

## Weekly COVID-19 Update in Montana (as of 10/8/2021)

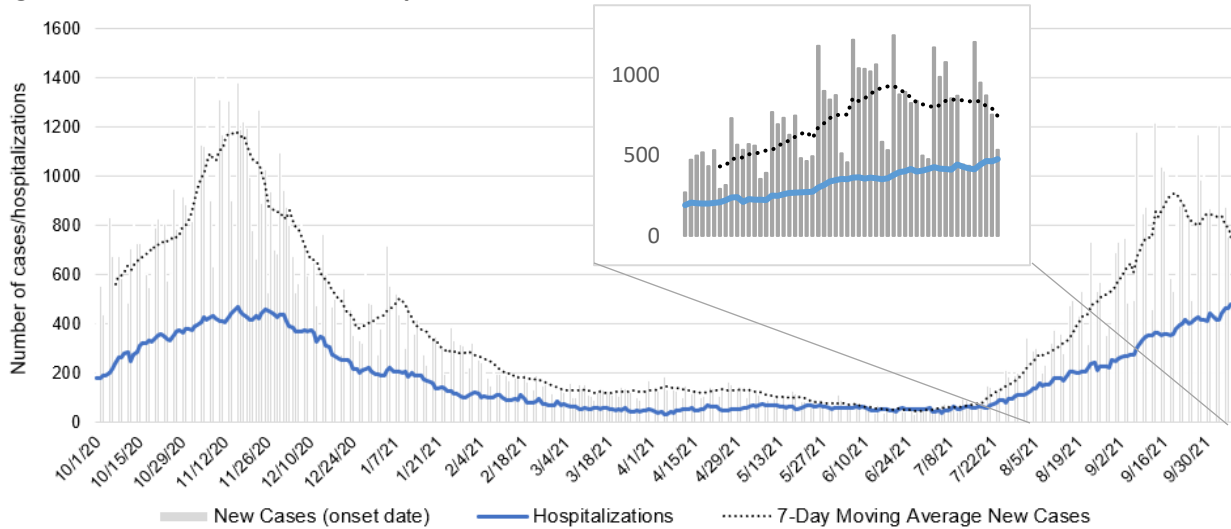
This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of October 8, 2021. Data are provisional and expected to change as more information is received.

### Case Data

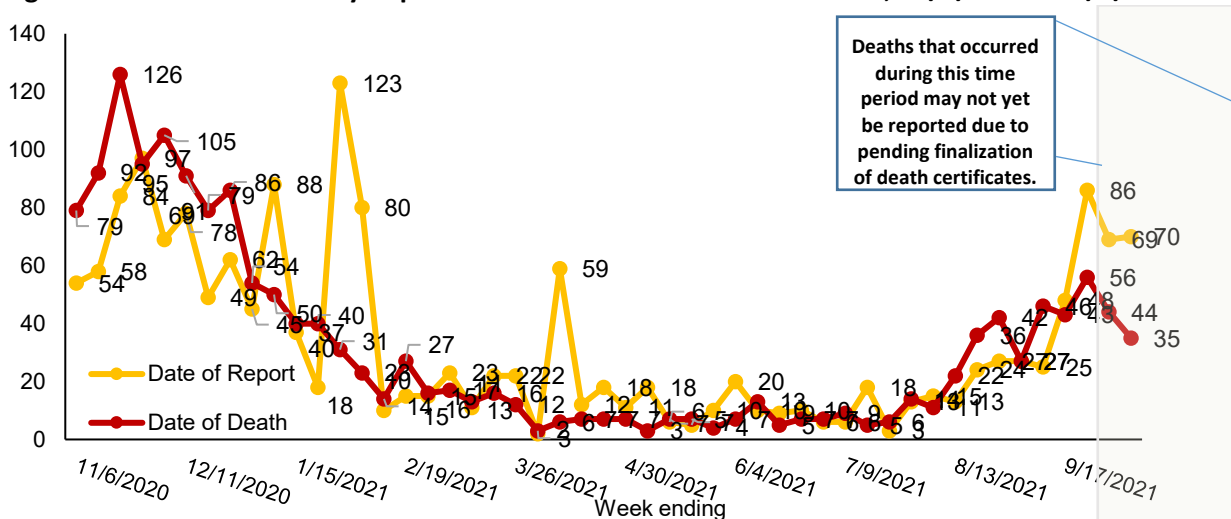
**Table 1. Summary of COVID-19 Activity – Montana, as of 10/8/2021**

