

Weekly COVID-19 Update in Montana (as of 3/18/2022)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of March 18, 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 3/18/2022

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	272,151	418	-34%
LABORATORY TESTS	2,697,673	18,412	+2%
HOSPITALIZATIONS	11,797	49	-37%
DEATHS	3,236	13	-13%

Figure 1. COVID-19 Cases and Hospitalizations over Time – Montana, as of 3/18/2022

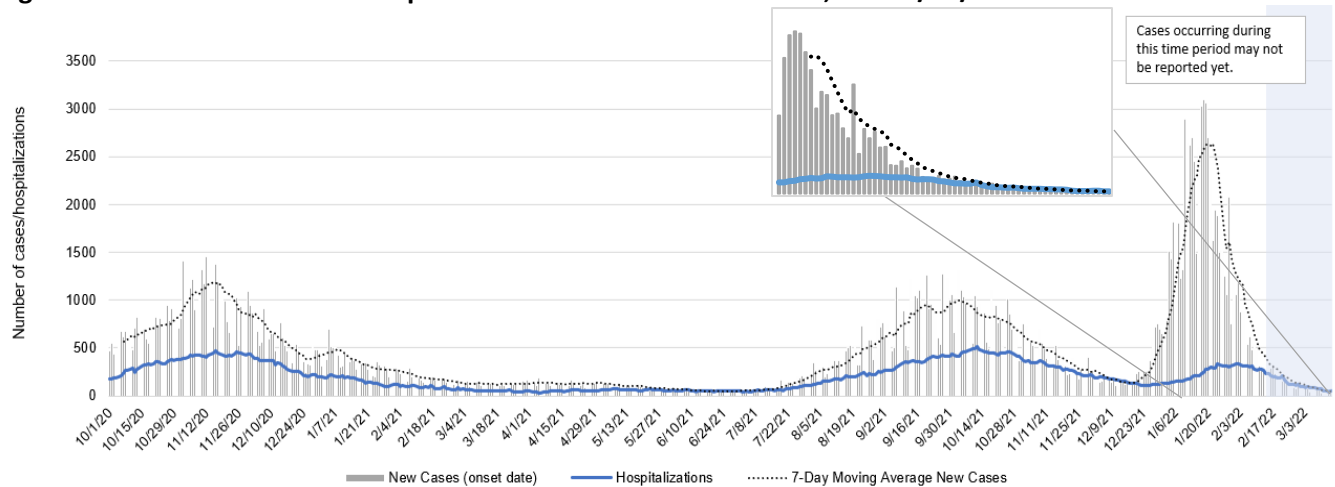


Figure 2: Status of Acute Care and ICU Beds – Hospitals in Montana, 3/9 - 3/22/2022

