

Weekly COVID-19 Update in Montana (as of 10/15/2021)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of October 15, 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 10/15/2021

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	165,598	5,747	-16%
LABORATORY TESTS	1,923,729	42,742	-10%
HOSPITALIZATIONS	8,297	485	+9%
DEATHS	2,182	90	+22%

Figure 1. COVID-19 Cases and Hospitalizations over Time - Montana, as of 10/15/2021

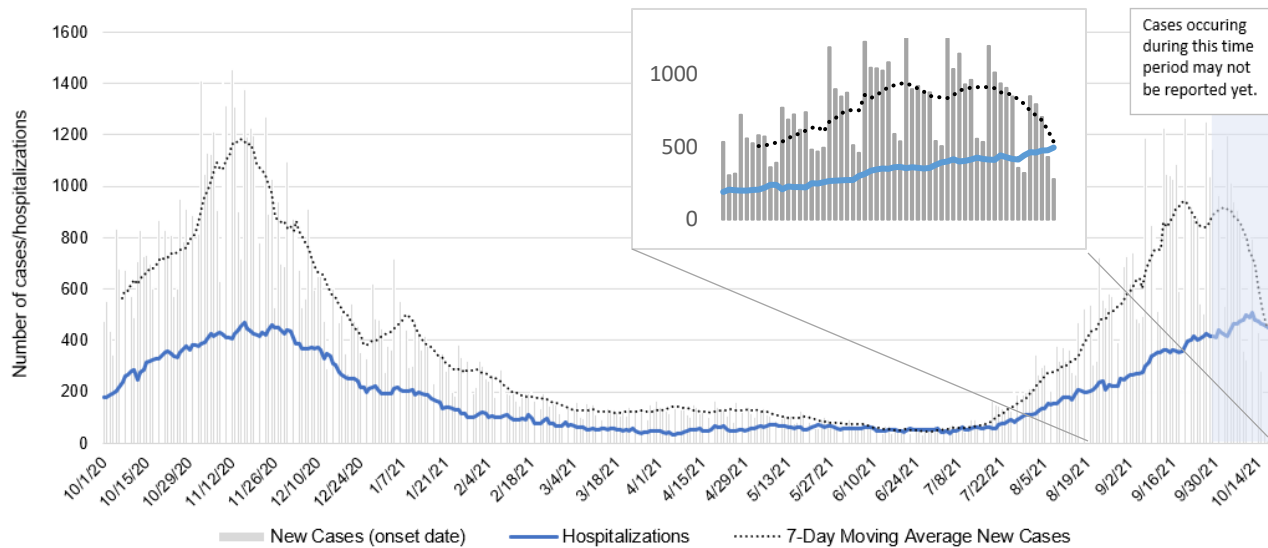
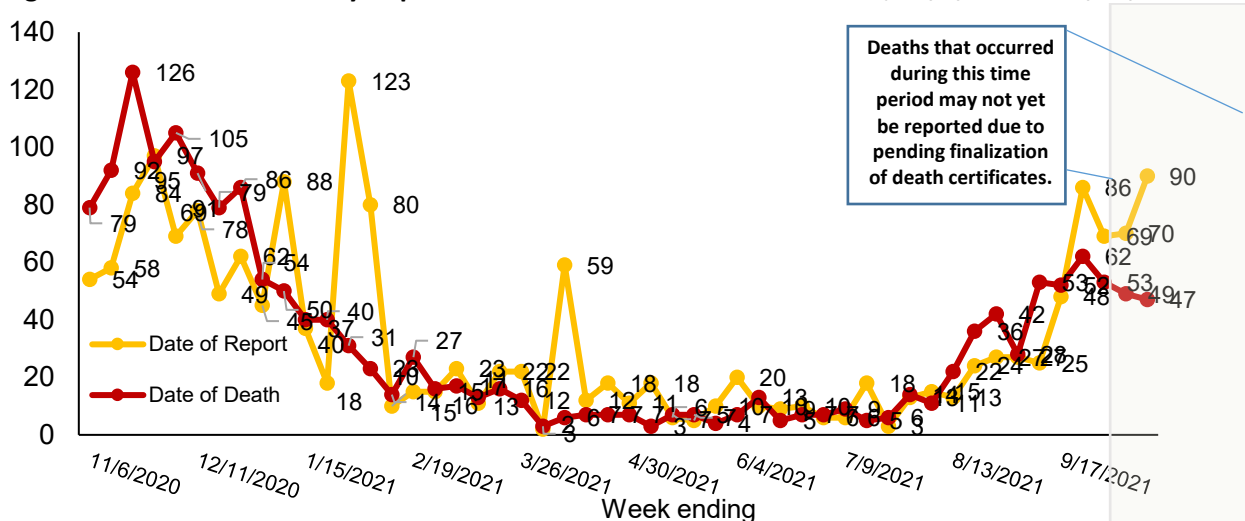