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	159,860	6,837	+12%
LABORATORY TESTS	1,880,987	47,514	-2%
HOSPITALIZATIONS	8,042	445	+6%
DEATHS	2,092	70	+1%

**Figure 1. COVID-19 Cases and Hospitalizations over Time - Montana, as of 10/8/2021**



**Figure 2. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 10/8/2021**



## Vaccine Data

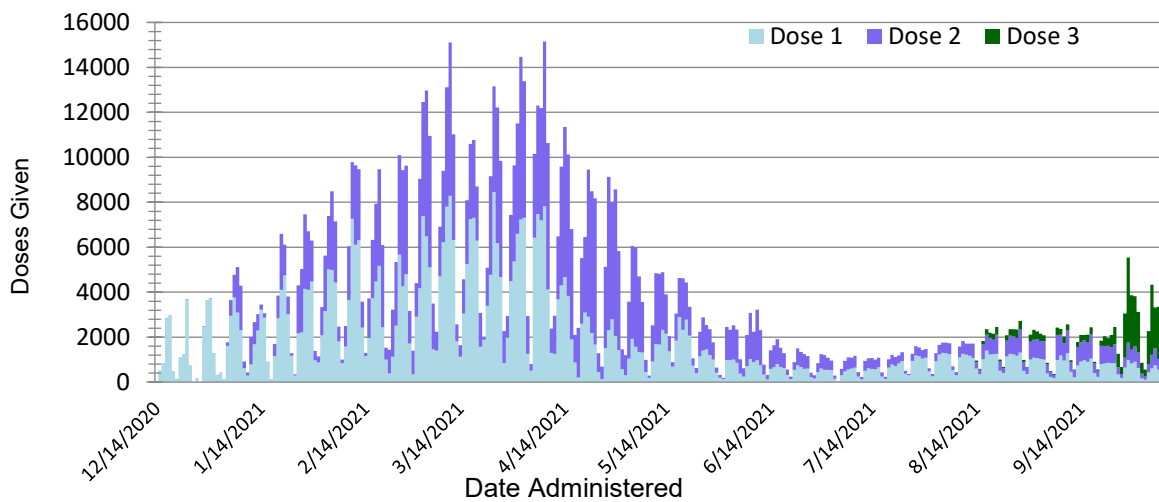
Montana began vaccinating individuals in mid-December 2020 with a phased process: Phase 1A on December 14, 2020, Phase 1B on January 19, 2021, and Phase 1B+ on March 8, 2021. Vaccinations were opened to all Montanans age 16+ on April 1, 2021 and expanded to all Montanans age 12+ on May 10<sup>th</sup>, 2021. To date, 1,032,567 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 10/8/2021**

