

## Weekly COVID-19 Update in Montana (as of 10/29/2021)

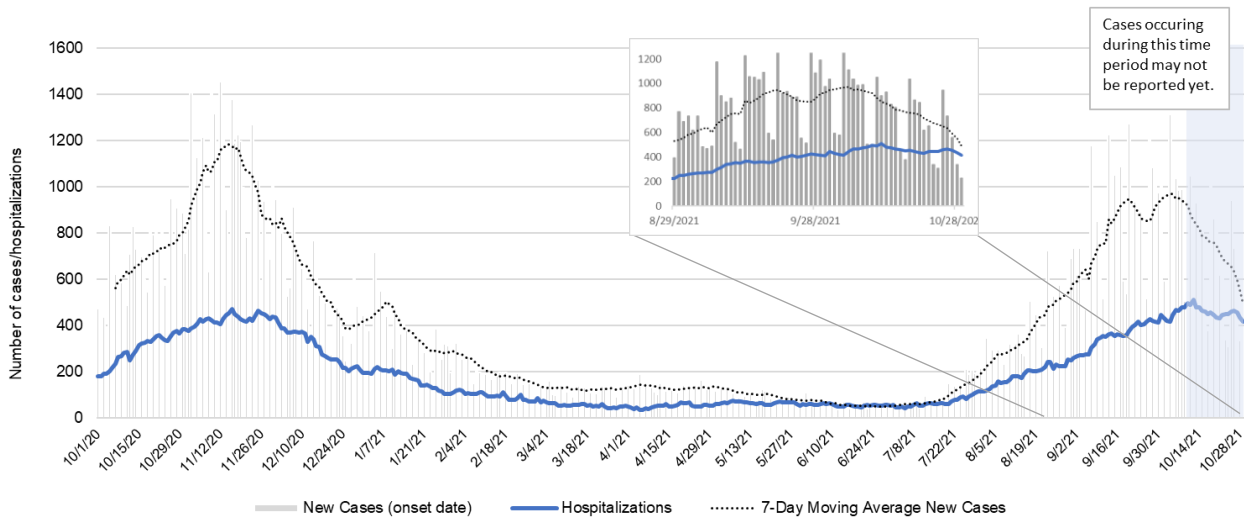
This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of October 29, 2021. Data are provisional and expected to change as more information is received.

### Case Data

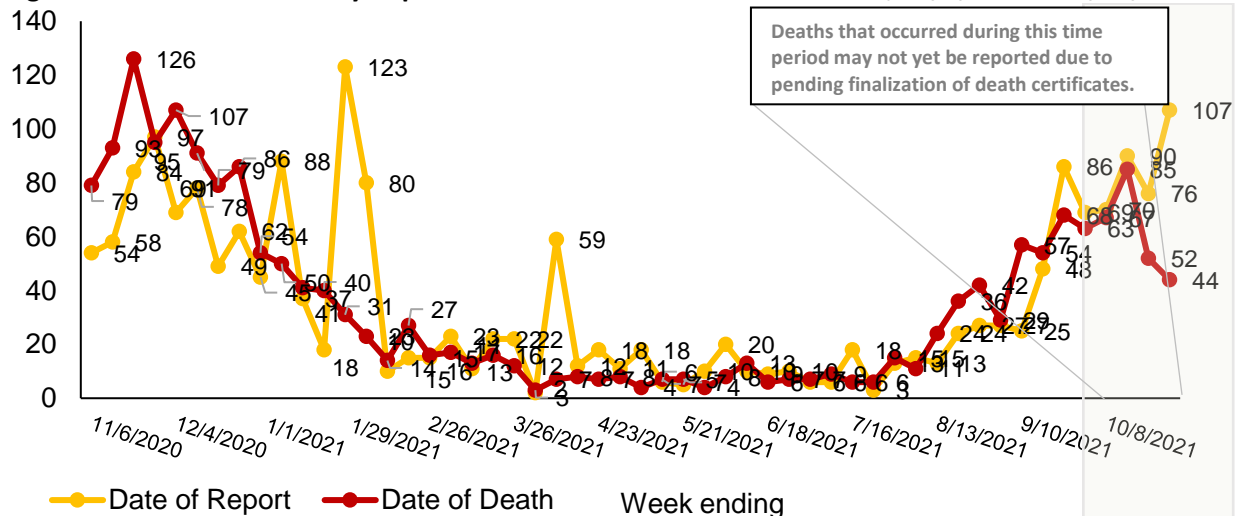
**Table 1. Summary of COVID-19 Activity – Montana, as of 10/29/2021**