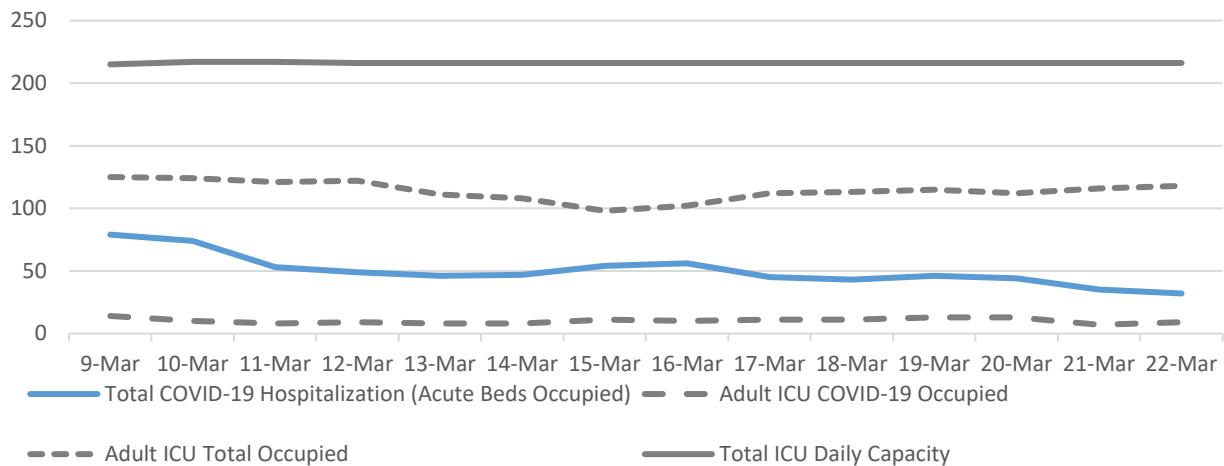
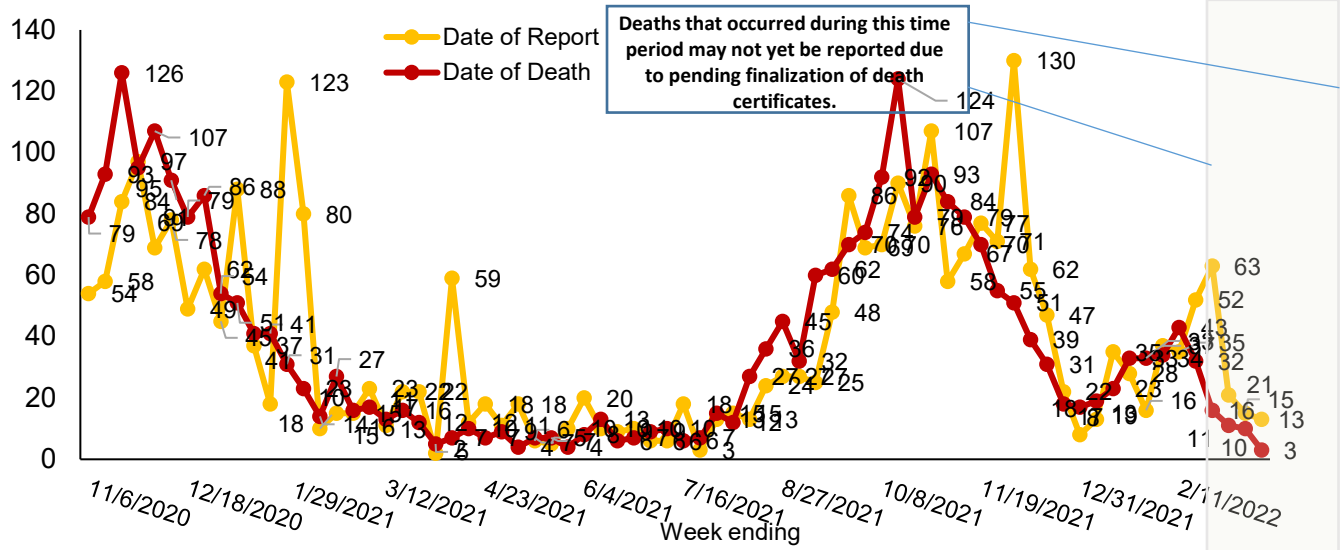


Figure 3. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 3/18/2022



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, 1,416,187 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 3/18/2022

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 3/4	WEEK ENDING 3/11	WEEK ENDING 3/18*
TOTAL DOSES ADMINISTERED	1,416,187		2,817	2,287	1,907
DOSE 1 ADMINISTERED	630,261	62%	635	531	453
FULLY VACCINATED INDIVIDUALS	558,817	55%	921	777	619

