	10	1	1	4	4	0	
Dawson	46	22	25	29	18	16	-2	
Deer Lodge	18	11	8	12	7	5	-2	
Fallon	19	14	11	17	12	5	-7	
Fergus	62	28	10	14	12	8	-4	
Flathead	344	339	229	178	115	121	6	
Gallatin	426	380	220	362	183	161	-22	
Garfield	10	1	1	3	2	0	-2	
Glacier	94	53	48	20	20	6	-14	
Golden Valley	4	3	0	2	2	0	-2	
Granite	3	1	3	1	0	0	0	
Hill	54	26	11	24	14	8	-6	
Jefferson	30	32	50	37	13	8	-5	
Judith Basin	3	0	2	0	0	1	1	
Lake	138	101	70	55	71	35	-36	
Lewis and Clark	282	215	139	182	106	59	-47	
Liberty	3	0	2	0	1	1	0	
Lincoln	44	61	42	29	22	27	5	
Madison	16	15	10	29	11	13	2	
McCone	13	12	0	6	5	5	0	
Meagher	4	2	3	5	1	1	0	

County	12 Nov	19 Nov	26 Nov	3 Dec	10 Dec	17 Dec	change from previous week*	Trendline
Missoula	306	228	141	142	108	105	-3	
Park	41	63	31	53	39	26	-13	
Phillips	15	12	12	9	4	3	-1	
Powder River	2	2	0	1	0	1	1	
Prairie	5	6	3	7	4	3	-1	
Richland	29	73	11	41	17	21	4	
Rosebud	17	13	11	44	6	3	-3	
Sheridan	7	6	10	18	1	1	0	
Stillwater	13	0	2	38	0	0	0	
Teton	17	15	6	6	1	12	11	
Treasure	0	6	7	7	0	0	0	
Wheatland	3	0	1	3	1	0	-1	
Yellowstone	664	526	323	296	206	139	-67	

†Note: Data are based on the date of report into the Montana Infectious Disease Information System (MIDIS). Underlined numbers in the above table reflect adjusted counts and may include cases diagnosed but not reported in earlier time frames. These adjustments result from local and state data reconciliation efforts, conducted to ensure accurate data.

County name	Eligible population 5+	Dose 1	Dose 2	Dose 3	Fully Immunized	Total Doses Administered	Percent eligible with first dose (5+)	Percent Fully Vaccinated (5+)
BEAVERHEAD	9,091	5,290	4,279	1,952	4,963	11,521	58%	55%
BIG HORN	11,975	7,732	6,560	2,021	6,918	16,313	65%	58%
BLAINE	6,044	3,359	2,845	1,141	3,044	7,345	56%	50%
BROADWATER	6,092	2,199	1,619	738	1,850	4,556	36%	30%
CARBON	10,476	5,398	4,659	2,184	4,993	12,241	52%	48%
CARTER	1,141	359	319	139	341	817	31%	30%
CASCADE	76,124	40,745	32,475	12,576	36,321	85,796	54%	48%
CHOUTEAU	5,430	2,132	1,744	1,001	1,921	4,877	39%	35%
CUSTER	10,692	5,152	4,108	1,838	4,610	11,098	48%	43%
DANIELS	1,559	718	618	280	672	1,616	46%	43%
DAWSON	8,071	3,392	2,828	1,211	3,128	7,431	42%	39%
DEER LODGE	8,887	6,139	5,057	2,623	5,621	13,819	69%	63%
FALLON	2,646	1,033	889	367	935	2,289	39%	35%
FERGUS	10,495	5,269	4,537	2,114	4,914	11,920	50%	47%
FLATHEAD	99,993	49,663	38,860	16,719	43,000	105,242	50%	43%
GALLATIN	110,900	79,129	60,729	24,652	66,666	164,510	71%	60%
GARFIELD	1,188	310	243	72	286	625	26%	24%
GLACIER	12,447	10,095	6,793	2,438	7,334	19,326	81%	59%
GOLDEN VALLEY	788	359	300	107	332	766	46%	42%
GRANITE	3,218	1,400	1,117	459	1,224	2,976	44%	38%
HILL	14,914	9,406	7,139	3,019	8,453	19,564	63%	57%
JEFFERSON	11,819	6,481	5,466	2,560	5,864	14,507	55%	50%
JUDITH BASIN	1,880	773	663	241	723	1,677	41%	38%
LAKE	29,280	18,988	15,553	6,660	16,720	41,201	65%	57%
LEWIS & CLARK	66,257	43,357	35,503	17,081	38,294	95,941	65%	58%
LIBERTY	2,234	840	699	371	798	1,910	38%	36%
LINCOLN	19,480	9,083	7,364	3,273	8,042	19,720	47%	41%
MADISON	8,589	4,277	3,407	1,732	3,833	9,416	50%	45%
MCCONE	1,562	441	412	182	422	1,035	28%	27%
MEAGHER	1,726	982	845	392	921	2,219	57%	53%
MINERAL	4,302	2,535	1,824	929	2,291	5,288	59%	53%
MISSOULA	115,881	81,803	67,984	30,703	73,905	180,490	71%	64%
MUSSELSHELL	4,458	1,662	1,337	475	1,527	3,474	37%	34%
PARK	15,969	10,788	8,325	3,651	9,224	22,764	68%	58%
PETROLEUM	483	158	138	57	147	353	33%	30%
PHILLIPS	3,675	1,835	1,404	766	1,708	4,005	50%	46%
PONDERA	5,389	3,431	2,633	1,161	2,997	7,225	64%	56%
POWDER RIVER	1,588	475	382	167	435	1,024	30%	27%
POWELL	6,534	4,053	3,031	887	3,813	7,971	62%	58%
PRAIRIE	994	452	395	214	417	1,061	45%	42%
RAVALLI	42,972	23,602	18,955	9,425	21,282	51,982	55%	50%
RICHLAND	10,310	4,260	3,343	1,347	4,010	8,950	41%	39%
ROOSEVELT	9,918	5,116	3,735	1,395	4,410	10,246	52%	44%
ROSEBUD	8,160	5,241	4,111	1,678	4,627	11,030	64%	57%
SANDERS	11,641	4,774	4,025	1,614	4,301	10,413	41%	37%
SHERIDAN	3,075	1,893	1,659	849	1,791	4,401	62%	58%
SILVER BOW	33,267	22,952	19,582	8,759	20,858	51,293	69%	63%
STILLWATER	9,451	4,191	3,316	1,646	3,857	9,153	44%	41%
SWEET GRASS	3,523	1,628	1,262	656	1,484	3,546	46%	42%
TETON	5,819	3,015	2,090	1,034	2,526	6,139	52%	43%
TOOLE	4,391	2,201	1,671	481	2,064	4,353	50%	47%
TREASURE	623	412	282	127	304	821	66%	49%
VALLEY	6,931	3,281	2,600	1,431	3,046	7,312	47%	44%
WHEATLAND	2,035	759	658	232	707	1,649	37%	35%
WIBAUX	898	341	287	88	295	716	38%	33%
YELLOWSTONE	153,378	88,199	72,964	29,614	79,016	190,777	58%	52%
MONTANA	**1,020,663**	**603,558**	**485,623**	**209,529**	**534,185**	**1,298,710**	**59%**	**52%**