

Weekly COVID-19 Update in Montana (as of 10/22/2021)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of October 22, 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 10/22/2021

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	171,538	5,951	+4%
LABORATORY TESTS	1,971,436	47,707	+12%
HOSPITALIZATIONS	8,589	445	-8%
DEATHS	2,258	76	-16%

Figure 1. COVID-19 Cases and Hospitalizations over Time - Montana, as of 10/22/2021

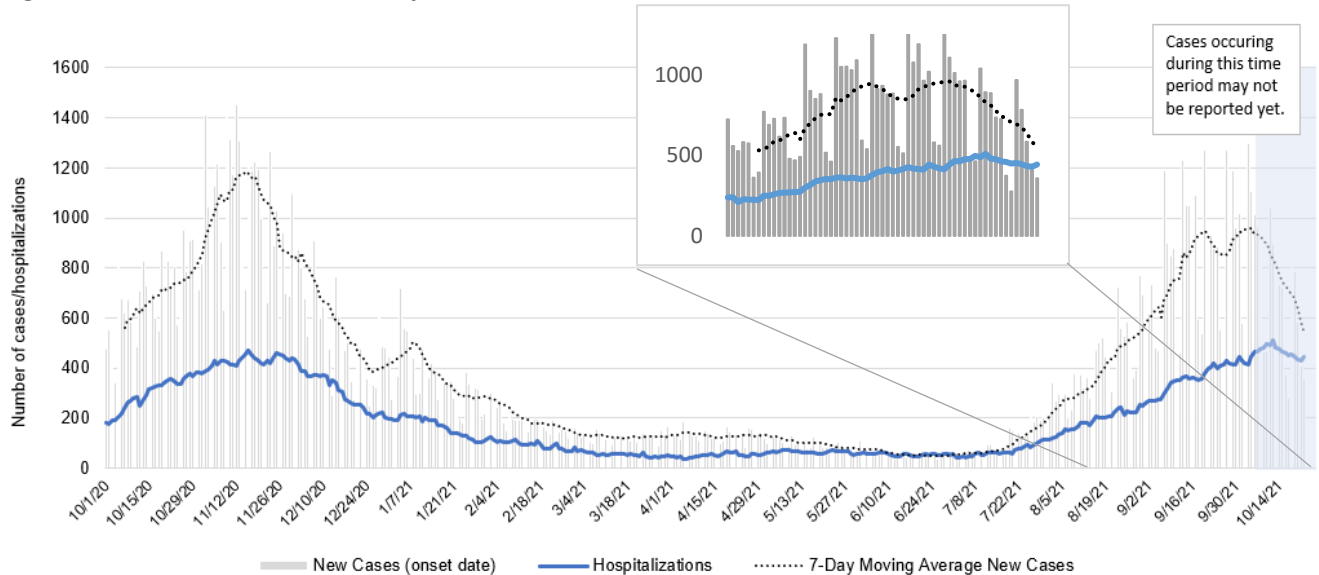
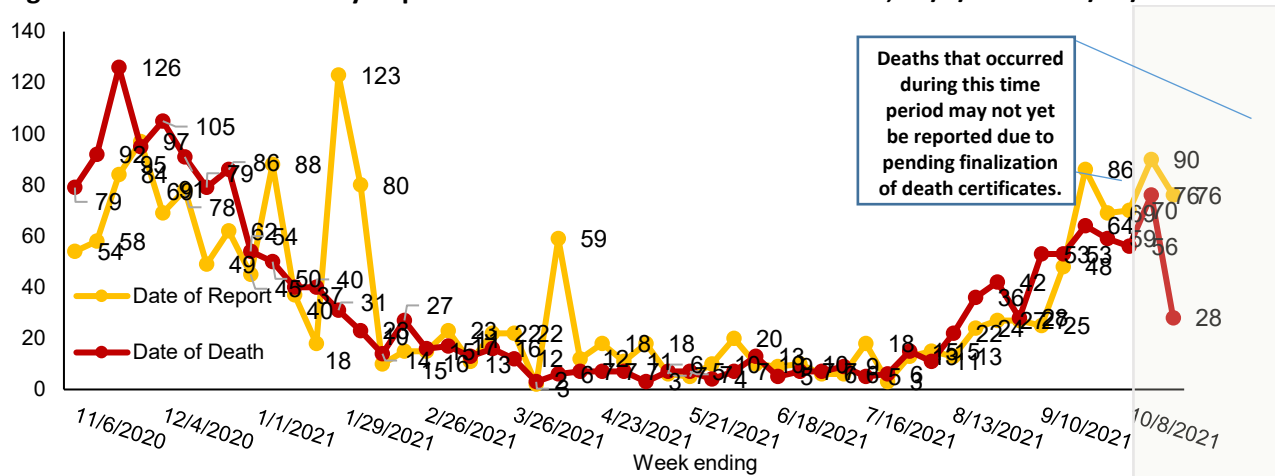