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	<b>176,655</b>	<b>5,155</b>	<b>-13%</b>
LABORATORY TESTS	<b>2,014,871</b>	<b>43,435</b>	<b>-9%</b>
HOSPITALIZATIONS	<b>8,921</b>	<b>445</b>	<b>0%</b>
DEATHS	<b>2,365</b>	<b>107</b>	<b>+41%</b>

**Figure 1. COVID-19 Cases and Hospitalizations over Time - Montana, as of 10/29/2021**



**Figure 2. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 10/29/2021**



## Vaccine Data

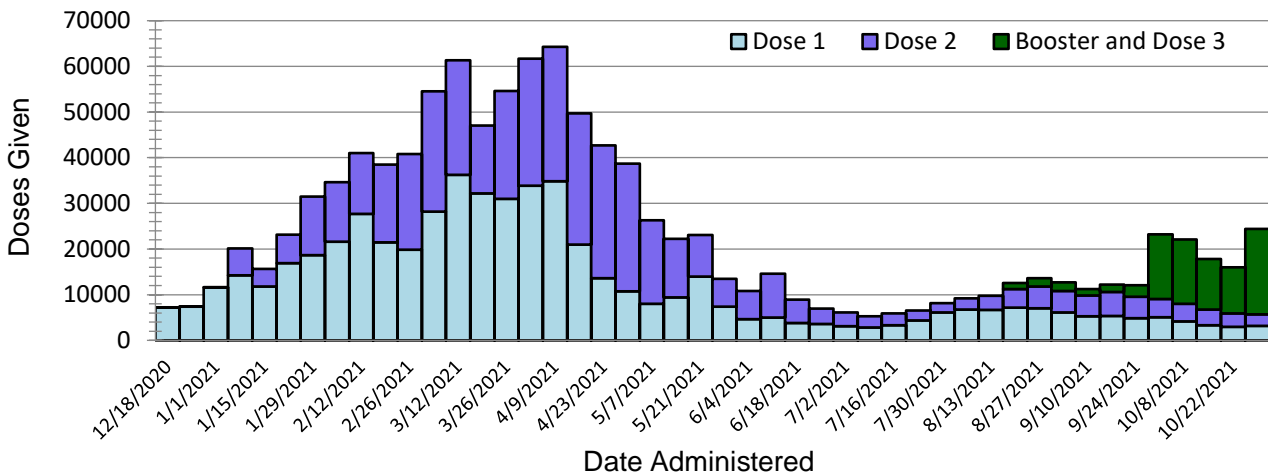
Montana began vaccinating individuals in mid-December 2020 with a phased process: Phase 1A on December 14, 2020, Phase 1B on January 19, 2021, and Phase 1B+ on March 8, 2021. Vaccinations were opened to all Montanans age 16+ on April 1, 2021 and expanded to all Montanans age 12+ on May 10<sup>th</sup>, 2021. To date, 1,100,187 doses have been given across the state and 55% of the eligible population is considered fully vaccinated.