Figure 2. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 10/15/2021



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. To date, 1,050,389 doses have been given across the state and 54% of the eligible population is considered fully vaccinated.

Table 2: COVID-19 Vaccine Doses Administered – Montana, as of 10/15/2021

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 10/1	WEEK ENDING 10/8	WEEK ENDING 10/15*
TOTAL DOSES ADMINISTERED	1,050,389		22,663	19,472	12,784
DOSE 1 ADMINISTERED	553,417	60%	4,890	3,577	2,285
FULLY VACCINATED INDIVIDUALS	495,886	54%	4,496	3,757	2,739

*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 – Montana, as of 10/15/2021

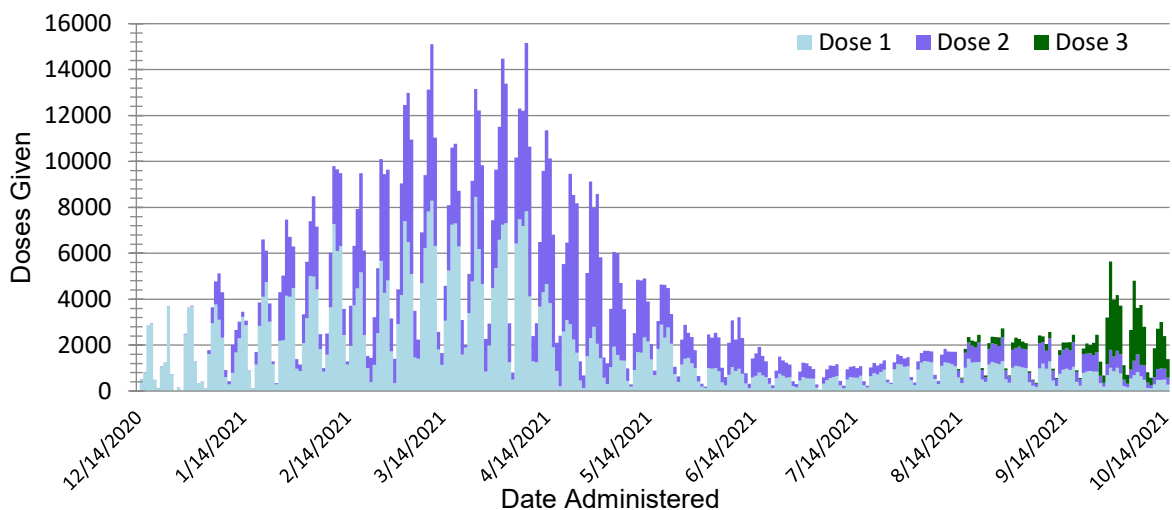
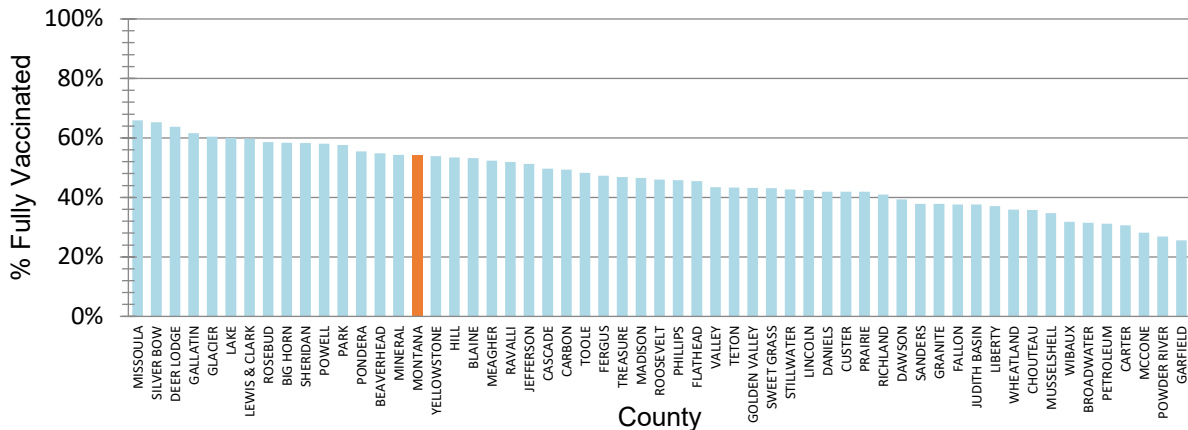