Figure 2. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 10/22/2021



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, 1,068,722 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 10/22/2021

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 10/8	WEEK ENDING 10/15	WEEK ENDING 10/22*
TOTAL DOSES ADMINISTERED	1,068,722		21,675	15,849	12,183
DOSE 1 ADMINISTERED	557,098	61%	4,092	2,901	2,182
FULLY VACCINATED INDIVIDUALS	499,927	55%	4,221	3,425	2,614

*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 10/22/2021

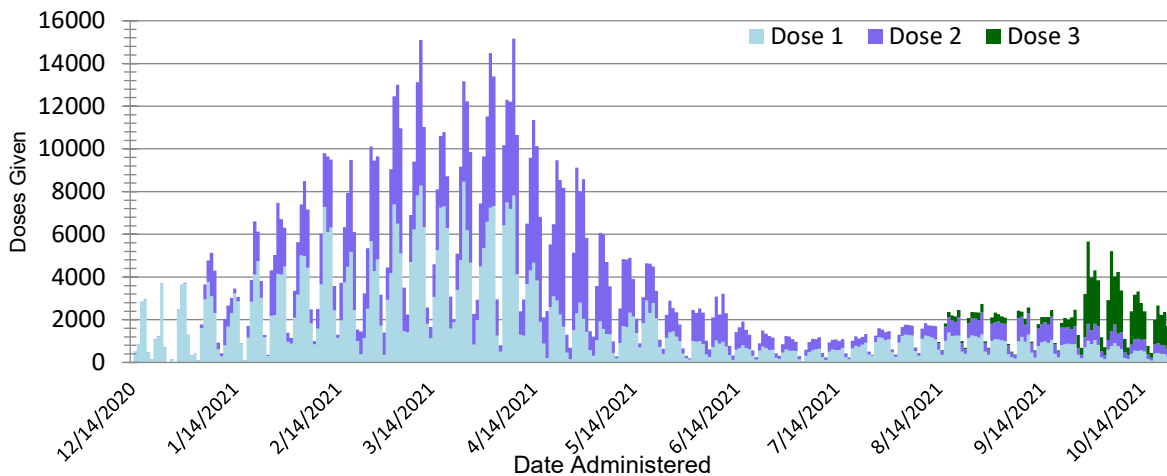
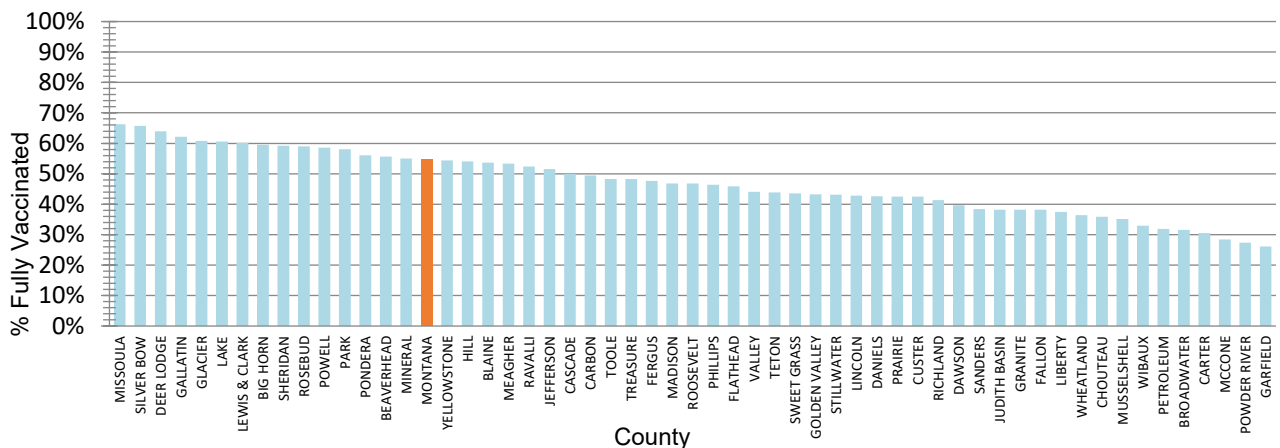


