Weekly COVID-19 Update in Montana (as of 1/7/2022)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of January 7, 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 1/7/2022

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
LABORATORY TESTS	**2,323,796**	**42,771**	**+81%**
DEATHS	**2,921**	**13**	**+63%**

Figure 1. COVID-19 Cases and Hospitalizations over Time - Montana, as of 1/7/2022

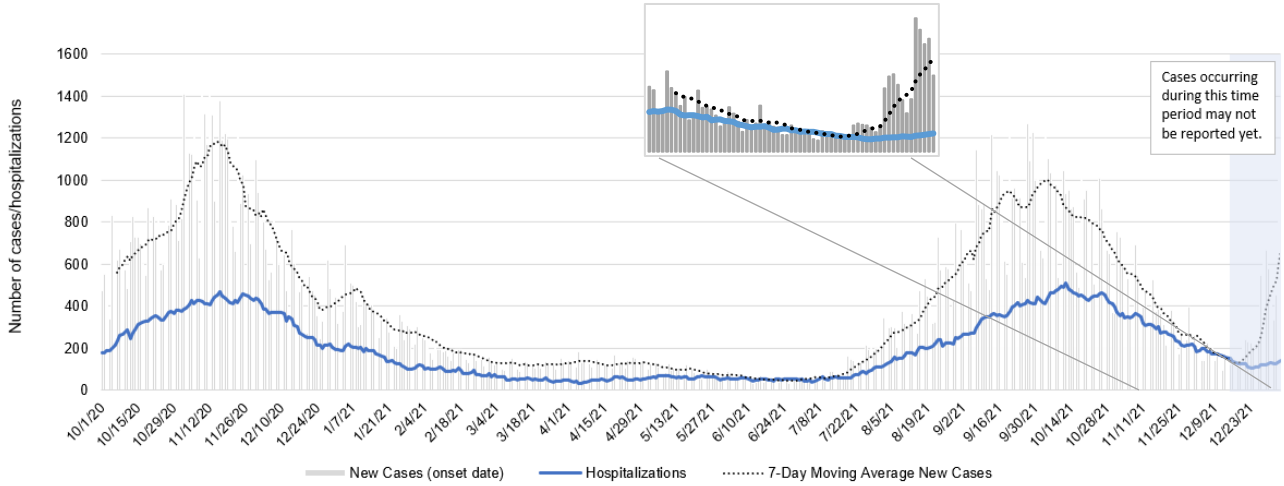
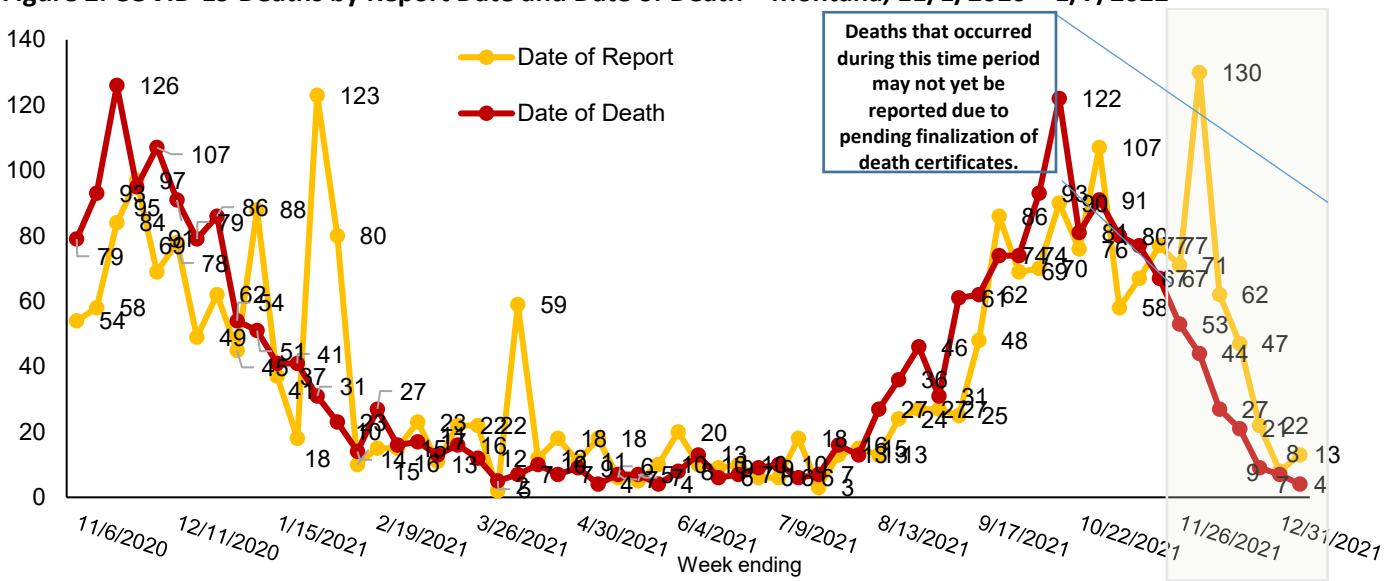


