

Weekly COVID-19 Update in Montana (as of 4/1/2022)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of April 1, 2022. Data are provisional and expected to change as more information is received.

Case Data

Table 1. Summary of COVID-19 Activity – Montana, as of 4/1/2022

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	272,649	227	-21%
LABORATORY TESTS	2,730,776	16,107	-5%
HOSPITALIZATIONS	11,834	28	-20%
DEATHS	3,248	3	-67%

Figure 1. COVID-19 Cases and Hospitalizations over Time – Montana, as of 4/1/2022

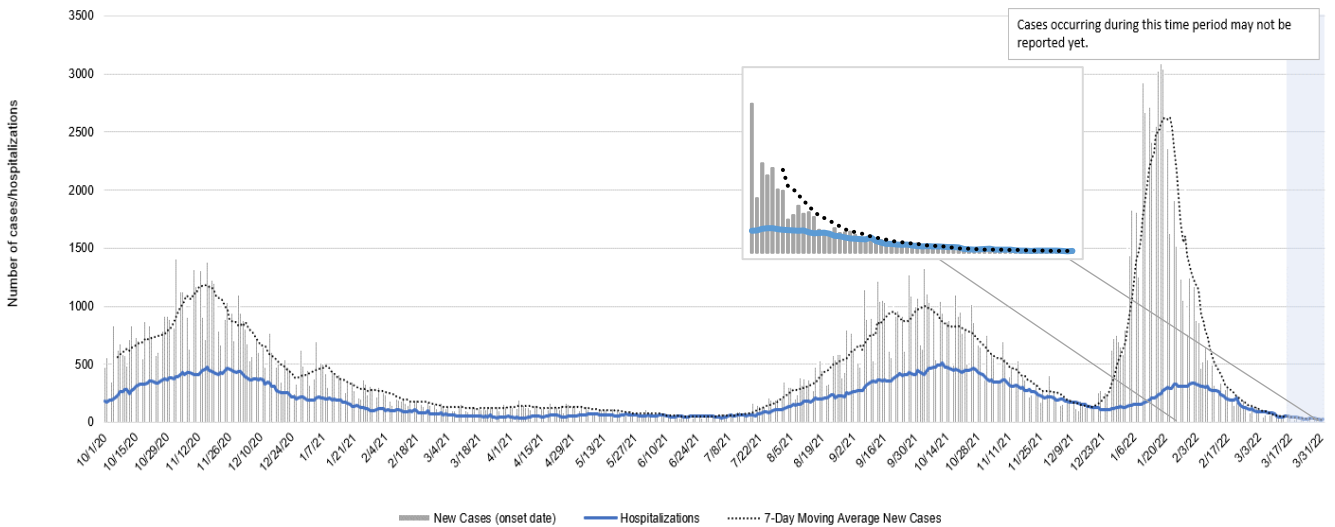


Figure 2: Status of Acute Care and ICU Beds – Hospitals in Montana, 3/23 – 4/5/2022