Figure 4. Percent of Eligible Montanans (12+ years) Fully Vaccinated by County – Montana, 10/22/2021



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 5,500 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, 1,779/1,780 (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 10/26/2021 [n=5,500]

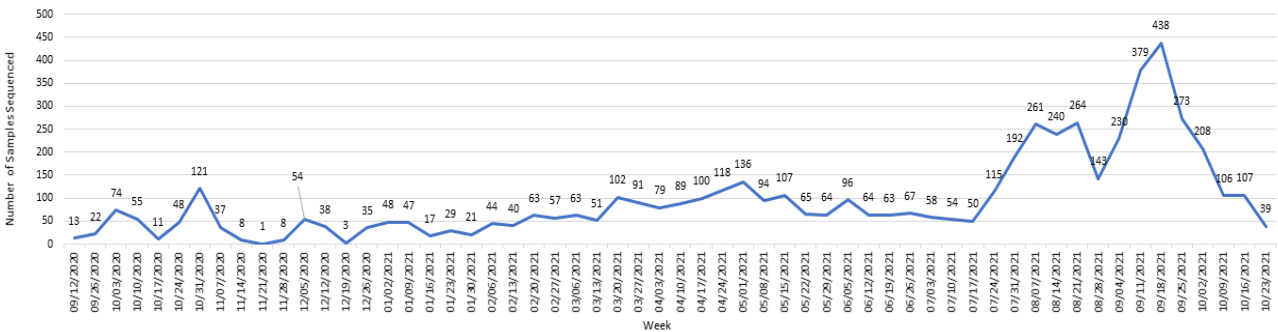
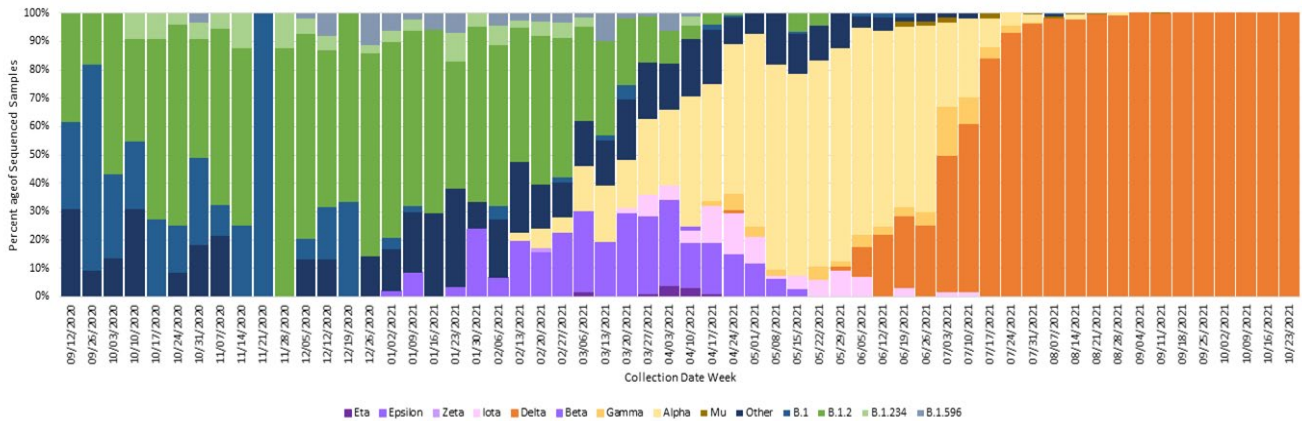


Figure 6. Percent of COVID-19 variants in sequenced samples by collection date, Montana 10/26/2021



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 10/26/21, Montana reports 10,809 cases of confirmed breakthrough disease, which includes 602 hospitalizations and 165 deaths. Over the past 8 weeks (August 28 – October 22) 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 4.6 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 22** 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 3,742 individuals who were hospitalized during this time period, 57 (2%) were <18 years old, 611 (17%) were 18 to 44 years old, 1,310 (35%) were 45 to 64 years old and 1,764 (47%) were ≥ 65 years old.