Figure 2. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 1/7/2022



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, 1,344,571 doses have been given across the state and 53% of the eligible population is considered fully vaccinated (table 3).

Table 2: COVID-19 Vaccine Doses Administered for the 12 and older population – Montana, as of 1/7/2022

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 12/24	WEEK ENDING 12/31	WEEK ENDING 1/7
TOTAL DOSES ADMINISTERED	**1,315,861**		13,534	10,729	**9,282**
DOSE 1 ADMINISTERED	**596,286**	**64%**	2,358	1,873	**1,489**
FULLY VACCINATED INDIVIDUALS	**530,367**	**57%**	1,407	1,346	**1,098**

*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.

Table 3: COVID-19 Vaccine Doses Administered for the 5 and older population – Montana, as of 1/7/2022

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 12/24	WEEK ENDING 12/31	WEEK ENDING 1/7
TOTAL DOSES ADMINISTERED	**1,344,571**		14,906	12,387	**10,580**
DOSE 1 ADMINISTERED	**613,198**	**60%**	3,010	2,630	**2,072**
FULLY VACCINATED INDIVIDUALS	**542,157**	**53%**	2,127	2,247	**1,813**

*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, 5+ Years – Montana, as of 1/7/2022

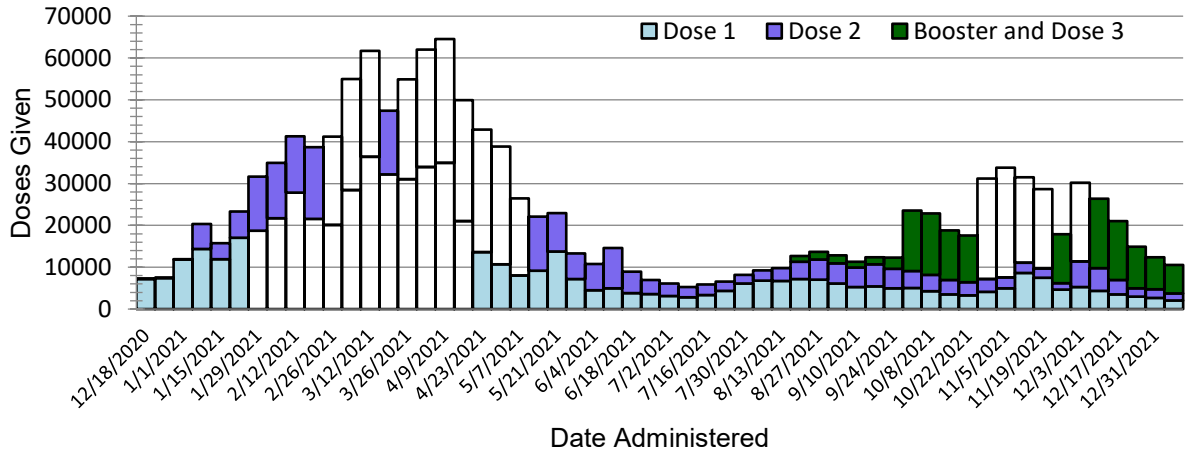
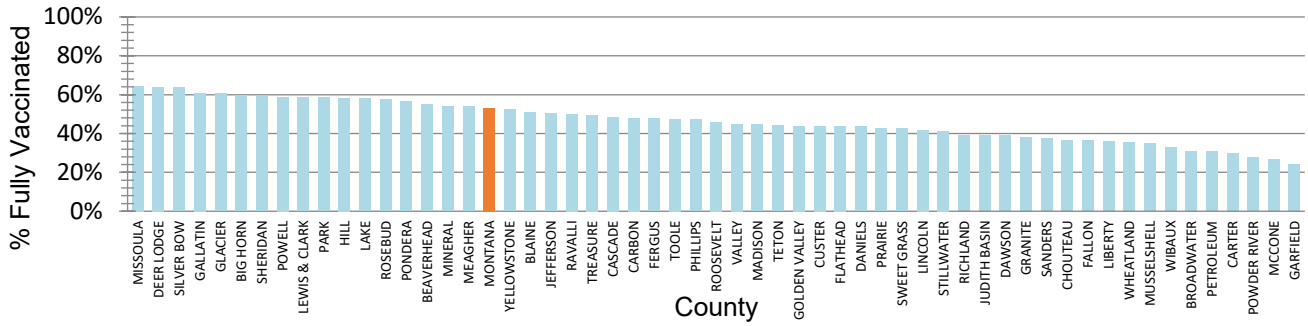