**Table 2: COVID-19 Vaccine Doses Administered – Montana, as of 10/29/2021**

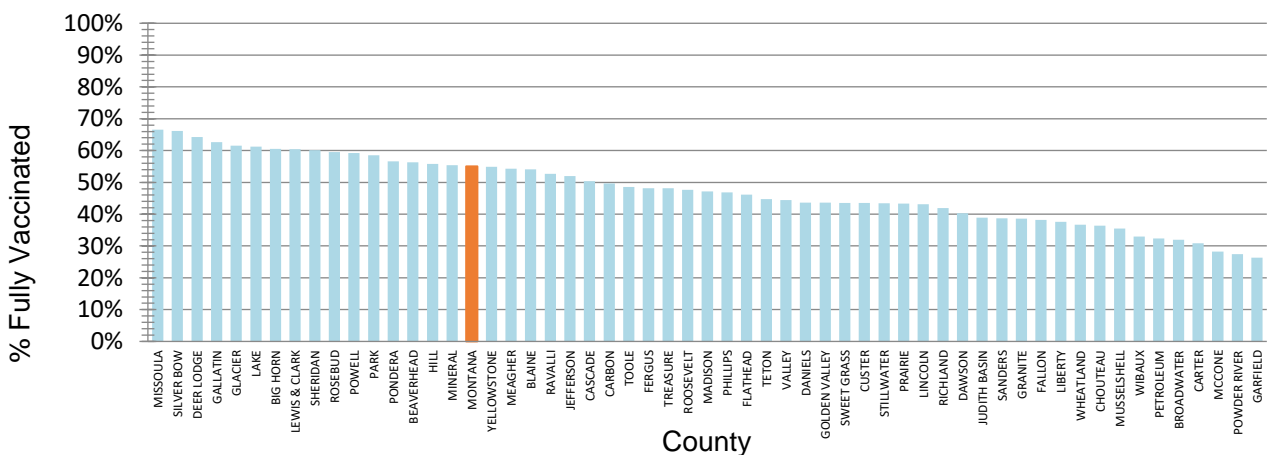
	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 10/15	WEEK ENDING 10/22	WEEK ENDING 10/29*
TOTAL DOSES ADMINISTERED	<b>1,100,187</b>		<b>17,790</b>	<b>16,023</b>	<b>24,398</b>
DOSE 1 ADMINISTERED	<b>562,246</b>	<b>61%</b>	<b>3,332</b>	<b>2,939</b>	<b>3,197</b>
FULLY VACCINATED INDIVIDUALS	<b>504,254</b>	<b>55%</b>	<b>3,754</b>	<b>3,300</b>	<b>2,790</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 10/29/2021**



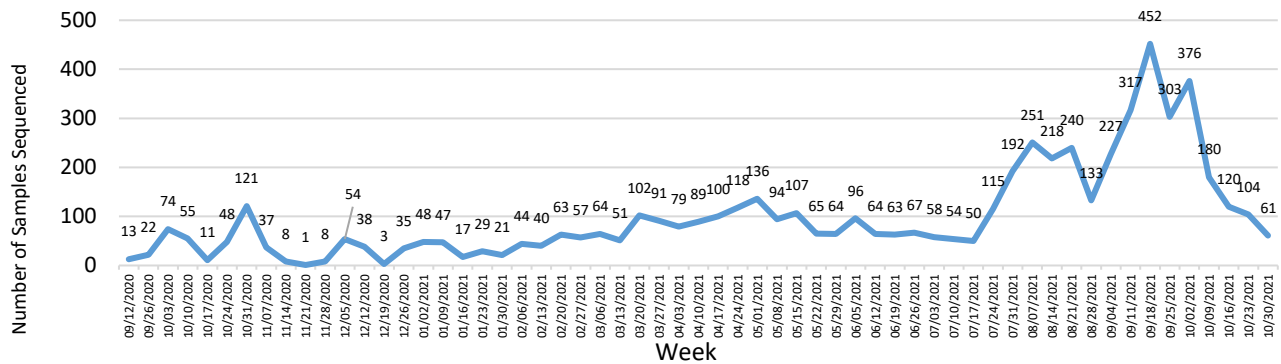
**Figure 4. Percent of Eligible Montanans (12+ years) Fully Vaccinated by County – Montana, 10/29/2021**