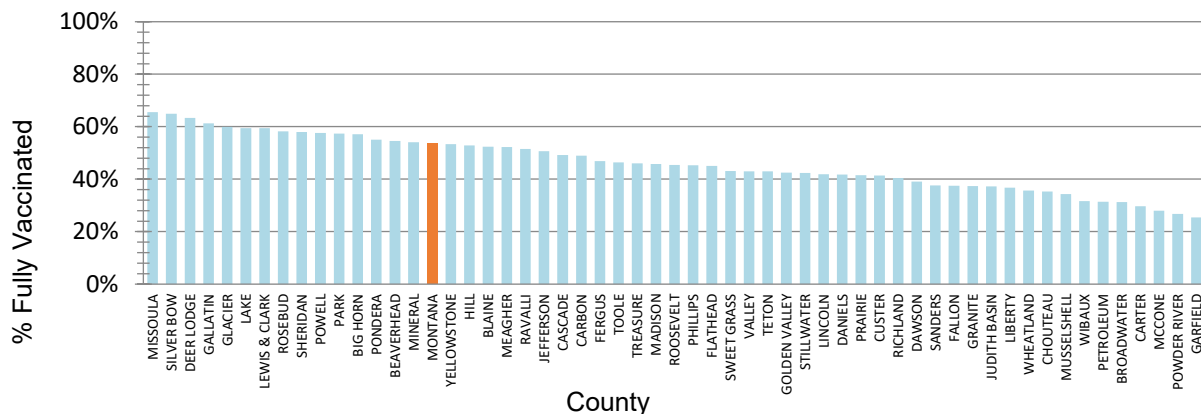
	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 9/24	WEEK ENDING 10/1	WEEK ENDING 10/8*
TOTAL DOSES ADMINISTERED	<b>1,032,567</b>		<b>11,862</b>	<b>21,333</b>	<b>16,617</b>
DOSE 1 ADMINISTERED	<b>549,747</b>	<b>60%</b>	<b>4,806</b>	<b>4,555</b>	<b>2,936</b>
FULLY VACCINATED INDIVIDUALS	<b>491,902</b>	<b>54%</b>	<b>5,128</b>	<b>4,151</b>	<b>3,272</b>

\*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 10/8/2021**



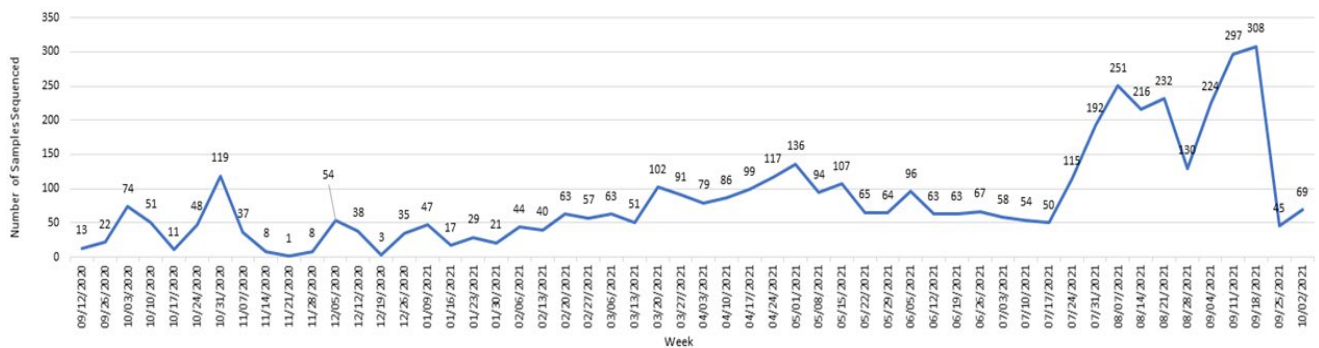
**Figure 4. Percent of Eligible Montanans (12+ years) Fully Vaccinated by County – Montana, 10/8/2021**