*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 3/18/2022

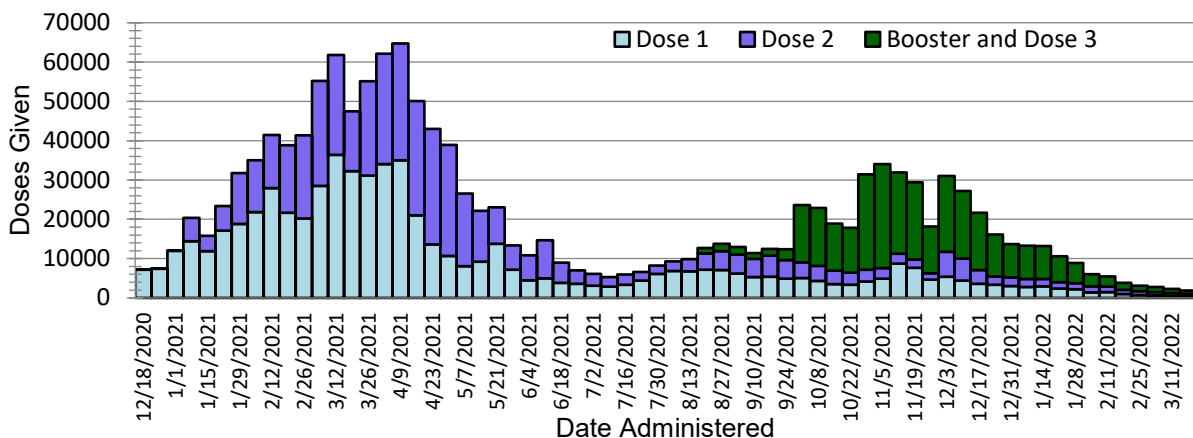
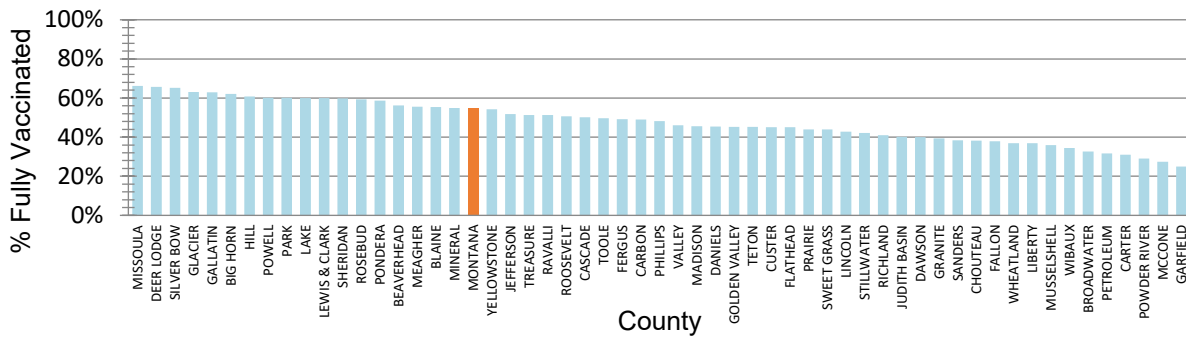


Figure 5. Percent of Eligible Montanans (5+ years) Fully Vaccinated by County – Montana, 3/18/2022



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 12,707 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.

As of March 22, there have been 3,569 cases across Montana infected with the Omicron variant. In the last four weeks, 134/134 (100%) specimens that were collected and sequenced were Omicron. Omicron is the dominant circulating strain in the state and is displayed in brown on the chart below. DPHHS is monitoring sublineages of the Omicron variant, including BA.2 (pink, below). There have been 21 cases of BA.2 reported; the first detection was January 30, 2022. Since that time, Montana has reported 1,068 detections of Omicron sublineages BA.1 and B.1.1.529. Please note that no positive specimens collected last week have been reported to GISAID yet.

Figure 6. Number of COVID-19 samples sequenced by collection date, Montana 3/22/2022