Figure 4. Percent of Eligible Montanans (12+ years) Fully Vaccinated by County – Montana, 10/15/2021



Variant and Breakthrough Cases

Figure 6 displays the percentage of the most common SARS-CoV-2 lineages detected each week, among all samples sequenced that were collected that week. There were 5,053 samples that were sequenced and had their lineages reported to [GISAID](https://gisaid.org/) 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. CDC updated their COVID variant classification system recently. Delta is the only Variant of Concern at this time, and it is the dominant circulating strain in Montana. Of specimens collected and sequenced in September and October, 1,405/1,407 (99.9%) are Delta. Aside from Delta, all other former variants of concern and interest have been re-classified as Variants Being Monitored. The overall trends in variants shows that, March through June, the Alpha variant (light yellow) was predominant. Beginning in July, the Delta variant (dark orange) has been detected most often among sequenced samples and is currently the dominant variant in Montana.

Figure 5. Number of COVID-19 samples sequenced by collection date, Montana 10/19/2021 [n=5,053]

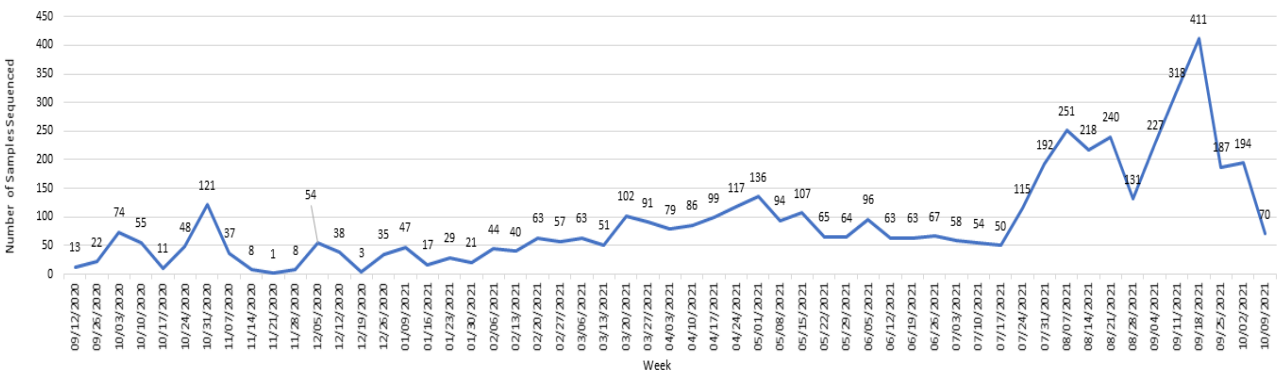
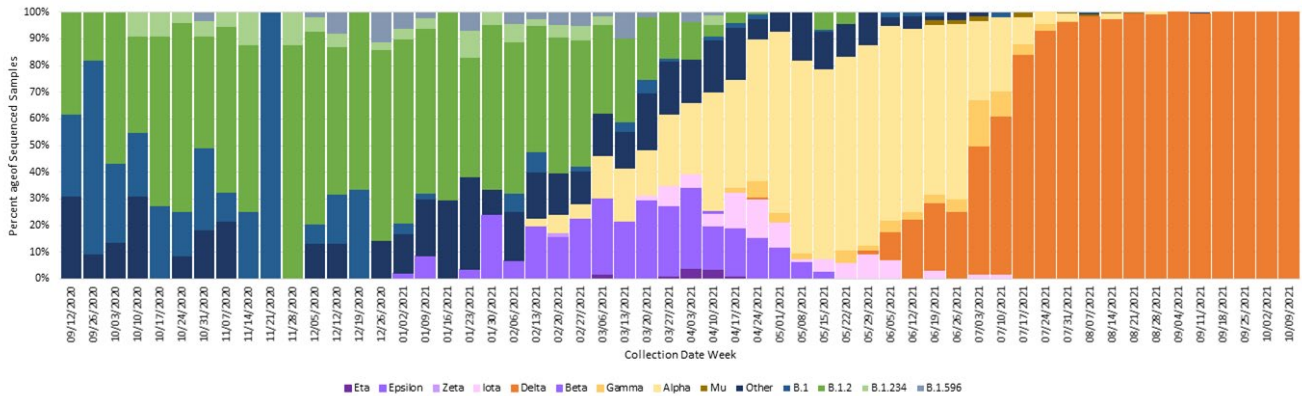


