

## Weekly COVID-19 Update in Montana (as of 10/1/2021)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of October 1, 2021. Data are provisional and expected to change as more information is received.

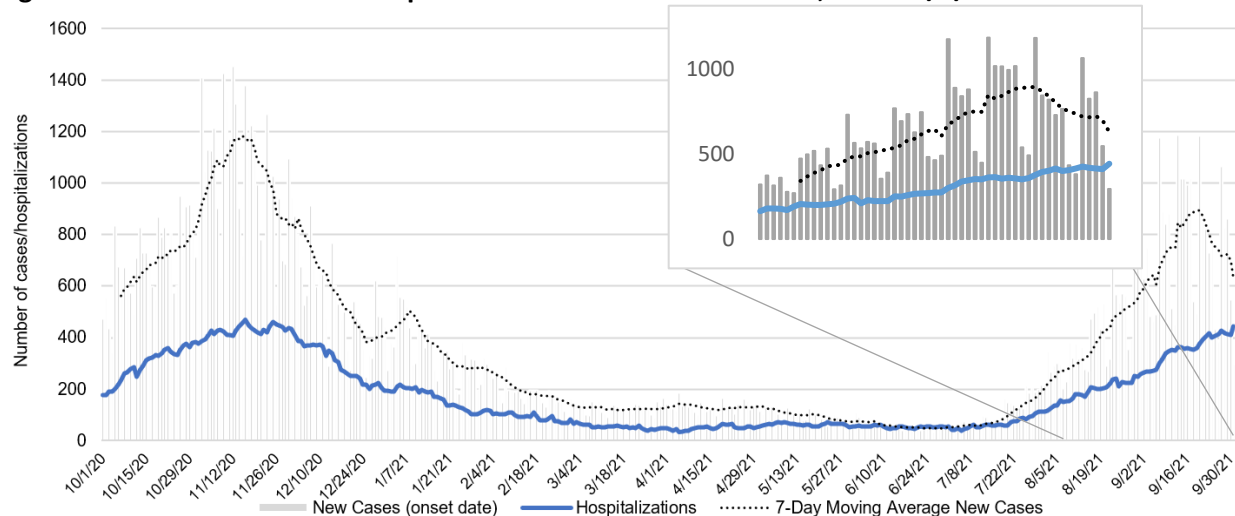
### Case Data

**Table 1. Summary of COVID-19 Activity – Montana, as of 10/1/2021**

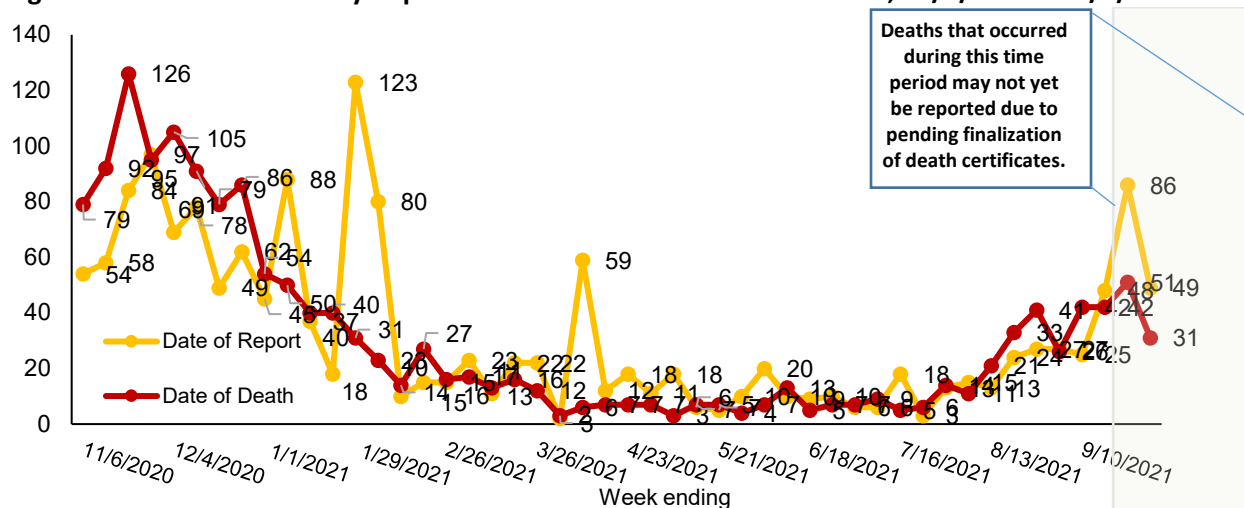
	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	153,052	6,112	+1%
LABORATORY TESTS	1,833,473	48,498	-10%
HOSPITALIZATIONS	7,731	419	+9%
DEATHS*	2,022	69	-20%