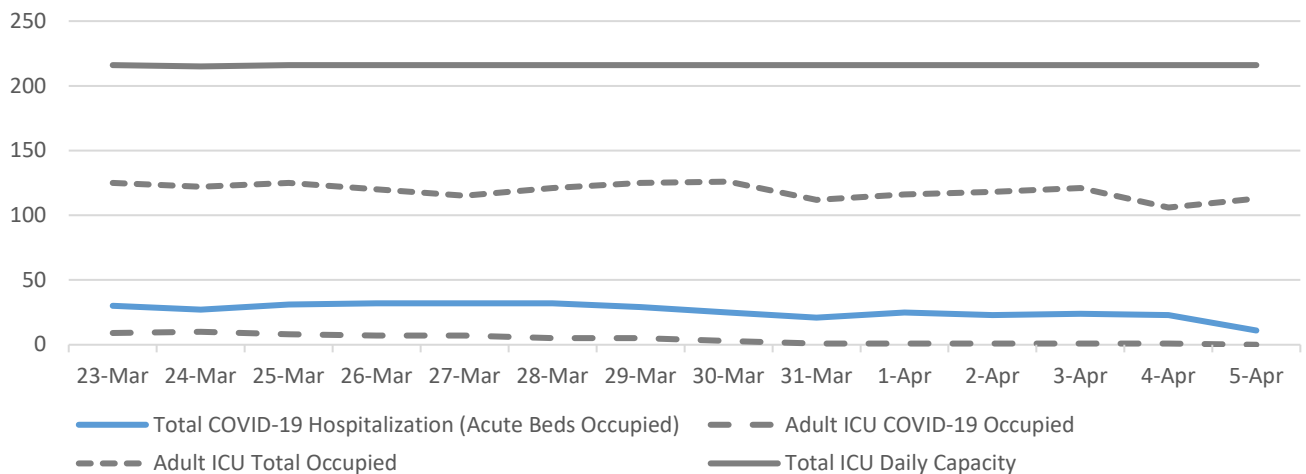
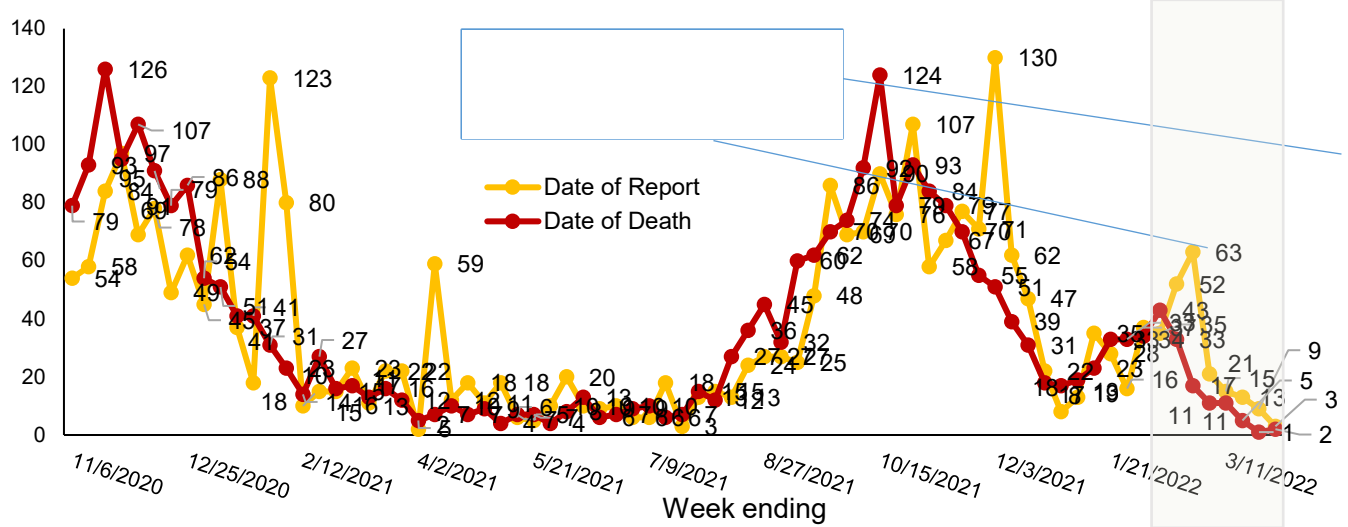


Figure 3. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 4/1/2022



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. Most recently, the Pfizer vaccine was approved for the 5-11 year old age group on October 29th, 2021. To date, 1,423,098 doses have been given across the state and 55% of the eligible population is considered fully vaccinated (table 2).