Figure 4. Percent of Eligible Montanans (5+ years) Fully Vaccinated by County – Montana, 1/7/2022



Variant and Breakthrough Cases

Figure 6 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 9,083 samples from Montana that were sequenced and their lineages were reported to GISAID since September 2020; figure 5 displays the number of specimens sequenced by week.

As of January 11, there have been 174 cases in Montana infected with the omicron variant, in over half of Montana's local and tribal health jurisdictions. Last week, 37/44 (84%) specimens that were collected and sequenced were Omicron, the remaining 7 were Delta. The week prior, 79/113 (70%) specimens that were collected and sequenced were Omicron, the remainder were Delta. We consider Omicron to be the dominant circulating strain in the state. Omicron is displayed in brown on the chart below.

Figure 5. Number of COVID-19 samples sequenced by collection date, Montana 1/8/2022 [n=9,083]

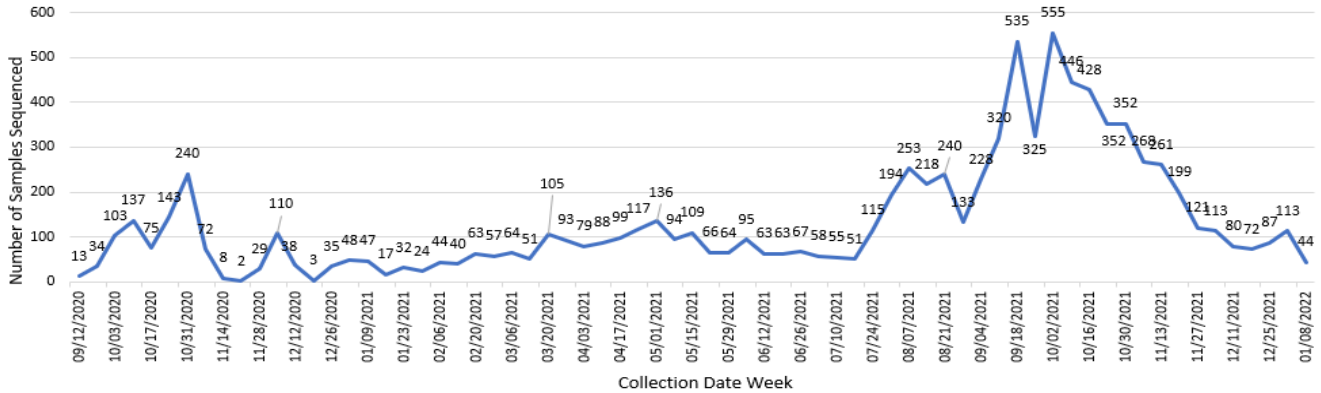
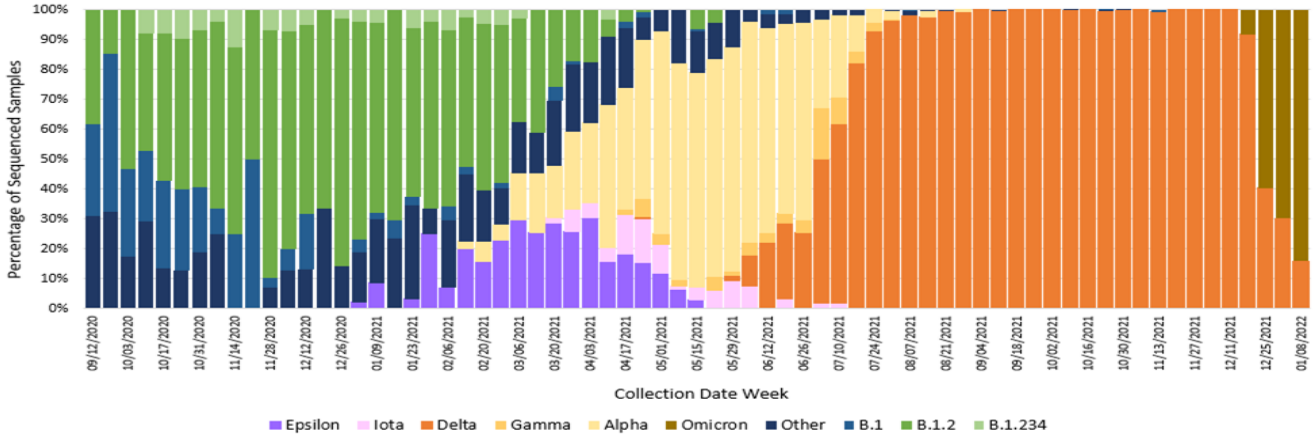