\*an initial version of this analysis underreported the number of deaths in the week ending 10/1. This report includes the correct and updated data.

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



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



Weekly COVID-19 Update for Montana as of 10/1/2021; updated 10/13 to correct the death data in table 1.

## Vaccine Data

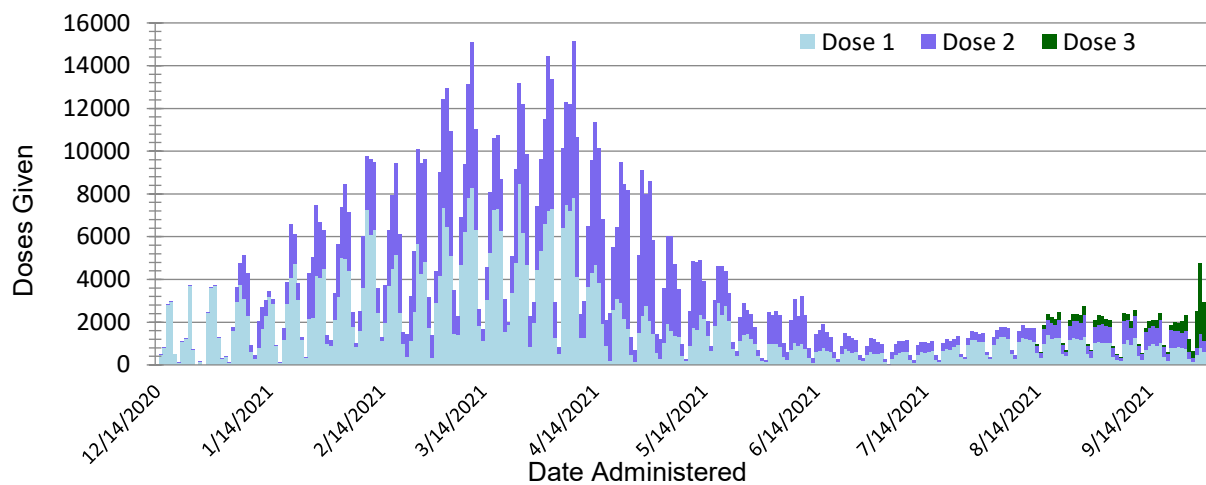
Montana began vaccinating individuals in mid-December 2020 with a phased process: Phase 1A on December 14, 2020, Phase 1B on January 19, 2021, and Phase 1B+ on March 8, 2021. Vaccinations were opened to all Montanans age 16+ on April 1, 2021 and expanded to all Montanans age 12+ on May 10<sup>th</sup>, 2021. To date, 1,010,088 doses have been given across the state and 53% of the eligible population is considered fully vaccinated.