Table 2: COVID-19 Vaccine Doses Administered for the 5 and older population – Montana, as of 4/1/2022

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 3/18	WEEK ENDING 3/25	WEEK ENDING 4/1*
TOTAL DOSES ADMINISTERED	1,423,098		2,142	1,925	3,734
DOSE 1 ADMINISTERED	631,384	62%	516	462	441
FULLY VACCINATED INDIVIDUALS	560,244	55%	685	490	473

*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 4. COVID-19 Vaccine Doses Administered by Week, 5+ Years – Montana, as of 4/1/2022

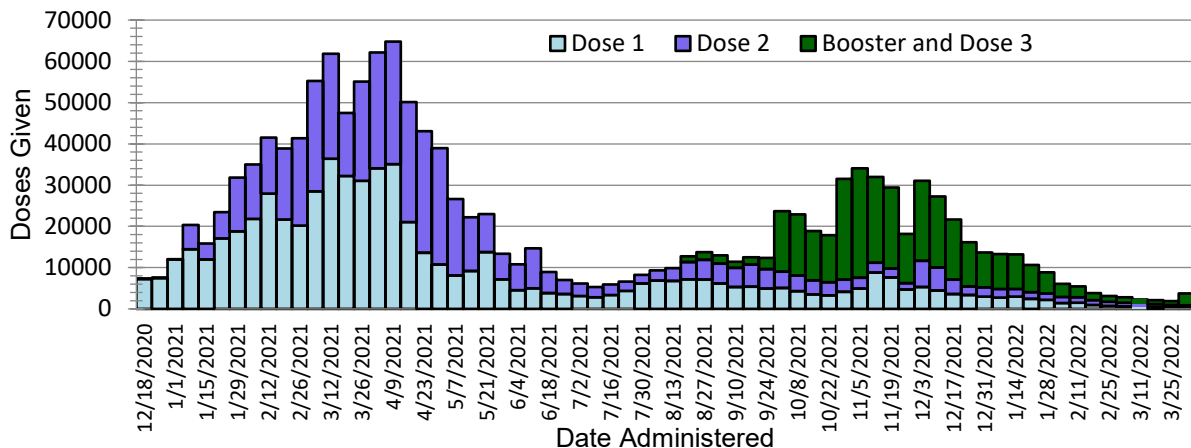
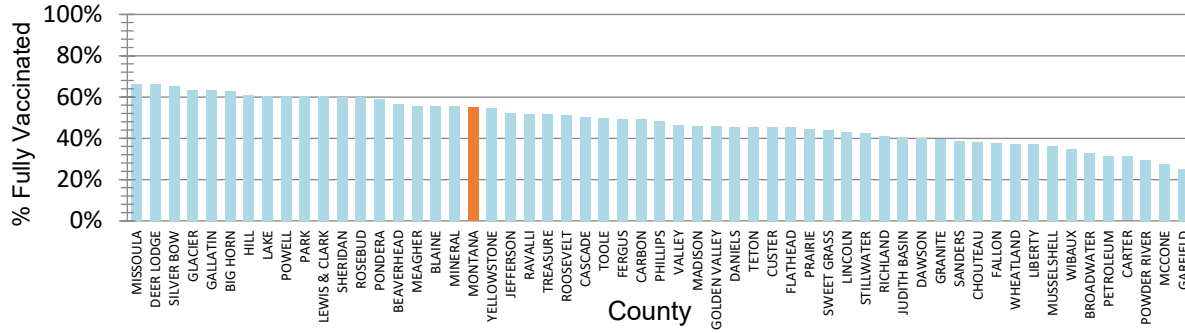


Figure 5. Percent of Eligible Montanans (5+ years) Fully Vaccinated by County – Montana, 4/1/2022



Variant and Breakthrough Cases

Figure 7 displays the percentage of the most common SARS-CoV-2 lineages detected each week, of all Montana samples sequenced that were collected that week. There were 13,092 samples from Montana that were sequenced and their lineages were reported to GISAID since September 2020; figure 6 displays the number of specimens sequenced by week. **Please note the relatively small number of samples sequenced in recent weeks limits interpretation of the available variant sequencing data.**

As of April 5, there have been 3,652 cases across Montana infected with Omicron variants—3,627 infected with BA.1/B.1.1.529 and 25 infected with BA.2. DPHHS is monitoring sublineages of the Omicron variant, including BA.2 (pink, below). There have been 25 cases of BA.2 reported since the first detection on January 30, 2022. In the past four weeks, 43 sequences have been reported to GISAID—38 (88%) BA.1/B.1.1.529 and 5 (12%) BA.2. No samples were collected and sequenced last week.