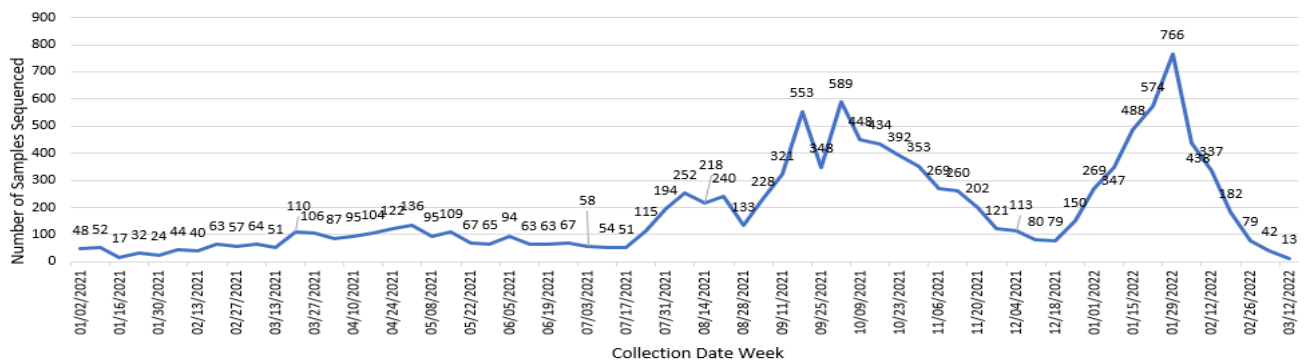
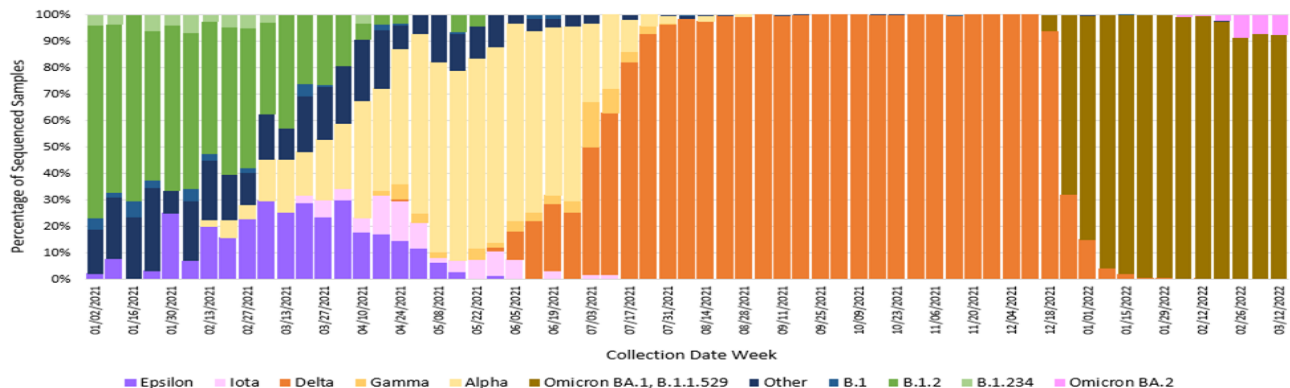


Figure 7. Percent of COVID-19 variants in sequenced samples by collection date, Montana 3/22/2022



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 3/18/2022, Montana reports 42,481 cases of confirmed breakthrough disease, which includes 1,406 hospitalizations and 381 deaths. CDC data from January 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 March 18, 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 6,958 individuals who were hospitalized during this time period, 133 (2%) were <18 years old, 942 (14%) were 18 to 44 years old, 2,279 (33%) were 45 to 64 years old and 3,604 (52%) were ≥ 65 years old.

Additionally, COVID-19-related hospitalization and death data from **January 22– March 18, 2022** (last 8 weeks) were analyzed to review vaccination status. Sixty-six percent of Montanans who were hospitalized and 66% of those who died had not received a COVID-19 vaccine (Table 4)[†]. Of the 945 individuals who were hospitalized during this time period, 33 (4%) were <18 years old, 87 (9%) were 18 to 44 years old, 246 (26%) were 45 to 64 years old and 579 (61%) were ≥ 65 years old.

Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1, 2021 to March 18, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	6,958	1,644
UNVACCINATED	5,559 (80%)	1,265 (77%)
VACCINATED (BREAKTHROUGH CASE)	1,399 (20%)	379 (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 – January 22 to March 18, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	945	182
UNVACCINATED	626 (66%)	121 (66%)
VACCINATED (BREAKTHROUGH CASE)	319 (34%)	61 (34%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-101 (69)	40-101 (75)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	7-103 (72)	48-100 (80)

[†]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.