**Table 2: COVID-19 Vaccine Doses Administered – Montana, as of 10/1/2021**

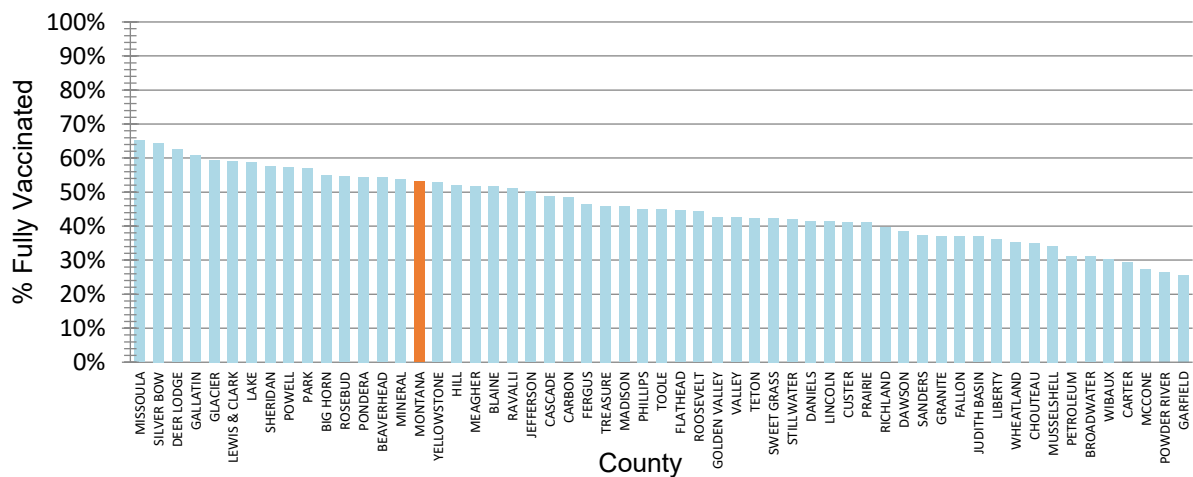
	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 9/17	WEEK ENDING 9/24	WEEK ENDING 10/1*
TOTAL DOSES ADMINISTERED	1,010,088		11,925	11,637	16,557
DOSE 1 ADMINISTERED	545,047	59%	5,204	4,651	3,350
FULLY VACCINATED INDIVIDUALS	487,211	53%	5,758	5,098	3,197

\*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 10/1/2021**



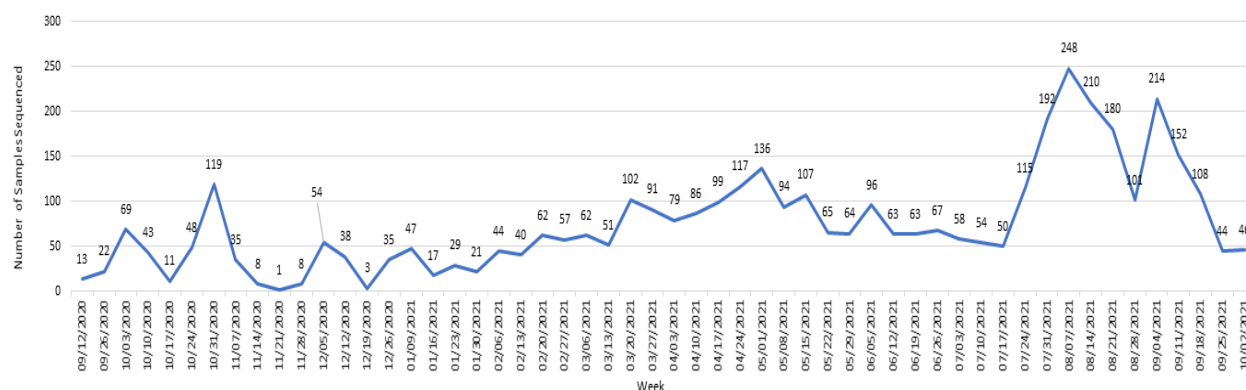
**Figure 4. Percent of Eligible Montanans (12+ years) Fully Vaccinated by County – Montana, 10/1/2021**