Figure 6. Number of COVID-19 samples sequenced by collection date, Montana 4/2/2022

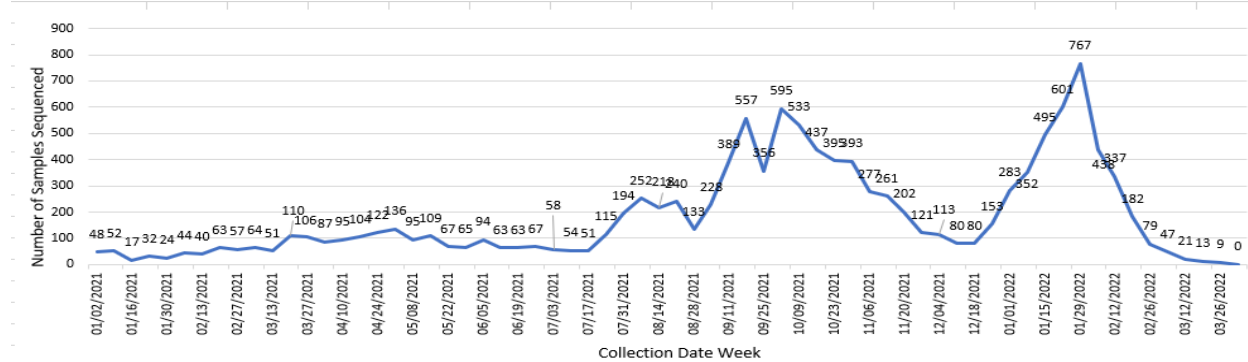
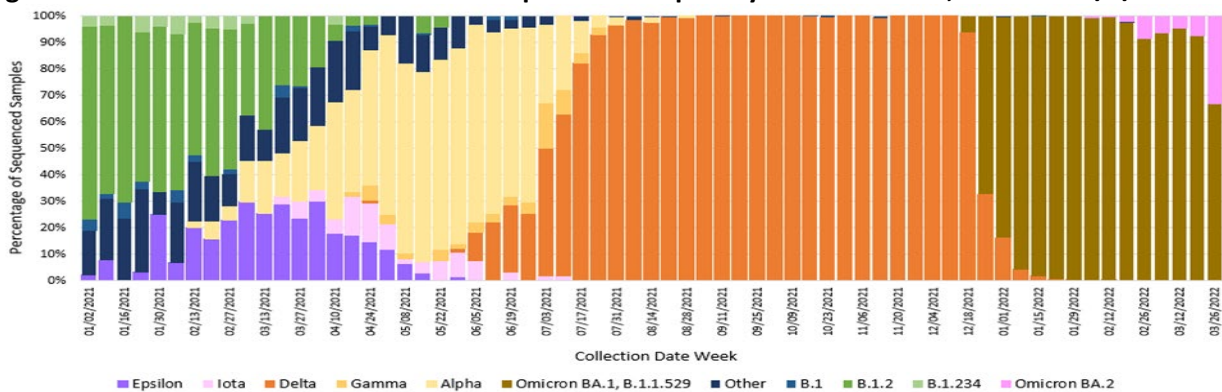


Figure 7. Percent of COVID-19 variants in sequenced samples by collection date, Montana 4/2/2022