Additionally, COVID-19-related hospitalization and death data from **August 28 – October 22** (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 2,103 individuals who were hospitalized during this time period, 39 (2%) were <18 years old, 341 (16%) were 18 to 44 years old, 733 (35%) were 45 to 64 years old and 990 (47%) were ≥ 65 years old.

Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1 to October 22, 2021

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	3,742	629
UNVACCINATED	3,158 (84%)	480 (76%)
VACCINATED (BREAKTHROUGH CASE)	584 (16%)	149 (24%)
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 28 – October 22, 2021

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	2,103	354
UNVACCINATED	1,727 (82%)	268 (76%)
VACCINATED (BREAKTHROUGH CASE)	376 (18%)	86 (24%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-99 (61)	26-100 (70)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	16-100 (75)	43-99 (82)

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

County	17-Sep	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct	change from previous week*	Trendline
Beaverhead	98	107	75	66	13	52	39	
Big Horn	38	52	69	22	31	45	14	
Blaine	24	11	28	73	140	40	-100	
Broadwater	27	43	46	28	25	25	0	
Carbon	27	76	13	64	51	76	25	
Carter	0	2	1	1	7	1	-6	
Cascade	643	481	502	637	375	671	296	
Chouteau	16	30	17	14	25	16	-9	
Custer	136	153	137	104	88	96	8	
Daniels	6	10	6	20	12	18	6	
Dawson	52	26	37	71	58	64	6	
Deer Lodge	47	36	40	53	34	35	1	
Fallon	14	15	12	3	4	12	8	
Fergus	57	38	23	38	33	106	73	
Flathead	674	585	584	606	498	474	-24	
Gallatin	627	570	497	618	502	654	152	
Garfield	1	1	6	6	3	7	4	
Glacier	75	47	48	81	82	65	-17	
Golden Valley	3	2	0	1	8	6	-2	
Granite	13	21	8	26	21	26	5	
Hill	159	148	109	119	137	85	-52	
Jefferson	61	86	75	68	49	64	15	
Judith Basin	6	10	6	4	6	3	-3	
Lake	180	237	230	235	347	154	-193	
Lewis and Clark	309	347	360	544	445	460	15	
Liberty	23	31	12	16	6	4	-2	
Lincoln	264	206	168	141	85	103	18	
Madison	67	66	51	69	25	47	22	
McCone	1	2	15	18	9	15	6	
Meagher	7	19	21	18	3	3	0	

County	17-Sep	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct	change from previous week*	Trendline
Mineral	48	54	49	43	29	21	-8	
Missoula	705	717	686	810	629	592	-37	
Musselshell	28	21	18	17	21	41	20	
Park	72	76	52	101	70	149	79	
Petroleum	1	0	0	1	1	1	0	
Phillips	6	10	29	32	65	36	-29	
Pondera	40	39	28	25	26	25	-1	
Powder River	8	7	29	23	15	5	-10	
Powell	39	24	36	30	37	54	17	
Prairie	1	0	4	1	2	3	1	
Ravalli	189	234	211	173	155	139	-16	
Richland	24	38	59	42	48	86	38	
Roosevelt	29	11	9	24	32	40	8	
Rosebud	50	49	62	70	25	39	14	
Sanders	90	131	94	66	53	41	-12	
Sheridan	10	18	10	3	5	6	1	
Silver Bow	179	171	228	181	131	147	16	
Stillwater	52	31	24	59	25	42	17	
Sweet Grass	27	17	22	13	7	14	7	
Teton	21	44	30	29	41	29	-12	
Toole	21	31	29	22	14	9	-5	
Treasure	3	3	12	3	1	3	2	
Valley	23	32	51	64	55	46	-9	
Wheatland	17	14	2	3	4	7	3	
Wibaux	4	5	8	6	1	2	1	
Yellowstone	956	829	1114	1227	1126	947	-179	
MONTANA	6298	6064	6092	6832	5740	5951	211	