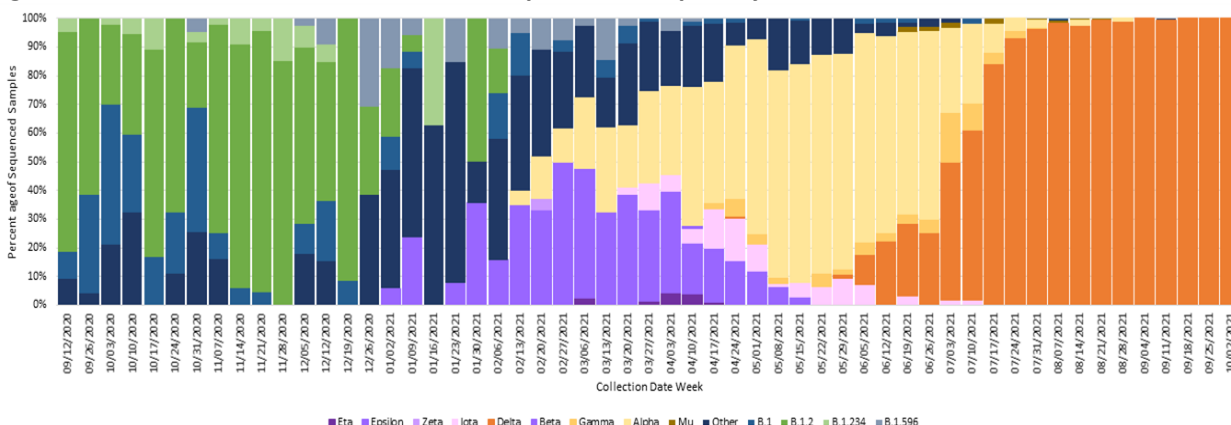
## Variant and Breakthrough Cases

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 4,086 samples that were sequenced and had their lineages 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. 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, 563/564 (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 10/5/2021 [n=4,086]**



**Figure 6. Percent of COVID-19 variants in sequenced samples by collection date, Montana 10/5/2021**



A breakthrough COVID-19 infection is defined as a positive SARS-CoV-2 collected  $\geq 14$  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 10/5/21, Montana reports 7,376 cases of confirmed breakthrough disease, which includes 422 hospitalizations and 88 deaths. Over the past 8 weeks (August 7 – October 1) the number of cases among unvaccinated individuals was 4.9 times higher than the number of cases among vaccinated individuals; the number of hospitalizations and deaths among unvaccinated individuals were 5.0 and 4.0 times higher, respectively, compared to vaccinated individuals.

*Weekly COVID-19 Update for Montana as of 10/1/2021; updated 10/13 to correct the death data in table 1.*

## Hospitalizations and Deaths and Vaccination Status

COVID-19-related hospitalizations and deaths were analyzed between **April 1 and October 1** to review vaccination status. Since the beginning of April this year, 86% of Montanans who were hospitalized and 79% of those who died were unvaccinated at the time of infection (Table 3). Of the 2,885 individuals who were hospitalized during this time period, 42 (2%) were <18 years old, 491 (17%) were 18 to 44 years old, 1,012 (35%) were 45 to 64 years old and 1,340 (46%) were ≥65 years old.

Additionally, COVID-19-related hospitalization and death data from **August 7 – October 1** (last 8 weeks) were analyzed to review vaccination status. Eighty-three percent of Montanans who were hospitalized and 80% of those who died had not received a COVID-19 vaccine (Table 4). Of the 1,810 individuals who were hospitalized during this time period, 30 (2%) were <18 years old, 312 (17%) were 18 to 44 years old, 617 (34%) were 45 to 64 years old and 851 (47%) were ≥65 years old.


