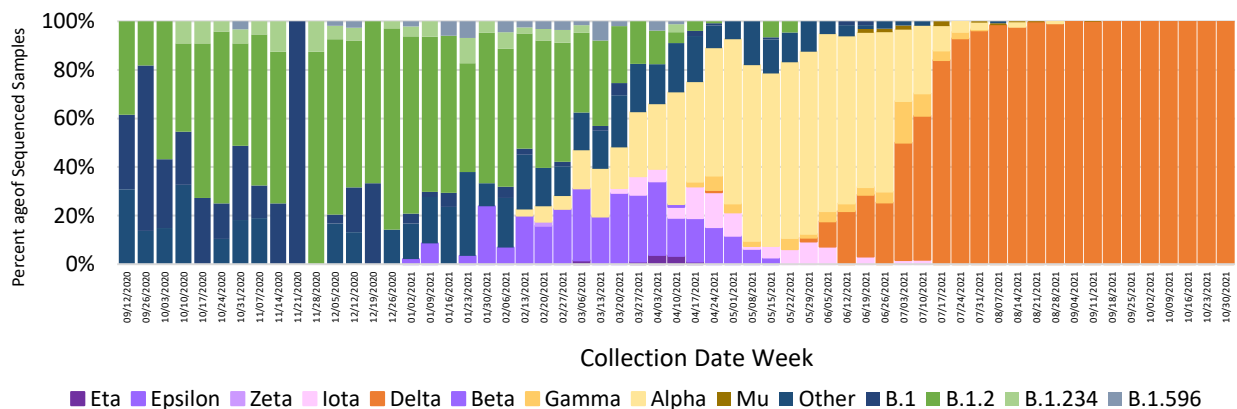
## Variant and Breakthrough Cases

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 5,795 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. 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, 2,139/2,140 (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 show 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. The charts below reflect information on specimens that were sequenced and reported to GISAID.

**Figure 5. Number of COVID-19 samples sequenced by collection date, Montana 11/2/2021 [n=5,795]**



**Figure 6. Percent of COVID-19 variants in sequenced samples by collection date, Montana 11/2/2021**



A breakthrough COVID-19 infection is defined as a positive SARS-CoV-2 specimen 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 10/29/21, Montana reports 11,750 cases of confirmed breakthrough disease, which includes 664 hospitalizations and 179 deaths. Over the past 8 weeks (September 4 – October 29) 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 4.5 and 3.1 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 29** to review vaccination status. Since the beginning of April this year, 84% of Montanans who were hospitalized and 76% of those who died were unvaccinated at the time of infection (Table 3). Of the 4,062 individuals who were hospitalized during this time period, 62 (2%) were <18 years old, 651 (16%) were 18 to 44 years old, 1,421 (35%) were 45 to 64 years old and 1,928 (47%) were  $\geq 65$  years old.

Additionally, COVID-19-related hospitalization and death data from **September 4 – October 29** (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 4). Of the 2,195 individuals who were hospitalized during this time period, 40 (2%) were <18 years old, 331 (15%) were 18 to 44 years old, 760 (35%) were 45 to 64 years old and 1,064 (48%) were  $\geq 65$  years old.

**Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1 to October 29, 2021**

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	<b>4,062</b>	<b>735</b>
UNVACCINATED	3,415 (84%)	562 (76%)
VACCINATED (BREAKTHROUGH CASE)	647 (16%)	173 (24%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>&lt;1-102 (61)</b>	<b>24-103 (70)</b>
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>16-101 (75)</b>	<b>43-99 (83)</b>

**Table 4. Vaccination status of COVID-19 hospitalizations and deaths – September 4 – October 29, 2021**

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	<b>2,195</b>	<b>411</b>
UNVACCINATED	1,794 (82%)	311 (76%)
VACCINATED (BREAKTHROUGH CASE)	401 (18%)	100 (24%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>&lt;1-99 (61)</b>	<b>29-103 (70)</b>
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>16-100 (75)</b>	<b>43-99 (83)</b>

