Weekly COVID-19 Update in Montana (as of 1/14/2022)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of January 14, 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 1/14/2022

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
LABORATORY TESTS	**2,379,729**	**55,933**	**+31%**
DEATHS	**2,956**	**35**	**+170%**

Figure 1. COVID-19 Cases and Hospitalizations over Time - Montana, as of 1/14/2022

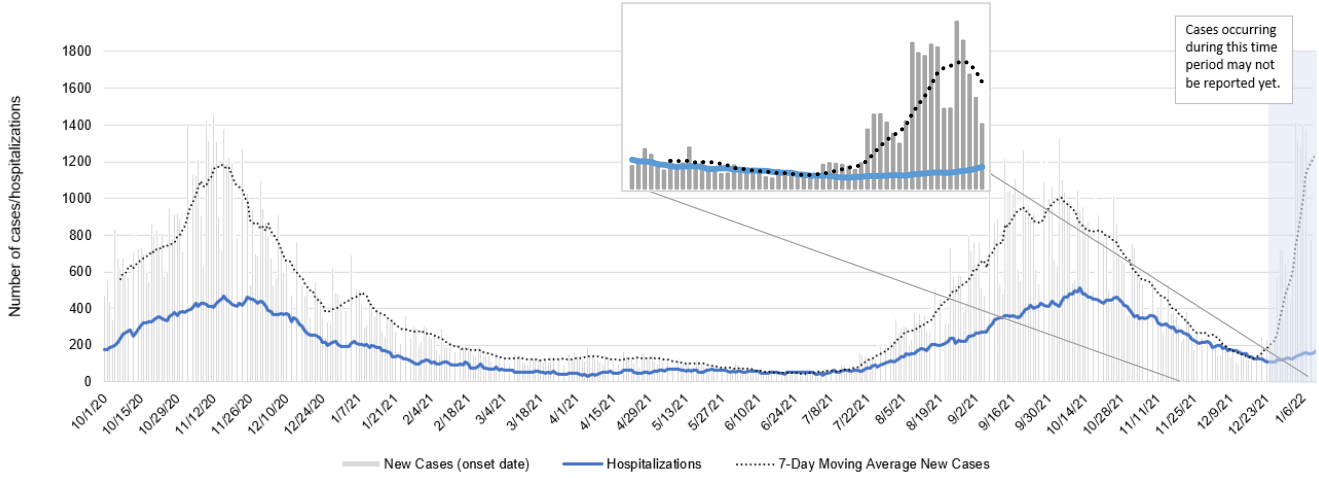
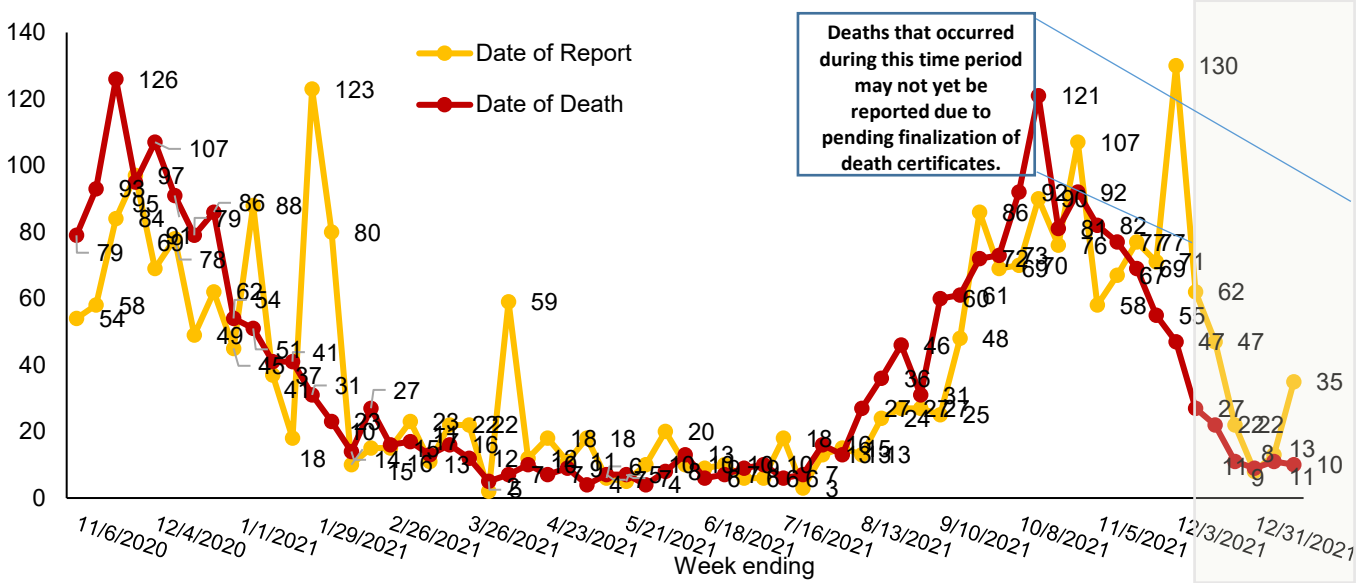