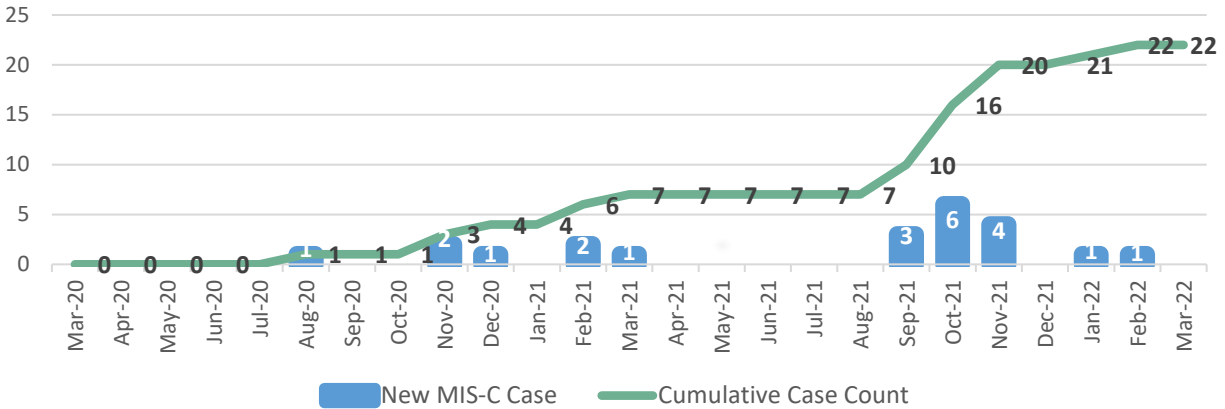
¹ CDC – COVID Data Tracker – Rates of COVID-19 Cases and Deaths by Vaccination Status.

<https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-status>. March 22, 2022.

Multisystem Inflammatory Syndrome in Children (MIS-C)

As of March 18, 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).

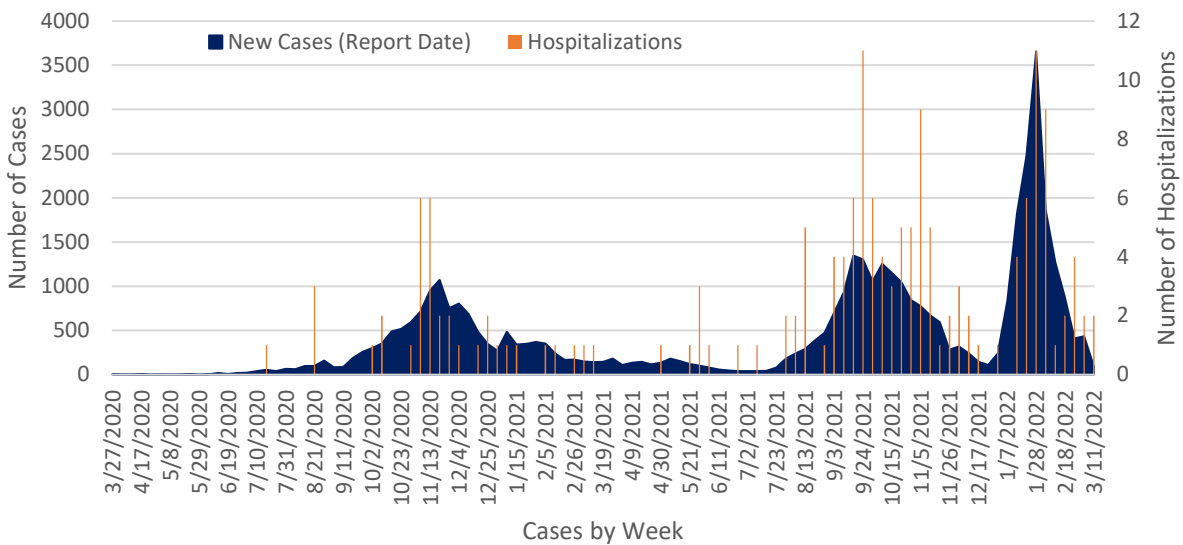
Figure 8. Montana MIS-C Cases by Month of Onset, March 2020 – March 2022



Cases and Hospitalizations Associated with COVID-19 Among Children

To date, there have been 42,808 children <18 years old in Montana diagnosed with COVID-19. Of those, 169 (<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 59 cases of COVID-19 in children reported during the week of March 12 – March 18, 2022, which is a 37% decrease in cases among that age group compared to the previous week. Two hospitalizations in children were reported that week.