*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	4,949	4,035	121	4,685	9,105	59%	56%
BIG HORN	10,303	6,908	5,838	151	6,129	12,897	67%	59%
BLAINE	5,359	3,188	2,696	381	2,875	6,265	59%	54%
BROADWATER	5,443	2,066	1,503	72	1,721	3,641	38%	32%
CARBON	9,621	5,030	4,450	186	4,753	9,666	52%	49%
CARTER	1,051	340	304	5	321	649	32%	31%
CASCADE	68,949	37,857	30,951	4,350	34,454	73,158	55%	50%
CHOUTEAU	4,903	1,976	1,603	68	1,762	3,647	40%	36%
CUSTER	9,855	4,658	3,732	89	4,189	8,479	47%	43%
DANIELS	1,454	682	574	16	620	1,272	47%	43%
DAWSON	7,410	3,167	2,684	92	2,943	5,943	43%	40%
DEER LODGE	8,375	5,766	4,815	459	5,358	11,040	69%	64%
FALLON	2,330	958	850	7	889	1,815	41%	38%
FERGUS	9,561	4,919	4,201	251	4,555	9,371	51%	48%
FLATHEAD	88,987	46,333	37,034	5,115	40,787	88,482	52%	46%
GALLATIN	99,225	72,343	56,323	6,029	61,643	134,695	73%	62%
GARFIELD	1,066	297	238	0	278	539	28%	26%
GLACIER	10,794	9,100	6,075	81	6,562	15,256	84%	61%
GOLDEN VALLEY	703	329	274	25	304	628	47%	43%
GRANITE	3,071	1,360	1,066	80	1,173	2,506	44%	38%
HILL	13,256	7,912	6,354	325	7,161	14,591	60%	54%
JEFFERSON	10,702	6,006	5,151	743	5,520	11,900	56%	52%
JUDITH BASIN	1,747	719	613	73	668	1,405	41%	38%
LAKE	25,868	17,529	14,605	1,373	15,685	33,507	68%	61%
LEWIS & CLARK	59,541	39,519	33,198	6,426	35,795	79,143	66%	60%
LIBERTY	2,022	788	663	81	757	1,532	39%	37%
LINCOLN	17,763	8,499	6,991	500	7,599	15,990	48%	43%
MADISON	7,777	3,983	3,250	112	3,642	7,345	51%	47%
MCCONE	1,440	431	401	13	409	845	30%	28%
MEAGHER	1,638	938	805	20	873	1,763	57%	53%
MINERAL	3,889	2,355	1,701	105	2,140	4,161	61%	55%
MISSOULA	104,911	75,246	63,904	10,363	69,479	149,513	72%	66%
MUSSELSHELL	4,097	1,545	1,271	73	1,441	2,889	38%	35%
PARK	14,746	9,971	7,730	234	8,562	17,935	68%	58%
PETROLEUM	433	148	130	43	138	321	34%	32%
PHILLIPS	3,331	1,671	1,264	119	1,547	3,054	50%	46%
PONDERA	4,931	3,190	2,426	179	2,765	5,795	65%	56%
POWDER RIVER	1,510	453	368	8	413	829	30%	27%
POWELL	6,230	3,919	2,917	98	3,652	6,934	63%	59%
PRAIRIE	931	425	378	2	396	805	46%	43%
RAVALLI	38,686	21,980	18,104	2,148	20,251	42,232	57%	52%
RICHLAND	8,978	3,965	3,123	152	3,717	7,240	44%	41%
ROOSEVELT	8,436	4,541	3,412	24	3,947	7,977	54%	47%
ROSEBUD	7,211	4,796	3,783	94	4,252	8,673	67%	59%
SANDERS	10,768	4,497	3,906	109	4,139	8,512	42%	38%
SHERIDAN	2,847	1,802	1,563	105	1,687	3,470	63%	59%
SILVER BOW	30,125	21,521	18,621	3,227	19,788	43,369	71%	66%
STILLWATER	8,428	3,946	3,138	390	3,635	7,474	47%	43%
SWEET GRASS	3,273	1,549	1,218	39	1,425	2,806	47%	44%
TETON	5,160	2,733	1,859	63	2,262	4,655	53%	44%
TOOLE	4,055	2,081	1,615	105	1,959	3,801	51%	48%
TREASURE	584	357	262	2	282	621	61%	48%
VALLEY	6,313	3,000	2,415	161	2,781	5,576	48%	44%
WHEATLAND	1,823	703	623	80	663	1,406	39%	36%
WIBAUX	834	302	268	2	275	572	36%	33%
YELLOWSTONE	136,442	81,852	68,857	10,322	74,221	161,031	60%	54%
MONTANA	917,598	557,098	456,133	55,491	499,927	1,068,722	61%	55%