Figure 6. Percent of COVID-19 variants in sequenced samples by collection date, Montana 10/19/2021



A breakthrough COVID-19 infection is defined as a positive SARS-CoV-2 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 10/19/21, Montana reports 9,744 cases of confirmed breakthrough disease, which includes 544 hospitalizations and 141 deaths. Over the past 8 weeks (August 21 – October 15) the number of cases among unvaccinated individuals was 4.7 times higher than the number of cases among vaccinated individuals; the number of hospitalizations and deaths among unvaccinated individuals were 4.8 and 3.5 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 October 15** to review vaccination status. Since the beginning of April this year, 85% of Montanans who were hospitalized and 77% of those who died were unvaccinated at the time of infection (Table 3). Of the 3,451 individuals who were hospitalized during this time period, 53 (2%) were <18 years old, 573 (17%) were 18 to 44 years old, 1,201 (35%) were 45 to 64 years old and 1,624 (47%) were ≥ 65 years old.

Additionally, COVID-19-related hospitalization and death data from **August 21 – October 15** (last 8 weeks) were analyzed to review vaccination status. Eighty-three percent of Montanans who were hospitalized and 78% of those who died had not received a COVID-19 vaccine (Table 4). Of the 2,046 individuals who were hospitalized during this time period, 36 (2%) were <18 years old, 354 (17%) were 18 to 44 years old, 707 (35%) were 45 to 64 years old and 949 (46%) were ≥ 65 years old.

Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1 to October 15, 2021

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	3,451	556
UNVACCINATED	2,927 (85%)	427 (77%)
VACCINATED (BREAKTHROUGH CASE)	524 (15%)	129 (23%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-102 (61)	24-100 (71)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	16-101 (75)	43-99 (83)

Table 4. Vaccination status of COVID-19 hospitalizations and deaths – August 21 – October 15, 2021

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	2,046	327
UNVACCINATED	1,692 (83%)	254 (78%)
VACCINATED (BREAKTHROUGH CASE)	354 (17%)	73 (22%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-99(60)	24-100 (70)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	16-101(74)	43-99 (83)