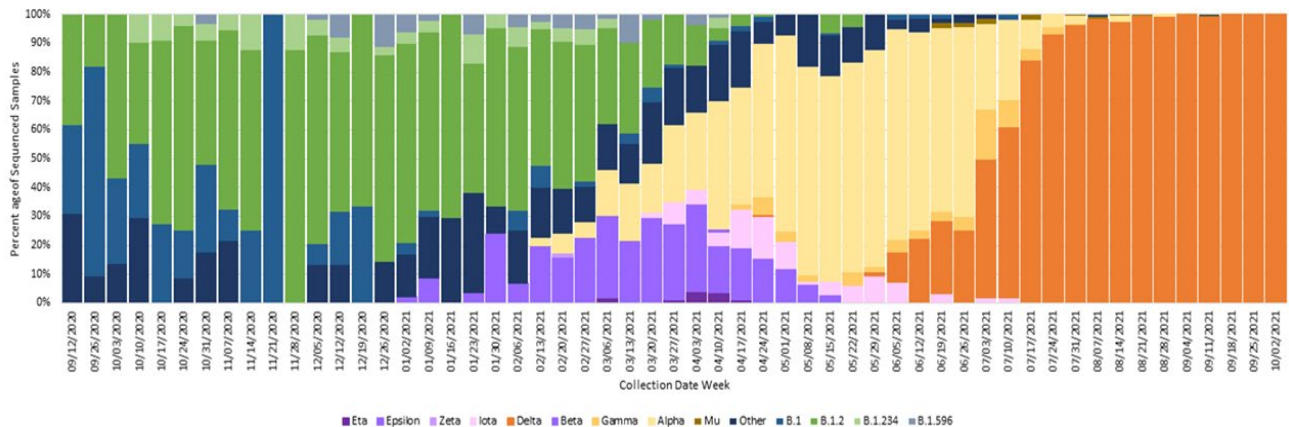
## Variant and Breakthrough Cases

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 4,572 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, 941/943 (99.8%) 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 10/12/2021 [n=4,572]**



**Figure 6. Percent of COVID-19 variants in sequenced samples by collection date, Montana 10/12/2021**



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 10/12/21, Montana reports 8,521 cases of confirmed breakthrough disease, which includes 482 hospitalizations and 103 deaths. Over the past 8 weeks (August 14 – October 8) the number of cases among unvaccinated individuals was 5.1 times higher than the number of cases among vaccinated individuals; the number of hospitalizations and deaths among unvaccinated individuals were 4.7 and 3.7 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 8** to review vaccination status. Since the beginning of April this year, 85% of Montanans who were hospitalized and 78% of those who died were unvaccinated at the time of infection (Table 3). Of the 3,196 individuals who were hospitalized during this time period, 51 (2%) were <18 years old, 535 (17%) were 18 to 44 years old, 1,112 (35%) were 45 to 64 years old and 1,498 (47%) were  $\geq$ 65 years old.

Additionally, COVID-19-related hospitalization and death data from **August 14 – October 8** (last 8 weeks) were analyzed to review vaccination status. Eighty-two percent of Montanans who were hospitalized and 79% of those who died had not received a COVID-19 vaccine (Table 4). Of the 1,968 individuals who were hospitalized during this time period, 34 (2%) were <18 years old, 342 (17%) were 18 to 44 years old, 673 (34%) were 45 to 64 years old and 919 (47%) were  $\geq$ 65 years old.

**Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1 to October 8, 2021**

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	<b>3,196</b>	<b>461</b>
UNVACCINATED	2,718 (85%)	360 (78%)
VACCINATED (BREAKTHROUGH CASE)	478 (15%)	101 (22%)
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 (75)</b>	<b>43-97 (83)</b>

**Table 4. Vaccination status of COVID-19 hospitalizations and deaths – August 14 – October 8, 2021**

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	<b>1,968</b>	<b>271</b>
UNVACCINATED	1,623 (82%)	215 (79%)
VACCINATED (BREAKTHROUGH CASE)	345 (18%)	56 (21%)
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>43-97 (82)</b>

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

County	3-Sep	10-Sep	17-Sep	24-Sep	1-Oct	8-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	3-Sep	10-Sep	17-Sep	24-Sep	1-Oct	8-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	
<b>MONTANA</b>	<b>4048</b>	<b>4365</b>	<b>6297</b>	<b>6061</b>	<b>6090</b>	<b>6837</b>	<b>747</b>	