Figure 2. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 1/14/2022



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, 1,358,477 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 1/14/2022

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 12/31	WEEK ENDING 1/7	WEEK ENDING 1/14
TOTAL DOSES ADMINISTERED	**1,328,185**		11,033	10,442	**8,707**
DOSE 1 ADMINISTERED	**598,727**	**64%**	1,944	1,703	**1,589**
FULLY VACCINATED INDIVIDUALS	**531,918**	**57%**	1,368	1,266	**985**

*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 1/14/2022

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 12/31	WEEK ENDING 1/7	WEEK ENDING 1/14
TOTAL DOSES ADMINISTERED	**1,358,477**		12,711	11,859	**9,908**
DOSE 1 ADMINISTERED	**616,395**	**60%**	2,707	2,348	**2,182**
FULLY VACCINATED INDIVIDUALS	**544,564**	**53%**	2,283	2,038	**1,593**

*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 1/14/2022

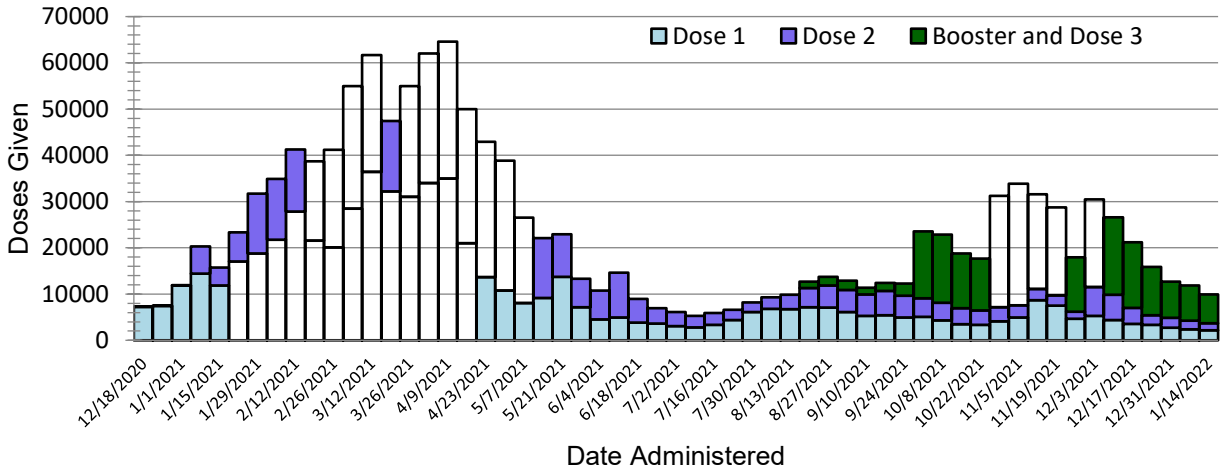
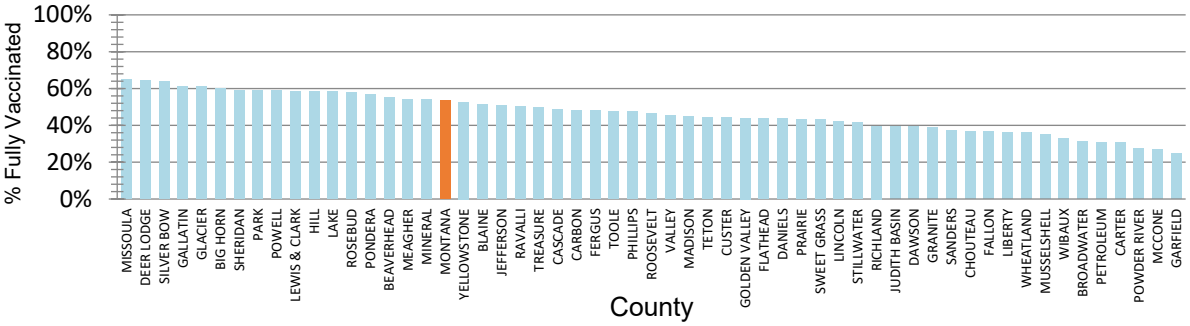


Figure 4. Percent of Eligible Montanans (5+ years) Fully Vaccinated by County – Montana, 1/14/2022



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 9,260 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 18, there have been 338 cases in Montana infected with the Omicron variant, detected in over half of Montana's local and tribal health jurisdictions. Last week, 48/48 (100%) specimens that were collected and sequenced were Omicron. The week prior, 99/108 (92%) specimens that were collected and sequenced were Omicron, the remainder were Delta. Omicron is the dominant circulating strain in the state, and is displayed in brown on the chart below.