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

County	10-Sep	17-Sep	24-Sep	1-Oct	8-Oct	15-Oct	change from previous week*	Trendline
Beaverhead	27	21	98	108	73	64	-9	
Big Horn	43	48	38	52	69	22	-47	
Blaine	30	12	25	11	28	73	45	
Broadwater	28	25	27	43	46	28	-18	
Carbon	9	30	27	76	13	64	51	
Carter	5	3	0	2	1	1	0	
Cascade	520	302	643	482	502	642	140	
Chouteau	14	15	16	30	17	14	-3	
Custer	46	53	136	153	136	104	-32	
Daniels	2	5	6	10	6	20	14	
Dawson	24	24	52	26	37	70	33	
Deer Lodge	30	26	47	36	40	53	13	
Fallon	25	5	14	15	12	3	-9	
Fergus	37	33	57	38	23	38	15	
Flathead	466	464	673	585	587	608	21	
Gallatin	332	434	627	571	499	619	120	
Garfield	1	0	1	1	6	6	0	
Glacier	43	54	75	47	48	82	34	
Golden Valley	0	1	3	2	0	1	1	
Granite	9	1	13	21	8	26	18	
Hill	117	69	158	148	109	119	10	
Jefferson	22	50	61	86	75	66	-9	
Judith Basin	3	2	6	10	6	4	-2	
Lake	97	94	180	236	230	234	4	
Lewis and Clark	244	318	308	347	361	545	184	
Liberty	7	5	23	31	12	16	4	
Lincoln	167	196	264	206	170	141	-29	
Madison	25	33	67	66	50	68	18	
McCone	4	3	1	2	15	18	3	
Meagher	3	6	7	19	21	18	-3	

County	10-Sep	17-Sep	24-Sep	1-Oct	8-Oct	15-Oct	change from previous week*	Trendline
Mineral	10	17	48	54	49	44	-5	
Missoula	428	535	705	716	682	810	128	
Musselshell	19	12	29	21	17	17	0	
Park	34	58	72	76	52	101	49	
Petroleum	0	0	1	0	0	1	1	
Phillips	10	8	6	10	29	32	3	
Pondera	7	22	40	39	28	25	-3	
Powder River	8	6	8	7	29	22	-7	
Powell	27	26	39	24	36	30	-6	
Prairie	4	0	1	0	4	1	-3	
Ravalli	99	173	189	232	210	173	-37	
Richland	27	62	24	38	59	42	-17	
Roosevelt	25	25	29	11	9	26	17	
Rosebud	28	21	50	49	62	70	8	
Sanders	23	76	90	130	94	66	-28	
Sheridan	4	0	10	18	10	3	-7	
Silver Bow	99	98	179	170	228	181	-47	
Stillwater	12	33	52	31	24	59	35	
Sweet Grass	15	8	27	17	22	13	-9	
Teton	23	29	21	43	30	29	-1	
Toole	10	10	21	31	29	22	-7	
Treasure	1	1	3	3	12	3	-9	
Valley	20	13	23	32	51	64	13	
Wheatland	4	12	17	14	2	3	1	
Wibaux	1	6	4	5	8	6	-2	
Yellowstone	730	782	956	830	1114	1227	113	
MONTANA	4367	6298	6064	6088	6832	5747	-1085	