\*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	4,888	3,947	94	4,587	8,929	58%	55%
BIG HORN	10,303	6,649	5,601	94	5,881	12,344	65%	57%
BLAINE	5,359	3,122	2,629	241	2,808	5,992	58%	52%
BROADWATER	5,443	2,044	1,485	43	1,704	3,572	38%	31%
CARBON	9,621	4,983	4,419	119	4,710	9,521	52%	49%
CARTER	1,051	338	295	5	312	638	32%	30%
CASCADE	68,949	37,371	30,511	2,430	33,947	70,312	54%	49%
CHOUTEAU	4,903	1,957	1,573	51	1,732	3,581	40%	35%
CUSTER	9,855	4,548	3,630	55	4,081	8,233	46%	41%
DANIELS	1,454	669	561	13	607	1,243	46%	42%
DAWSON	7,410	3,127	2,635	61	2,898	5,823	42%	39%
DEER LODGE	8,375	5,713	4,762	278	5,310	10,753	68%	63%
FALLON	2,330	954	835	7	874	1,796	41%	38%
FERGUS	9,561	4,840	4,130	164	4,479	9,134	51%	47%
FLATHEAD	88,987	45,665	36,374	2,877	40,071	84,916	51%	45%
GALLATIN	99,225	71,557	55,549	3,984	60,761	131,090	72%	61%
GARFIELD	1,066	292	232	0	271	526	27%	25%
GLACIER	10,794	9,019	5,992	64	6,473	15,075	84%	60%
GOLDEN VALLEY	703	323	270	22	299	615	46%	43%
GRANITE	3,071	1,338	1,044	33	1,146	2,415	44%	37%
HILL	13,256	7,775	6,202	130	7,008	14,107	59%	53%
JEFFERSON	10,702	5,912	5,058	459	5,424	11,429	55%	51%
JUDITH BASIN	1,747	701	599	55	651	1,355	40%	37%
LAKE	25,868	17,246	14,298	834	15,378	32,378	67%	59%
LEWIS & CLARK	59,541	39,049	32,791	4,400	35,376	76,240	66%	59%
LIBERTY	2,022	779	650	69	744	1,498	39%	37%
LINCOLN	17,763	8,353	6,840	306	7,434	15,499	47%	42%
MADISON	7,777	3,923	3,174	74	3,565	7,171	50%	46%
MCCONE	1,440	421	395	9	403	825	29%	28%
MEAGHER	1,638	927	788	14	855	1,729	57%	52%
MINERAL	3,889	2,311	1,665	60	2,103	4,036	59%	54%
MISSOULA	104,911	74,576	63,224	6,551	68,731	144,351	71%	66%
MUSSELSHELL	4,097	1,521	1,244	61	1,408	2,826	37%	34%
PARK	14,746	9,873	7,631	165	8,456	17,669	67%	57%
PETROLEUM	433	144	128	43	136	315	33%	31%
PHILLIPS	3,331	1,635	1,229	83	1,508	2,947	49%	45%
PONDERA	4,931	3,154	2,376	148	2,714	5,678	64%	55%
POWDER RIVER	1,510	443	360	7	404	810	29%	27%
POWELL	6,230	3,879	2,872	87	3,592	6,838	62%	58%
PRAIRIE	931	417	369	2	386	788	45%	41%
RAVALLI	38,686	21,692	17,842	1,342	19,951	40,876	56%	52%
RICHLAND	8,978	3,902	3,054	90	3,631	7,046	43%	40%
ROOSEVELT	8,436	4,422	3,318	13	3,827	7,753	52%	45%
ROSEBUD	7,211	4,738	3,737	60	4,196	8,535	66%	58%
SANDERS	10,768	4,437	3,825	73	4,055	8,335	41%	38%
SHERIDAN	2,847	1,778	1,529	29	1,652	3,336	62%	58%
SILVER BOW	30,125	21,320	18,422	2,015	19,569	41,757	71%	65%
STILLWATER	8,428	3,886	3,083	185	3,571	7,154	46%	42%
SWEET GRASS	3,273	1,527	1,204	36	1,409	2,767	47%	43%
TETON	5,160	2,689	1,822	40	2,218	4,551	52%	43%
TOOLE	4,055	2,007	1,538	69	1,881	3,614	49%	46%
TREASURE	584	344	250	1	269	595	59%	46%
VALLEY	6,313	2,918	2,359	61	2,717	5,338	46%	43%
WHEATLAND	1,823	690	613	66	650	1,369	38%	36%
WIBAUX	834	298	257	1	264	556	36%	32%
YELLOWSTONE	136,442	80,663	67,567	5,760	72,815	153,990	59%	53%
<b>MONTANA</b>	<b>917,598</b>	<b>549,747</b>	<b>448,787</b>	<b>34,033</b>	<b>491,902</b>	<b>1,032,567</b>	<b>60%</b>	<b>54%</b>