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

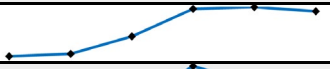


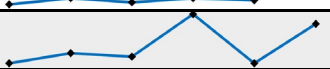



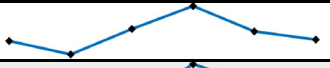






	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	<b>2,885</b>	<b>398</b>
UNVACCINATED	2,476 (86%)	316 (79%)
VACCINATED (BREAKTHROUGH CASE)	409 (14%)	82 (21%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>&lt;1-102 (61)</b>	<b>24-100 (71)</b>
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>16-101 (74)</b>	<b>53-97 (83)</b>

**Table 4. Vaccination status of COVID-19 hospitalizations and deaths – August 7 – October 1, 2021**

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	<b>1,810</b>	<b>251</b>
UNVACCINATED	1,506 (83%)	201 (80%)
VACCINATED (BREAKTHROUGH CASE)	304 (17%)	50 (20%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>&lt;1-99(60)</b>	<b>24-100 (70)</b>
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>16-101(74)</b>	<b>53-97 (82)</b>

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

County	27 Aug	3 Sep	10 Sep	17 Sep	24 Sep	1 Oct	change from previous week*	Trendline
Beaverhead	12	27	21	98	107	73	-34	
Big Horn	33	43	48	38	52	69	17	
Blaine	23	30	12	25	11	28	17	
Broadwater	20	28	25	27	43	47	4	
Carbon	29	9	30	27	76	13	-63	
Carter	5	5	3	0	2	1	-1	
Cascade	310	520	302	643	482	501	19	
Chouteau	5	14	15	16	30	17	-13	
Custer	28	46	53	136	153	136	-17	
Daniels	0	2	5	6	10	6	-4	
Dawson	33	24	24	52	27	38	11	
Deer Lodge	33	30	26	47	36	40	4	
Fallon	21	25	5	14	15	12	-3	
Fergus	27	37	33	57	38	23	-15	
Flathead	452	466	464	673	584	592	8	
Gallatin	237	332	434	627	570	501	-69	
Garfield	10	1	0	1	1	6	5	
Glacier	27	43	54	75	47	48	1	
Golden Valley	1	0	1	3	2	0	-2	
Granite	11	9	1	13	21	9	-12	
Hill	88	117	69	158	149	109	-40	
Jefferson	18	22	50	61	86	76	-10	
Judith Basin	2	3	2	6	10	6	-4	
Lake	95	97	94	180	237	230	-7	
Lewis and Clark	215	244	318	308	346	360	14	
Liberty	6	7	5	23	31	12	-19	
Lincoln	85	167	196	264	207	170	-37	
Madison	20	25	33	67	66	51	-15	
McCone	8	4	3	1	2	15	13	
Meagher	5	3	6	7	19	21	2	

Missoula	413	428	535	705	715	689	-26	
Park	29	34	58	72	76	52	-24	
Phillips	21	10	8	6	10	29	19	
Powder River	5	8	6	8	7	29	22	
Prairie	0	4	0	1	0	4	4	
Richland	45	27	62	24	38	59	21	
Rosebud	19	28	21	50	49	62	13	
Sheridan	4	4	0	10	18	10	-8	
Stillwater	23	12	33	52	31	24	-7	
Teton	7	23	29	21	43	30	-13	
Treasure	1	1	1	3	3	12	9	
Wheatland	2	4	12	17	14	2	-12	
Yellowstone	665	730	782	956	830	1114	284	
MONTANA	3419	4048	4364	6296	6057	6112	55	