*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 12+	Dose 1	Dose 2	Dose 3	Fully Immunized	Total Doses Administered	Percent eligible with first dose (12+)	Percent Fully Vaccinated (12+)
BEAVERHEAD	8,412	4,902	3,973	101	4,614	8,976	58%	55%
BIG HORN	10,303	6,789	5,734	120	6,015	12,643	66%	58%
BLAINE	5,359	3,156	2,672	310	2,850	6,138	59%	53%
BROADWATER	5,443	2,058	1,491	53	1,711	3,602	38%	31%
CARBON	9,621	5,020	4,442	138	4,743	9,600	52%	49%
CARTER	1,051	338	305	5	322	648	32%	31%
CASCADE	68,949	37,621	30,741	3,275	34,215	71,637	55%	50%
CHOUTEAU	4,903	1,974	1,593	56	1,752	3,623	40%	36%
CUSTER	9,855	4,607	3,674	61	4,130	8,342	47%	42%
DANIELS	1,454	676	564	13	610	1,253	46%	42%
DAWSON	7,410	3,144	2,655	84	2,915	5,883	42%	39%
DEER LODGE	8,375	5,740	4,789	356	5,337	10,885	69%	64%
FALLON	2,330	955	838	7	877	1,800	41%	38%
FERGUS	9,561	4,879	4,172	223	4,526	9,274	51%	47%
FLATHEAD	88,987	45,988	36,745	4,074	40,473	86,807	52%	45%
GALLATIN	99,225	71,943	55,875	4,977	61,172	132,795	73%	62%
GARFIELD	1,066	295	234	0	273	532	28%	26%
GLACIER	10,794	9,061	6,044	73	6,527	15,178	84%	60%
GOLDEN VALLEY	703	325	274	21	304	620	46%	43%
GRANITE	3,071	1,345	1,058	40	1,161	2,443	44%	38%
HILL	13,256	7,832	6,276	227	7,084	14,335	59%	53%
JEFFERSON	10,702	5,972	5,111	613	5,486	11,696	56%	51%
JUDITH BASIN	1,747	702	603	72	657	1,377	40%	38%
LAKE	25,868	17,380	14,444	1,070	15,523	32,894	67%	60%
LEWIS & CLARK	59,541	39,293	32,985	5,606	35,581	77,884	66%	60%
LIBERTY	2,022	784	655	75	749	1,514	39%	37%
LINCOLN	17,763	8,446	6,931	423	7,532	15,800	48%	42%
MADISON	7,777	3,954	3,226	93	3,617	7,273	51%	47%
MCCONE	1,440	423	398	11	406	832	29%	28%
MEAGHER	1,638	926	791	14	858	1,731	57%	52%
MINERAL	3,889	2,334	1,674	82	2,111	4,090	60%	54%
MISSOULA	104,911	74,932	63,595	8,526	69,140	147,053	71%	66%
MUSSELSHELL	4,097	1,530	1,255	69	1,421	2,854	37%	35%
PARK	14,746	9,924	7,669	187	8,500	17,780	67%	58%
PETROLEUM	433	143	127	43	135	313	33%	31%
PHILLIPS	3,331	1,653	1,245	101	1,525	2,999	50%	46%
PONDERA	4,931	3,172	2,398	166	2,738	5,736	64%	56%
POWDER RIVER	1,510	447	362	7	406	816	30%	27%
POWELL	6,230	3,902	2,884	92	3,617	6,878	63%	58%
PRAIRIE	931	422	372	2	390	796	45%	42%
RAVALLI	38,686	21,850	17,962	1,701	20,085	41,513	56%	52%
RICHLAND	8,978	3,935	3,090	120	3,678	7,145	44%	41%
ROOSEVELT	8,436	4,484	3,361	14	3,885	7,859	53%	46%
ROSEBUD	7,211	4,770	3,764	78	4,227	8,612	66%	59%
SANDERS	10,768	4,452	3,841	86	4,071	8,379	41%	38%
SHERIDAN	2,847	1,788	1,534	62	1,658	3,384	63%	58%
SILVER BOW	30,125	21,408	18,516	2,598	19,670	42,522	71%	65%
STILLWATER	8,428	3,913	3,102	275	3,594	7,290	46%	43%
SWEET GRASS	3,273	1,532	1,203	37	1,410	2,772	47%	43%
TETON	5,160	2,704	1,837	50	2,236	4,591	52%	43%
TOOLE	4,055	2,077	1,605	90	1,955	3,772	51%	48%
TREASURE	584	346	254	2	274	602	59%	47%
VALLEY	6,313	2,964	2,384	138	2,744	5,486	47%	43%
WHEATLAND	1,823	692	617	66	654	1,375	38%	36%
WIBAUX	834	298	258	1	265	557	36%	32%
YELLOWSTONE	136,442	81,217	68,168	7,818	73,477	157,203	60%	54%
MONTANA	917,598	553,417	452,370	44,602	495,886	1,050,389	60%	54%