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. Studies show that protection from COVID vaccination decreases over time; in response, the CDC has recommended booster doses for eligible populations to protect against waning immunity. As of 4/1/2022, Montana reports 42,808 cases of confirmed breakthrough disease, which includes 1,422 hospitalizations and 389 deaths. CDC data from January 2022 show that unvaccinated individuals aged 12 years and older were more than 3 times more likely to become infected with COVID-19, compared to fully vaccinated individuals in the same age group with a booster dose. Additionally, unvaccinated individuals 12 and older had 21 times the risk of dying from COVID-19 compared to fully vaccinated individuals in the same age group with booster doses.¹

Hospitalizations and Deaths and Vaccination Status

COVID-19-related hospitalizations and deaths were analyzed between **April 1, 2021 and April 1, 2022** to review vaccination status. Since the beginning of April 2021, 80% of Montanans who were hospitalized and 77% of those who died were unvaccinated at the time of infection (Table 3). Of the 6,995 individuals who were hospitalized during this time period, 135 (2%) were <18 years old, 948 (14%) were 18 to 44 years old, 2,289 (33%) were 45 to 64 years old and 3,623 (52%) were ≥ 65 years old.

Additionally, COVID-19-related hospitalization and death data from **February 5– April 1, 2022** (last 8 weeks) were analyzed to review vaccination status. Sixty-five percent of Montanans who were hospitalized and 59% of those who died had not received a COVID-19 vaccine (Table 4)[†]. Of the 494 individuals who were hospitalized during this time period, 14 (3%) were <18 years old, 44 (9%) were 18 to 44 years old, 122 (25%) were 45 to 64 years old and 314 (64%) were ≥ 65 years old.

Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1, 2021 to April 1, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	6,995	1,656
UNVACCINATED	5,578 (80%)	1,270 (77%)
VACCINATED (BREAKTHROUGH CASE)	1,417 (20%)	386 (23%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-102 (63)	23-103 (71)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	7-103 (73)	20-101 (81)

Table 4. Vaccination status of COVID-19 hospitalizations and deaths – February 5 to April 1, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	494	123
UNVACCINATED	320 (65%)	73 (59%)
VACCINATED (BREAKTHROUGH CASE)	174 (35%)	50 (41%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-100 (70)	40-100 (75)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	18-103 (72)	39-97 (78)

[†]The analysis of hospitalizations and deaths by vaccination status does not include data on booster doses. Booster doses are recommended by the CDC and have been shown to improve protection against hospitalization and death from COVID-19¹.

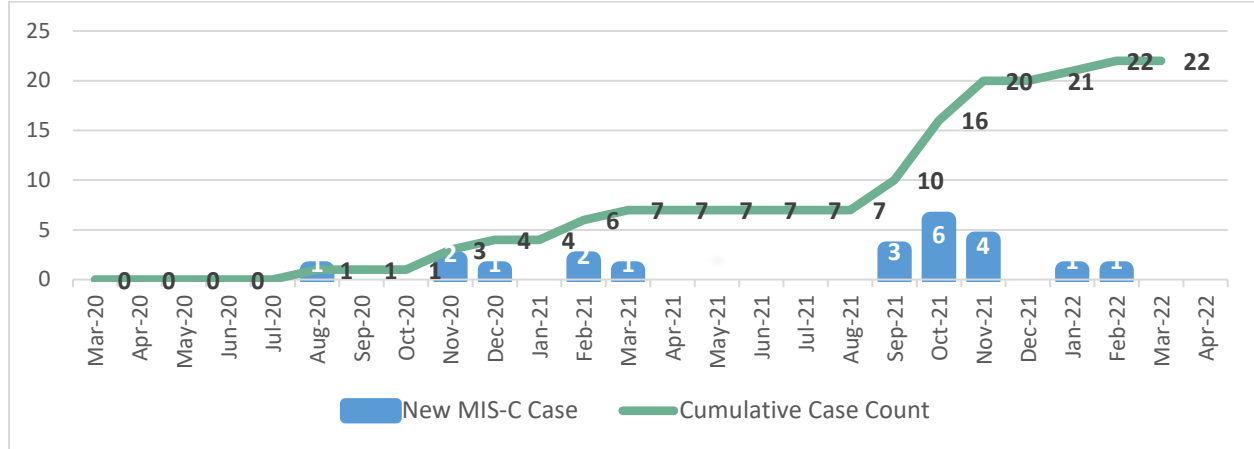
¹ CDC – COVID Data Tracker – Rates of COVID-19 Cases and Deaths by Vaccination Status.