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



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

County	11-Feb	18-Feb	25-Feb	4-Mar	11-Mar	18-Mar	change from previous week*	Trendline
Beaverhead	29	12	12	10	1	3	2	
Big Horn	335	240	9	6	11	0	-11	
Blaine	187	23	9	61	11	2	-9	
Broadwater	25	30	13	6	5	4	-1	
Carbon	33	15	11	15	8	2	-6	
Carter	2	2	2	6	1	2	1	
Cascade	961	961	717	462	90	31	-59	
Chouteau	27	13	12	3	2	0	-2	
Custer	53	35	8	8	4	6	2	
Daniels	13	1	3	3	0	0	0	
Dawson	38	8	8	11	2	1	-1	
Deer Lodge	82	29	39	30	16	5	-11	
Fallon	17	6	0	0	0	0	0	
Fergus	76	73	22	17	3	7	4	
Flathead	634	1041	643	734	56	20	-36	
Gallatin	423	257	180	127	80	37	-43	
Garfield	4	3	0	0	1	0	-1	
Glacier	175	204	32	86	12	6	-6	
Golden Valley	5	0	1	0	0	0	0	
Granite	8	9	2	0	1	1	0	
Hill	157	32	24	87	8	4	-4	
Jefferson	64	21	4	6	0	1	1	
Judith Basin	6	3	1	0	0	1	1	
Lake	128	234	65	17	10	4	-6	
Lewis and Clark	327	171	93	62	33	56	23	
Liberty	10	5	7	5	0	0	0	
Lincoln	89	41	41	15	22	21	-1	
Madison	24	12	4	1	3	1	-2	
McCone	6	3	1	0	0	0	0	
Meagher	17	3	3	1	0	0	0	

County	11-Feb	18-Feb	25-Feb	4-Mar	11-Mar	18-Mar	change from previous week*	Trendline
Mineral	23	14	4	4	1	1	0	
Missoula	533	306	160	130	76	68	-8	
Musselshell	21	5	4	3	1	0	-1	
Park	176	87	14	19	7	9	2	
Petroleum	1	0	0	0	0	0	0	
Phillips	23	9	1	9	3	4	1	
Pondera	32	8	4	3	1	1	0	
Powder River	6	5	2	1	0	1	1	
Powell	51	9	5	5	4	1	-3	
Prairie	6	3	0	0	0	0	0	
Ravalli	118	42	46	26	22	15	-7	
Richland	43	20	13	20	31	27	-4	
Roosevelt	155	67	26	28	7	8	1	
Rosebud	356	142	68	12	2	0	-2	
Sanders	42	16	11	13	7	2	-5	
Sheridan	24	8	1	8	0	1	1	
Silver Bow	134	72	40	18	8	10	2	
Stillwater	30	13	7	26	0	2	2	
Sweet Grass	9	2	7	2	1	1	0	
Teton	14	11	9	2	1	0	-1	
Toole	23	8	3	1	3	2	-1	
Treasure	2	0	0	0	0	0	0	
Valley	41	18	12	7	2	2	0	
Wheatland	18	6	0	2	1	1	0	
Wibaux	0	1	0	0	0	0	0	
Yellowstone	658	326	203	460	77	47	-30	
MONTANA	6494	4685	2606	2578	635	418	-217	