Figure 6. Percent of COVID-19 variants in sequenced samples by collection date, Montana 1/8/2022



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 many populations to protect against waning immunity. As of 1/7/2022, Montana reports 20,281 cases of confirmed breakthrough disease, which includes 974 hospitalizations and 290 deaths. CDC data from November show that those who were unvaccinated were more than 3 times more likely to become infected with COVID, compared to those who were vaccinated. However, when booster doses were considered, those who were unvaccinated were more than 9 times more likely to become infected compared to those who were boosted.[1]

Hospitalizations and Deaths and Vaccination Status

COVID-19-related hospitalizations and deaths were analyzed between **April 1, 2021 and January 7, 2022** to review vaccination status. Since the beginning of April this year, 83% of Montanans who were hospitalized and 79% of those who died were unvaccinated at the time of infection (Table 4). Of the 5,666 individuals who were hospitalized during this time period, 92 (2%) were <18 years old, 812 (14%) were 18 to 44 years old, 1,951 (34%) were 45 to 64 years old and 2,811 (50%) were ≥65 years old.

Additionally, COVID-19-related hospitalization and death data from **November 13, 2021 – January 7, 2022** (last 8 weeks) were analyzed to review vaccination status. Eighty percent of Montanans who were hospitalized and 77% of those who died had not received a COVID-19 vaccine (Table 5). Of the 811 individuals who were hospitalized during this time period, 10 (1%) were <18 years old, 81 (10%) were 18 to 44 years old, 282 (35%) were 45 to 64 years old and 438 (54%) were ≥65 years old.

Table 4. Vaccination status of COVID-19 hospitalizations and deaths – April 1 to January 7, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	**5,666**	**1340**
UNVACCINATED	4,701 (83%)	1052 (79%)
VACCINATED (BREAKTHROUGH CASE)	965 (17%)	288 (21%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**<1-102 (62)**	**22-103 (71)**
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**16-101 (74)**	**20-101 (81)**

Table 5. Vaccination status of COVID-19 hospitalizations and deaths – November 13 to January 7, 2022