<https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-status>. April 5, 2022.

Multisystem Inflammatory Syndrome in Children (MIS-C)

As of April 1, 2022, there have been a total of 22 reported cases of multisystem inflammatory syndrome in children, or MIS-C, reported in Montana. There have been no deaths. Ages range from less than 1 year to 20 years old; median is 8 years. Ten cases were female, 12 were male. Cases are from 13 counties around Montana. The first case of MIS-C was reported in August 2020; 15 of the 22 cases have been reported since September 2021 (Figure 8).

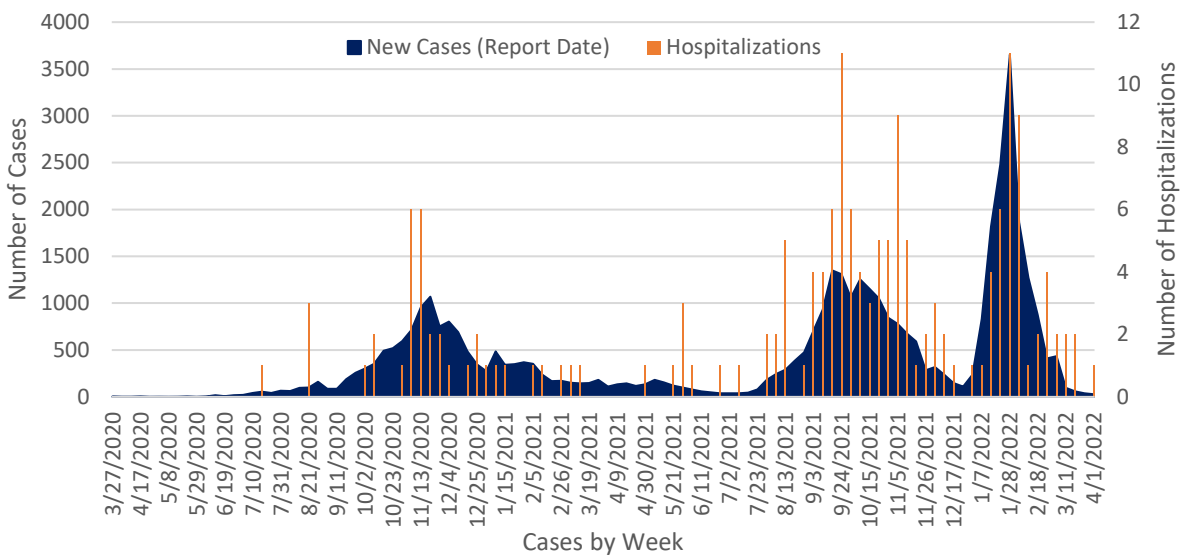
Figure 8. Montana MIS-C Cases by Month of Onset, March 2020 – April 2022



Cases and Hospitalizations Associated with COVID-19 Among Children

To date, there have been 42,874 children <18 years old in Montana diagnosed with COVID-19. Of those, 171 (<1%) have been hospitalized. Case rates among children follow a similar pattern to COVID-19 cases among all age groups (see Figure 1 for comparison) and increased sharply during the recent Omicron surge (Figure 9). There were 28 cases of COVID-19 in children reported during the week of March 26 – April 1, 2022, which is a 26% decrease in cases among that age group compared to the previous week. One hospitalization in a child was reported that week.