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

County	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct	29-Oct	change from previous week*	Trendline
Beaverhead	107	75	67	13	52	48	-4	
Big Horn	52	69	22	31	45	32	-13	
Blaine	12	28	73	140	40	25	-15	
Broadwater	43	46	28	25	25	19	-6	
Carbon	76	13	64	51	76	14	-62	
Carter	2	1	1	7	1	1	0	
Cascade	481	502	637	375	668	338	-330	
Chouteau	30	17	14	25	16	35	19	
Custer	153	137	104	88	95	52	-43	
Daniels	10	6	20	12	18	8	-10	
Dawson	26	37	71	60	65	60	-5	
Deer Lodge	36	40	53	34	35	37	2	
Fallon	15	12	3	4	12	26	14	
Fergus	38	23	38	33	106	70	-36	
Flathead	585	584	606	500	470	516	46	
Gallatin	570	498	618	502	651	477	-174	
Garfield	1	6	6	3	7	11	4	
Glacier	47	48	81	83	65	60	-5	
Golden Valley	2	0	1	8	6	22	16	
Granite	21	8	26	21	26	14	-12	
Hill	148	109	119	137	85	69	-16	
Jefferson	86	75	68	50	64	39	-25	
Judith Basin	10	6	4	6	3	7	4	
Lake	237	230	235	347	153	205	52	
Lewis and Clark	347	360	543	445	456	410	-46	
Liberty	31	12	16	6	4	4	0	
Lincoln	207	168	142	85	102	62	-40	
Madison	66	51	69	25	47	42	-5	
McCone	2	15	18	7	14	6	-8	
Meagher	19	21	18	3	3	8	5	