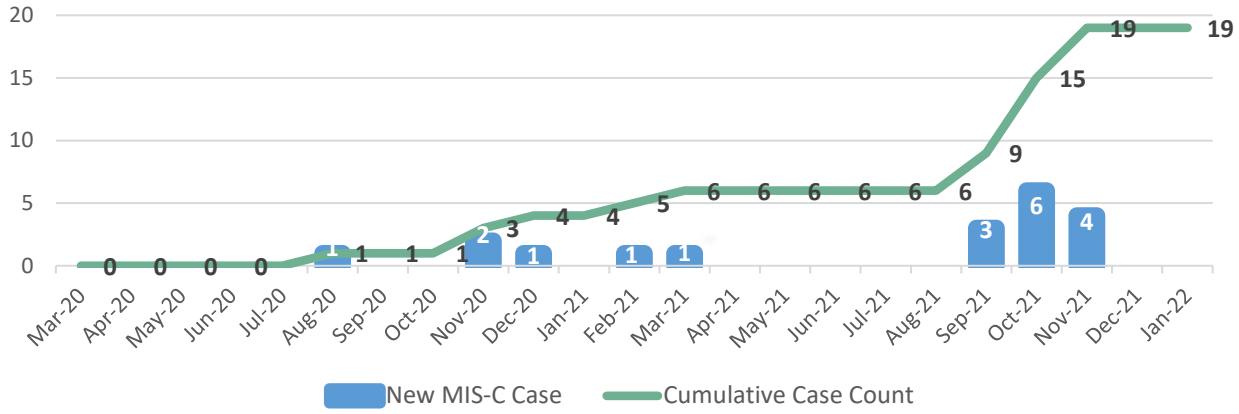
	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	**811**	**132**
UNVACCINATED	649 (80%)	101 (77%)
VACCINATED (BREAKTHROUGH CASE)	162 (20%)	31 (23%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**<1-99 (64)**	**31-99 (71)**
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**2-94 (73)**	**50-101 (78)**

[1] CDC – Stay Up to Date with Your Vaccines – Data Supporting Need for a Booster Shot. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html. January 11, 2022.

Multisystem Inflammatory Syndrome in Children (MIS-C)

As of January 7, 2022, Montana has a total of 19 reported cases of multisystem inflammatory syndrome in children, or MIS-C. There have been no deaths. Ages range from less than 1 year to 20 years old; median is 8 years. Nine cases were female, 10 were male. Cases are from 13 counties around Montana. The first case of MIS-C was reported in August 2020; 13 of the 19 cases have been reported since September 2021 (Figure 7).

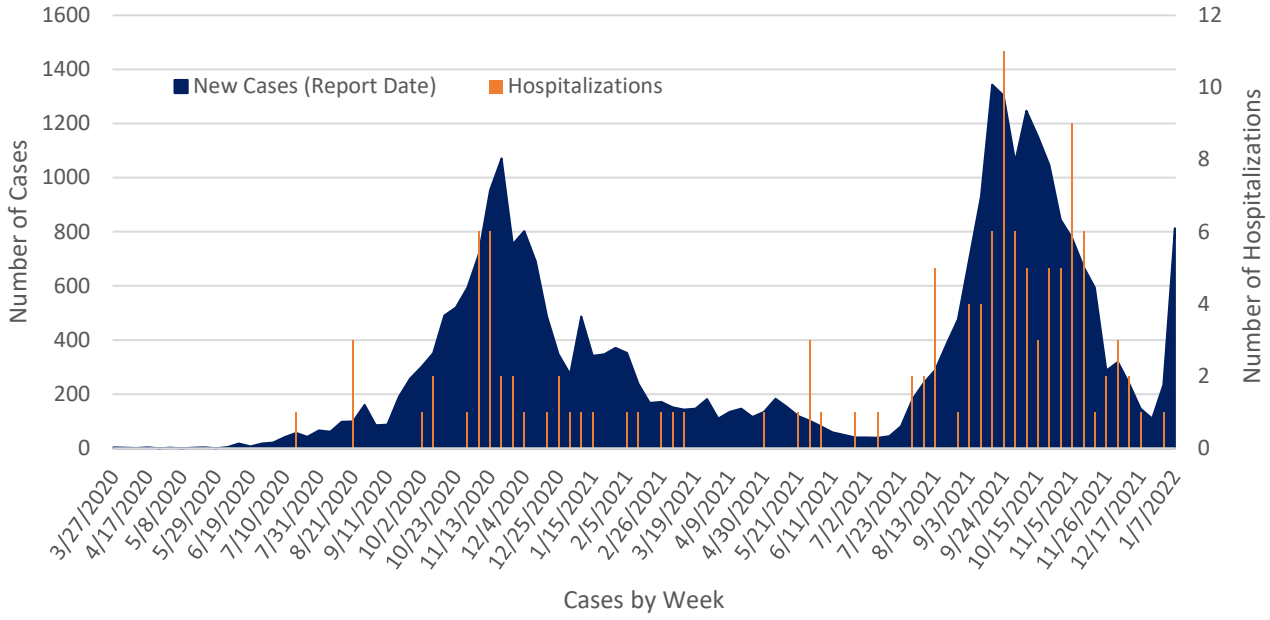
Figure 7. Montana MIS-C Cases by Month, March 2020 – January 2022