Figure 9. COVID-19 Cases and Hospitalizations by Week, March 2020 – April 1, 2022, Children <18



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

County	25 Feb	4 Mar	11 Mar	18 Mar	25 Mar	1 Apr	change from previous week*	Trendline
Beaverhead	12	10	1	3	4	5	1	
Big Horn	9	6	11	0	4	2	-2	
Blaine	9	61	11	2	1	2	1	
Broadwater	13	6	5	4	1	0	-1	
Carbon	11	15	8	2	4	1	-3	
Carter	2	6	1	2	0	0	0	
Cascade	717	461	90	29	21	13	-8	
Chouteau	12	3	2	0	0	7	7	
Custer	8	8	4	6	2	3	1	
Daniels	3	3	0	0	0	0	0	
Dawson	8	11	2	1	1	1	0	
Deer Lodge	39	30	15	5	8	2	-6	
Fallon	0	0	0	0	0	1	1	
Fergus	22	17	3	7	7	3	-4	
Flathead	643	734	51	20	31	17	-14	
Gallatin	180	127	81	37	32	36	4	
Garfield	0	0	1	0	0	0	0	
Glacier	32	86	12	6	3	0	-3	
Golden Valley	1	0	0	0	0	0	0	
Granite	2	0	1	1	1	0	-1	
Hill	24	87	8	4	3	2	-1	
Jefferson	4	6	0	1	0	2	2	
Judith Basin	1	0	0	1	0	1	1	
Lake	65	17	10	4	14	6	-8	
Lewis and Clark	93	62	33	53	27	11	-16	
Liberty	7	5	0	0	2	1	-1	
Lincoln	41	15	22	21	12	3	-9	
Madison	4	1	3	1	0	1	1	
McCone	1	0	0	0	0	0	0	
Meagher	3	1	0	0	0	0	0	

Missoula	160	129	76	68	31	40	9		
Park	14	19	7	9	6	5	-1		
Phillips	1	9	3	4	2	0	-2		
Powder River	2	1	0	1	2	1	-1		
Prairie	0	0	0	0	0	0	0		
Richland	13	20	31	27	3	4	1		
Rosebud	68	12	2	0	3	1	-2		
Sheridan	1	8	0	1	1	0	-1		
Stillwater	7	26	0	2	3	2	-1		
Teton	9	2	1	0	1	1	0		
Treasure	0	0	0	0	0	0	0		
Wheatland	0	2	1	1	0	0	0		
Yellowstone	203	460	77	47	24	24	0		
MONTANA	2606	2577	630	412	289	227	-62		