County	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct	29-Oct	change from previous week*	Trendline
Mineral	54	49	43	29	21	15	-6	
Missoula	717	686	809	630	581	469	-112	
Musselshell	21	17	17	21	41	60	19	
Park	76	52	101	70	149	99	-50	
Petroleum	0	0	1	1	1	0	-1	
Phillips	10	29	32	65	36	40	4	
Pondera	39	28	25	26	25	8	-17	
Powder River	7	29	23	15	5	5	0	
Powell	24	36	30	37	55	50	-5	
Prairie	0	4	1	2	3	3	0	
Ravalli	234	211	174	154	139	129	-10	
Richland	38	59	42	48	86	31	-55	
Roosevelt	11	9	24	32	40	77	37	
Rosebud	49	62	70	25	39	23	-16	
Sanders	131	94	66	54	41	46	5	
Sheridan	18	10	3	5	6	14	8	
Silver Bow	171	228	180	131	146	150	4	
Stillwater	31	24	59	25	42	51	9	
Sweet Grass	17	22	13	7	14	20	6	
Teton	44	30	29	41	31	26	-5	
Toole	31	29	22	14	9	16	7	
Treasure	3	12	3	1	3	5	2	
Valley	32	51	64	55	46	24	-22	
Wheatland	14	2	3	4	7	5	-2	
Wibaux	5	8	6	1	2	4	2	
Yellowstone	829	1114	1227	1125	947	1068	121	
<b>MONTANA</b>	<b>6066</b>	<b>6092</b>	<b>6832</b>	<b>5744</b>	<b>5925</b>	<b>5155</b>	<b>-770</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	5,009	4,070	219	4,735	9,298	60%	56%
BIG HORN	10,303	6,994	5,938	424	6,240	13,356	68%	61%
BLAINE	5,359	3,216	2,709	448	2,901	6,373	60%	54%
BROADWATER	5,443	2,091	1,515	156	1,740	3,762	38%	32%
CARBON	9,621	5,082	4,470	745	4,779	10,297	53%	50%
CARTER	1,051	344	305	18	324	667	33%	31%
CASCADE	68,949	38,211	31,188	5,608	34,733	75,007	55%	50%
CHOUTEAU	4,903	1,988	1,624	119	1,786	3,731	41%	36%
CUSTER	9,855	4,734	3,819	355	4,289	8,908	48%	44%
DANIELS	1,454	688	585	134	635	1,407	47%	44%
DAWSON	7,410	3,201	2,723	212	2,989	6,136	43%	40%
DEER LODGE	8,375	5,801	4,830	893	5,383	11,524	69%	64%
FALLON	2,330	959	850	13	890	1,822	41%	38%
FERGUS	9,561	4,981	4,251	333	4,607	9,565	52%	48%
FLATHEAD	88,987	46,770	37,202	7,014	41,077	90,986	53%	46%
GALLATIN	99,225	72,960	56,663	9,106	62,202	138,729	74%	63%
GARFIELD	1,066	301	240	0	281	549	28%	26%
GLACIER	10,794	9,166	6,148	441	6,642	15,755	85%	62%
GOLDEN VALLEY	703	331	276	33	307	640	47%	44%
GRANITE	3,071	1,365	1,078	130	1,185	2,573	44%	39%
HILL	13,256	8,188	6,425	917	7,391	15,530	62%	56%
JEFFERSON	10,702	6,065	5,176	1,013	5,558	12,254	57%	52%
JUDITH BASIN	1,747	731	622	75	679	1,428	42%	39%
LAKE	25,868	17,759	14,729	2,372	15,837	34,860	69%	61%
LEWIS & CLARK	59,541	39,922	33,336	7,960	35,999	81,218	67%	60%
LIBERTY	2,022	795	665	124	761	1,584	39%	38%
LINCOLN	17,763	8,563	7,048	837	7,663	16,448	48%	43%
MADISON	7,777	4,016	3,267	199	3,665	7,482	52%	47%
MCCONE	1,440	429	399	15	407	843	30%	28%
MEAGHER	1,638	945	814	128	889	1,887	58%	54%
MINERAL	3,889	2,379	1,714	190	2,154	4,283	61%	55%
MISSOULA	104,911	75,784	64,189	13,845	69,849	153,818	72%	67%
MUSSELSHELL	4,097	1,556	1,276	93	1,453	2,925	38%	35%
PARK	14,746	10,071	7,780	554	8,629	18,405	68%	59%
PETROLEUM	433	149	132	45	140	326	34%	32%
PHILLIPS	3,331	1,689	1,278	149	1,562	3,116	51%	47%
PONDERA	4,931	3,210	2,448	305	2,793	5,963	65%	57%
POWDER RIVER	1,510	456	370	17	415	843	30%	27%
POWELL	6,230	3,927	2,951	168	3,688	7,046	63%	59%
PRAIRIE	931	430	384	11	403	825	46%	43%
RAVALLI	38,686	22,227	18,177	3,439	20,382	43,843	57%	53%
RICHLAND	8,978	3,992	3,156	271	3,765	7,419	44%	42%
ROOSEVELT	8,436	4,597	3,459	70	4,020	8,126	54%	48%
ROSEBUD	7,211	4,823	3,813	259	4,291	8,895	67%	60%
SANDERS	10,768	4,516	3,926	230	4,164	8,672	42%	39%
SHERIDAN	2,847	1,820	1,587	347	1,712	3,754	64%	60%
SILVER BOW	30,125	21,646	18,711	3,974	19,921	44,331	72%	66%
STILLWATER	8,428	3,970	3,154	505	3,663	7,629	47%	43%
SWEET GRASS	3,273	1,551	1,215	67	1,425	2,833	47%	44%
TETON	5,160	2,769	1,891	204	2,307	4,864	54%	45%
TOOLE	4,055	2,086	1,622	166	1,967	3,874	51%	49%
TREASURE	584	356	261	5	281	622	61%	48%
VALLEY	6,313	3,035	2,428	337	2,804	5,800	48%	44%
WHEATLAND	1,823	714	629	111	669	1,454	39%	37%
WIBAUX	834	304	268	2	275	574	36%	33%
YELLOWSTONE	136,442	82,584	69,426	13,326	74,948	165,336	61%	55%
<b>MONTANA</b>	<b>917,598</b>	<b>562,246</b>	<b>459,210</b>	<b>78,731</b>	<b>504,254</b>	<b>1,100,187</b>	<b>61%</b>	<b>55%</b>