Cases and Hospitalizations Associated with COVID-19 Among Children

To date, there have been 29,810 children <18 years old in Montana diagnosed with COVID-19. Of those, 128 (<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 have increased sharply during the recent Omicron surge (Figure 8). There were 814 cases of COVID-19 in children reported during the first week of January 2022, and no hospitalizations in children were reported that week.

Figure 8. COVID-19 Cases and Hospitalizations by Month, March 2020 – January 2022, Among Children



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

County	3 Dec	10 Dec	17 Dec	24 Dec	31 Dec	7 Jan	change from previous week*	Trendline
Beaverhead	12	10	4	1	15	37	22	
Big Horn	11	18	11	1	6	21	15	
Blaine	19	9	8	0	3	17	14	
Broadwater	22	15	11	7	5	17	12	
Carbon	15	15	16	4	19	43	24	
Carter	0	0	1	0	9	0	-9	
Cascade	171	110	90	74	127	302	175	
Chouteau	4	8	2	3	9	15	6	
Custer	22	16	9	4	17	28	11	
Daniels	1	4	4	1	0	1	1	
Dawson	29	18	16	17	23	28	5	
Deer Lodge	12	7	5	5	18	38	20	
Fallon	17	12	5	6	0	9	9	
Fergus	14	12	9	11	17	56	39	
Flathead	178	116	122	111	214	470	256	
Gallatin	362	183	162	255	589	1436	847	
Garfield	3	2	0	0	9	4	-5	
Glacier	20	20	6	7	18	56	38	
Golden Valley	2	2	0	0	0	1	1	
Granite	1	0	0	0	1	22	21	
Hill	24	14	8	7	9	39	30	
Jefferson	37	13	8	5	21	32	11	
Judith Basin	0	0	1	0	1	5	4	
Lake	55	71	35	21	41	92	51	
Lewis and Clark	182	104	57	86	150	413	263	
Liberty	0	1	1	0	1	7	6	
Lincoln	29	22	27	15	38	103	65	
Madison	29	11	13	8	15	44	29	
McCone	6	5	5	0	0	5	5	
Meagher	5	1	1	1	4	10	6	

Missoula	142	109	102	150	425	922	497	
Park	53	39	26	13	55	61	6	
Phillips	9	4	2	0	2	13	11	
Powder River	1	0	1	1	0	2	2	
Prairie	7	4	4	2	1	9	8	
Richland	41	17	21	23	36	65	29	
Rosebud	44	6	3	3	3	16	13	
Sheridan	18	1	1	1	1	4	3	
Stillwater	38	1	0	1	3	5	2	
Teton	6	1	12	6	15	32	17	
Treasure	7	0	0	0	0	0	0	
Wheatland	3	1	0	4	0	2	2	
Yellowstone	296	206	139	136	319	764	445	
MONTANA	**2217**	**1359**	**1058**	**1069**	**2428**	**5703**	**3275**	