*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 5+	Dose 1	Dose 2	Dose 3	Fully Immunized	Total Doses Administered	Percent eligible with first dose (5+)	Percent Fully Vaccinated (5+)
BEAVERHEAD	9,091	5,503	4,427	2,628	5,127	12,558	61%	56%
BIG HORN	11,975	8,248	7,110	2,823	7,486	18,181	69%	63%
BLAINE	6,044	3,738	3,138	1,518	3,346	8,394	62%	55%
BROADWATER	6,092	2,381	1,747	959	1,989	5,087	39%	33%
CARBON	10,476	5,593	4,784	2,695	5,137	13,072	53%	49%
CARTER	1,141	378	335	182	357	895	33%	31%
CASCADE	76,124	42,954	34,177	18,085	38,262	95,216	56%	50%
CHOUTEAU	5,430	2,229	1,889	1,306	2,076	5,424	41%	38%
CUSTER	10,692	5,373	4,327	2,385	4,838	12,085	50%	45%
DANIELS	1,559	743	654	349	709	1,746	48%	45%
DAWSON	8,071	3,548	2,929	1,618	3,240	8,095	44%	40%
DEER LODGE	8,887	6,369	5,280	3,288	5,858	14,937	72%	66%
FALLON	2,646	1,081	950	472	1,000	2,503	41%	38%
FERGUS	10,495	5,482	4,760	2,790	5,157	13,032	52%	49%
FLATHEAD	99,993	52,084	40,870	22,639	45,175	115,593	52%	45%
GALLATIN	110,900	82,917	63,635	33,973	69,860	180,525	75%	63%
GARFIELD	1,188	319	254	104	297	677	27%	25%
GLACIER	12,447	10,489	7,322	3,228	7,882	21,039	84%	63%
GOLDEN VALLEY	788	388	328	161	360	877	49%	46%
GRANITE	3,218	1,457	1,165	624	1,271	3,246	45%	39%
HILL	14,914	9,913	7,699	4,121	9,090	21,733	66%	61%
JEFFERSON	11,819	6,735	5,711	3,330	6,124	15,776	57%	52%
JUDITH BASIN	1,880	803	693	407	757	1,903	43%	40%
LAKE	29,280	19,996	16,447	9,018	17,679	45,461	68%	60%
LEWIS & CLARK	66,257	45,169	36,905	21,706	39,785	103,780	68%	60%
LIBERTY	2,234	856	727	448	827	2,031	38%	37%
LINCOLN	19,480	9,451	7,650	4,282	8,355	21,383	49%	43%
MADISON	8,589	4,399	3,491	2,093	3,928	9,983	51%	46%
MCCONE	1,562	453	420	240	429	1,113	29%	27%
MEAGHER	1,726	1,010	873	501	957	2,384	59%	55%
MINERAL	4,302	2,627	1,907	1,209	2,378	5,743	61%	55%
MISSOULA	115,881	84,968	70,710	41,625	76,774	197,303	73%	66%
MUSSELSHELL	4,458	1,733	1,413	732	1,613	3,878	39%	36%
PARK	15,969	11,175	8,694	5,008	9,622	24,877	70%	60%
PETROLEUM	483	162	141	85	152	388	34%	31%
PHILLIPS	3,675	1,905	1,468	909	1,774	4,282	52%	48%
PONDERA	5,389	3,553	2,787	1,473	3,165	7,813	66%	59%
POWDER RIVER	1,588	499	407	208	464	1,114	31%	29%
POWELL	6,534	4,229	3,154	1,917	3,945	9,300	65%	60%
PRAIRIE	994	465	414	244	438	1,123	47%	44%
RAVALLI	42,972	24,487	19,698	12,064	22,086	56,249	57%	51%
RICHLAND	10,310	4,473	3,546	1,874	4,229	9,893	43%	41%
ROOSEVELT	9,918	5,704	4,288	2,169	5,046	12,161	58%	51%
ROSEBUD	8,160	5,437	4,337	2,212	4,860	11,986	67%	60%
SANDERS	11,641	5,040	4,180	2,339	4,482	11,559	43%	39%
SHERIDAN	3,075	1,936	1,709	1,006	1,842	4,651	63%	60%
SILVER BOW	33,267	23,836	20,374	11,519	21,730	55,729	72%	65%
STILLWATER	9,451	4,353	3,441	2,077	3,999	9,871	46%	42%
SWEET GRASS	3,523	1,700	1,323	798	1,548	3,821	48%	44%
TETON	5,819	3,113	2,198	1,264	2,638	6,575	53%	45%
TOOLE	4,391	2,338	1,769	845	2,190	4,952	53%	50%
TREASURE	623	426	297	145	320	868	68%	51%
VALLEY	6,931	3,377	2,735	1,686	3,197	7,798	49%	46%
WHEATLAND	2,035	804	699	401	754	1,904	40%	37%
WIBAUX	898	356	301	136	310	793	40%	35%
YELLOWSTONE	153,378	92,629	77,040	40,069	83,330	209,738	60%	54%
MONTANA	1,020,663	631,384	509,727	281,987	560,244	1,423,098	62%	55%