*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	5,497	4,412	2,604	5,110	12,513	60%	56%
BIG HORN	11,975	8,235	7,071	2,765	7,445	18,071	69%	62%
BLAINE	6,044	3,729	3,135	1,500	3,343	8,364	62%	55%
BROADWATER	6,092	2,380	1,743	941	1,985	5,064	39%	33%
CARBON	10,476	5,590	4,782	2,674	5,132	13,046	53%	49%
CARTER	1,141	376	332	181	354	889	33%	31%
CASCADE	76,124	42,876	34,105	17,763	38,181	94,744	56%	50%
CHOUTEAU	5,430	2,229	1,886	1,292	2,073	5,407	41%	38%
CUSTER	10,692	5,352	4,314	2,339	4,824	12,005	50%	45%
DANIELS	1,559	743	653	345	708	1,741	48%	45%
DAWSON	8,071	3,535	2,921	1,607	3,230	8,063	44%	40%
DEER LODGE	8,887	6,355	5,267	3,233	5,845	14,855	72%	66%
FALLON	2,646	1,083	952	471	1,002	2,506	41%	38%
FERGUS	10,495	5,486	4,759	2,763	5,158	13,008	52%	49%
FLATHEAD	99,993	52,038	40,755	22,211	45,052	115,004	52%	45%
GALLATIN	110,900	82,726	63,475	33,452	69,682	179,653	75%	63%
GARFIELD	1,188	319	253	104	296	676	27%	25%
GLACIER	12,447	10,459	7,301	3,185	7,859	20,945	84%	63%
GOLDEN VALLEY	788	386	325	156	357	867	49%	45%
GRANITE	3,218	1,451	1,162	608	1,268	3,221	45%	39%
HILL	14,914	9,897	7,684	4,074	9,073	21,655	66%	61%
JEFFERSON	11,819	6,728	5,702	3,274	6,116	15,704	57%	52%
JUDITH BASIN	1,880	801	691	388	754	1,880	43%	40%
LAKE	29,280	19,897	16,353	8,786	17,572	45,036	68%	60%
LEWIS & CLARK	66,257	45,093	36,816	21,367	39,689	103,276	68%	60%
LIBERTY	2,234	858	724	448	824	2,030	38%	37%
LINCOLN	19,480	9,436	7,633	4,213	8,339	21,282	48%	43%
MADISON	8,589	4,397	3,483	2,069	3,919	9,949	51%	46%
MCCONE	1,562	452	419	237	428	1,108	29%	27%
MEAGHER	1,726	1,011	874	498	958	2,383	59%	56%
MINERAL	4,302	2,627	1,894	1,189	2,365	5,710	61%	55%
MISSOULA	115,881	84,856	70,561	41,004	76,616	196,421	73%	66%
MUSSELSHELL	4,458	1,727	1,406	725	1,604	3,858	39%	36%
PARK	15,969	11,167	8,678	4,962	9,605	24,807	70%	60%
PETROLEUM	483	163	142	85	153	390	34%	32%
PHILLIPS	3,675	1,901	1,465	904	1,771	4,270	52%	48%
PONDERA	5,389	3,552	2,785	1,457	3,162	7,794	66%	59%
POWDER RIVER	1,588	499	404	204	461	1,107	31%	29%
POWELL	6,534	4,220	3,143	1,895	3,932	9,258	65%	60%
PRAIRIE	994	464	413	242	437	1,119	47%	44%
RAVALLI	42,972	24,461	19,650	11,898	22,034	56,009	57%	51%
RICHLAND	10,310	4,461	3,541	1,860	4,223	9,862	43%	41%
ROOSEVELT	9,918	5,687	4,269	2,132	5,021	12,088	57%	51%
ROSEBUD	8,160	5,433	4,315	2,183	4,838	11,931	67%	59%
SANDERS	11,641	5,033	4,168	2,318	4,470	11,519	43%	38%
SHERIDAN	3,075	1,934	1,707	978	1,840	4,619	63%	60%
SILVER BOW	33,267	23,795	20,332	11,268	21,682	55,395	72%	65%
STILLWATER	9,451	4,341	3,433	2,047	3,989	9,821	46%	42%
SWEET GRASS	3,523	1,700	1,323	795	1,548	3,818	48%	44%
TETON	5,819	3,111	2,193	1,251	2,635	6,555	53%	45%
TOOLE	4,391	2,334	1,766	826	2,183	4,926	53%	50%
TREASURE	623	426	297	142	320	865	68%	51%
VALLEY	6,931	3,373	2,726	1,675	3,188	7,774	49%	46%
WHEATLAND	2,035	803	696	398	751	1,897	39%	37%
WIBAUX	898	354	301	136	309	791	39%	34%
YELLOWSTONE	153,378	92,424	76,826	39,388	83,104	208,638	60%	54%
MONTANA	1,020,663	630,261	508,416	277,510	558,817	1,416,187	62%	55%