*<sup>†</sup>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	4,869	3,922	87	4,566	8,878	58%	54%
BIG HORN	10,303	6,479	5,404	61	5,670	11,944	63%	55%
BLAINE	5,359	3,091	2,598	89	2,772	5,778	58%	52%
BROADWATER	5,443	2,022	1,472	31	1,690	3,525	37%	31%
CARBON	9,621	4,951	4,384	89	4,662	9,424	51%	48%
CARTER	1,051	337	293	5	310	635	32%	29%
CASCADE	68,949	37,111	30,248	1,494	33,662	68,853	54%	49%
CHOUTEAU	4,903	1,945	1,558	36	1,717	3,539	40%	35%
CUSTER	9,855	4,489	3,602	52	4,052	8,143	46%	41%
DANIELS	1,454	661	559	10	604	1,230	45%	42%
DAWSON	7,410	3,091	2,590	30	2,852	5,711	42%	38%
DEER LODGE	8,375	5,670	4,697	195	5,242	10,562	68%	63%
FALLON	2,330	948	825	3	864	1,776	41%	37%
FERGUS	9,561	4,806	4,095	134	4,442	9,035	50%	46%
FLATHEAD	88,987	45,315	36,018	1,582	39,673	82,915	51%	45%
GALLATIN	99,225	71,030	55,054	2,887	60,233	128,971	72%	61%
GARFIELD	1,066	294	234	0	273	530	28%	26%
GLACIER	10,794	8,960	5,942	56	6,423	14,958	83%	60%
GOLDEN VALLEY	703	321	271	21	300	613	46%	43%
GRANITE	3,071	1,329	1,039	27	1,140	2,395	43%	37%
HILL	13,256	7,706	6,116	75	6,914	13,897	58%	52%
JEFFERSON	10,702	5,851	5,016	270	5,372	11,137	55%	50%
JUDITH BASIN	1,747	698	594	40	646	1,332	40%	37%
LAKE	25,868	17,054	14,148	517	15,225	31,719	66%	59%
LEWIS & CLARK	59,541	38,728	32,603	2,470	35,171	73,801	65%	59%
LIBERTY	2,022	772	637	43	731	1,452	38%	36%
LINCOLN	17,763	8,294	6,791	196	7,377	15,281	47%	42%
MADISON	7,777	3,907	3,164	62	3,554	7,133	50%	46%
MCCONE	1,440	413	385	5	393	803	29%	27%
MEAGHER	1,638	919	780	12	849	1,711	56%	52%
MINERAL	3,889	2,302	1,660	37	2,096	3,999	59%	54%
MISSOULA	104,911	74,118	62,865	3,535	68,317	140,518	71%	65%
MUSSELSHELL	4,097	1,512	1,235	33	1,399	2,780	37%	34%
PARK	14,746	9,820	7,601	143	8,422	17,564	67%	57%
PETROLEUM	433	144	127	42	135	313	33%	31%
PHILLIPS	3,331	1,623	1,224	28	1,501	2,875	49%	45%
PONDERA	4,931	3,126	2,355	117	2,689	5,598	63%	55%
POWDER RIVER	1,510	439	358	6	401	803	29%	27%
POWELL	6,230	3,863	2,853	68	3,569	6,784	62%	57%
PRAIRIE	931	415	365	2	382	782	45%	41%
RAVALLI	38,686	21,499	17,705	861	19,804	40,065	56%	51%
RICHLAND	8,978	3,830	2,998	72	3,560	6,900	43%	40%
ROOSEVELT	8,436	4,328	3,252	11	3,733	7,591	51%	44%
ROSEBUD	7,211	4,551	3,505	33	3,936	8,089	63%	55%
SANDERS	10,768	4,410	3,798	63	4,022	8,271	41%	37%
SHERIDAN	2,847	1,763	1,520	12	1,643	3,295	62%	58%
SILVER BOW	30,125	21,128	18,261	1,221	19,388	40,610	70%	64%
STILLWATER	8,428	3,839	3,042	114	3,527	6,995	46%	42%
SWEET GRASS	3,273	1,511	1,186	25	1,389	2,722	46%	42%
TETON	5,160	2,649	1,796	29	2,191	4,474	51%	42%
TOOLE	4,055	1,975	1,475	58	1,825	3,508	49%	45%
TREASURE	584	341	250	1	268	592	58%	46%
VALLEY	6,313	2,870	2,349	49	2,686	5,268	45%	43%
WHEATLAND	1,823	687	609	32	645	1,328	38%	35%
WIBAUX	834	295	246	1	253	542	35%	30%
YELLOWSTONE	136,442	79,948	66,859	3,336	72,051	150,143	59%	53%
<b>MONTANA</b>	<b>917,598</b>	<b>545,047</b>	<b>444,533</b>	<b>20,508</b>	<b>487,211</b>	<b>1,010,088</b>	<b>59%</b>	<b>53%</b>