†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	5,357	4,310	2,254	4,999	11,921	59%	55%
BIG HORN	11,975	7,893	6,746	2,265	7,112	16,904	66%	59%
BLAINE	6,044	3,556	2,869	1,264	3,074	7,689	59%	51%
BROADWATER	6,092	2,251	1,663	831	1,896	4,745	37%	31%
CARBON	10,476	5,444	4,691	2,377	5,032	12,512	52%	48%
CARTER	1,141	367	320	157	342	844	32%	30%
CASCADE	76,124	41,449	33,024	14,549	36,921	89,022	54%	49%
CHOUTEAU	5,430	2,172	1,818	1,185	1,996	5,175	40%	37%
CUSTER	10,692	5,231	4,186	2,059	4,692	11,476	49%	44%
DANIELS	1,559	729	627	310	681	1,666	47%	44%
DAWSON	8,071	3,434	2,847	1,298	3,151	7,579	43%	39%
DEER LODGE	8,887	6,205	5,117	2,836	5,684	14,158	70%	64%
FALLON	2,646	1,044	916	411	963	2,371	39%	36%
FERGUS	10,495	5,373	4,623	2,439	5,015	12,435	51%	48%
FLATHEAD	99,993	50,666	39,540	19,248	43,733	109,454	51%	44%
GALLATIN	110,900	80,460	61,621	28,177	67,653	170,258	73%	61%
GARFIELD	1,188	316	246	97	289	659	27%	24%
GLACIER	12,447	10,253	6,984	2,731	7,533	19,968	82%	61%
GOLDEN VALLEY	788	375	314	144	346	833	48%	44%
GRANITE	3,218	1,418	1,123	518	1,231	3,059	44%	38%
HILL	14,914	9,610	7,342	3,348	8,699	20,300	64%	58%
JEFFERSON	11,819	6,572	5,561	2,849	5,962	14,982	56%	50%
JUDITH BASIN	1,880	784	678	343	739	1,805	42%	39%
LAKE	29,280	19,313	15,817	7,563	16,997	42,693	66%	58%
LEWIS & CLARK	66,257	44,007	35,927	18,947	38,745	98,881	66%	58%
LIBERTY	2,234	848	710	409	809	1,967	38%	36%
LINCOLN	19,480	9,227	7,454	3,713	8,144	20,394	47%	42%
MADISON	8,589	4,313	3,417	1,878	3,843	9,608	50%	45%
MCCONE	1,562	440	411	187	420	1,038	28%	27%
MEAGHER	1,726	991	849	431	928	2,271	57%	54%
MINERAL	4,302	2,579	1,850	1,029	2,318	5,458	60%	54%
MISSOULA	115,881	82,908	68,729	35,088	74,676	186,725	72%	64%
MUSSELSHELL	4,458	1,676	1,351	629	1,546	3,656	38%	35%
PARK	15,969	10,927	8,421	4,190	9,325	23,538	68%	58%
PETROLEUM	483	159	140	78	149	377	33%	31%
PHILLIPS	3,675	1,860	1,425	823	1,734	4,108	51%	47%
PONDERA	5,389	3,470	2,678	1,302	3,045	7,450	64%	57%
POWDER RIVER	1,588	485	384	175	438	1,044	31%	28%
POWELL	6,534	4,100	3,053	1,524	3,838	8,677	63%	59%
PRAIRIE	994	457	402	219	424	1,078	46%	43%
RAVALLI	42,972	23,963	19,180	10,548	21,524	53,691	56%	50%
RICHLAND	10,310	4,311	3,384	1,573	4,060	9,268	42%	39%
ROOSEVELT	9,918	5,191	3,863	1,578	4,550	10,632	52%	46%
ROSEBUD	8,160	5,307	4,187	1,833	4,706	11,327	65%	58%
SANDERS	11,641	4,864	4,066	1,923	4,349	10,853	42%	37%
SHERIDAN	3,075	1,912	1,680	908	1,813	4,500	62%	59%
SILVER BOW	33,267	23,268	19,883	9,994	21,189	53,145	70%	64%
STILLWATER	9,451	4,254	3,352	1,831	3,900	9,437	45%	41%
SWEET GRASS	3,523	1,668	1,275	727	1,498	3,670	47%	43%
TETON	5,819	3,037	2,127	1,089	2,563	6,253	52%	44%
TOOLE	4,391	2,224	1,698	591	2,084	4,513	51%	47%
TREASURE	623	418	286	134	309	838	67%	50%
VALLEY	6,931	3,307	2,669	1,495	3,116	7,471	48%	45%
WHEATLAND	2,035	780	676	344	728	1,800	38%	36%
WIBAUX	898	348	288	113	296	749	39%	33%
YELLOWSTONE	153,378	89,627	74,224	33,795	80,350	197,646	58%	52%
MONTANA	**1,020,663**	**613,198**	**493,022**	**238,351**	**542,157**	**1,344,571**	**60%**	**53%**