Figure 5. Number of COVID-19 samples sequenced by collection date, Montana 1/18/2022 [n=9,260]

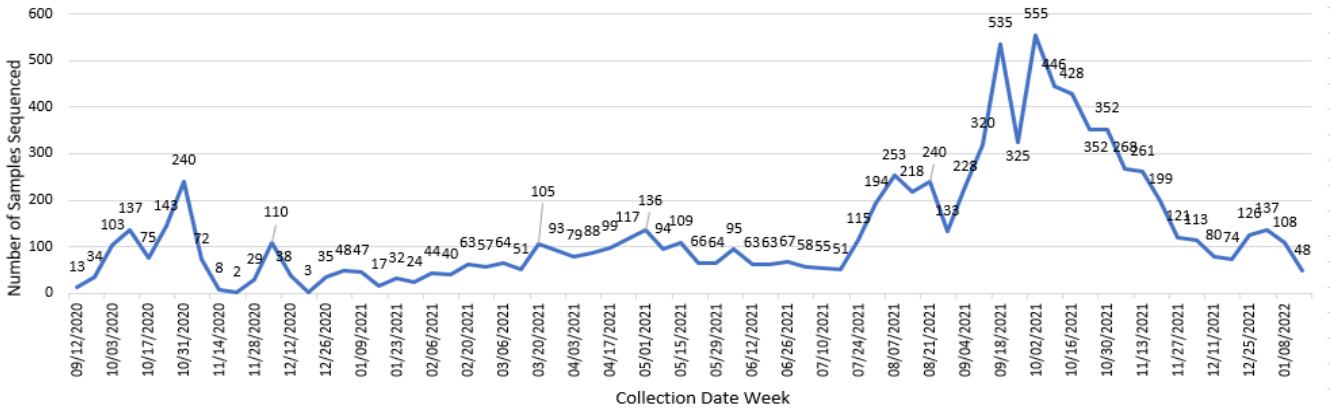
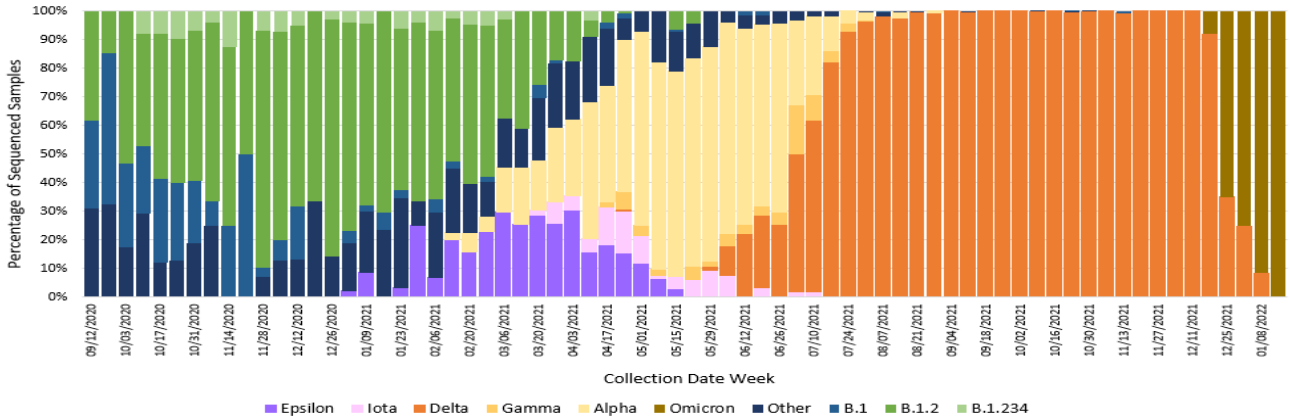


Figure 6. Percent of COVID-19 variants in sequenced samples by collection date, Montana 1/18/2022



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 1/14/2022, Montana reports 22,827 cases of confirmed breakthrough disease, which includes 1,006 hospitalizations and 295 deaths. CDC data from October show that those who were unvaccinated were more than 5 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 10 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 14, 2022** to review vaccination status. Since the beginning of April 2021, 83% of Montanans who were hospitalized and 78% of those who died were unvaccinated at the time of infection (Table 4). Of the 5,813 individuals who were hospitalized during this time period, 96 (2%) were <18 years old, 829 (14%) were 18 to 44 years old, 1,990 (34%) were 45 to 64 years old and 2,898 (50%) were ≥65 years old.

Additionally, COVID-19-related hospitalization and death data from **November 20, 2021 – January 14, 2022** (last 8 weeks) were analyzed to review vaccination status. Seventy-eight percent of Montanans who were hospitalized and 78% of those who died had not received a COVID-19 vaccine (Table 5). Of the 748 individuals who were hospitalized during this time period, 13 (2%) were <18 years old, 74 (10%) were 18 to 44 years old, 240 (32%) were 45 to 64 years old and 421 (56%) were ≥65 years old.

Table 4. Vaccination status of COVID-19 hospitalizations and deaths – April 1 to January 14, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	**5,813**	**1362**
UNVACCINATED	4,810 (83%)	1068 (78%)
VACCINATED (BREAKTHROUGH CASE)	1,003 (17%)	294 (22%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**<1-102 (62)**	**23-103 (70)**
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**16-101 (74)**	**20-101 (81)**

Table 5. Vaccination status of COVID-19 hospitalizations and deaths – November 20 to January 14, 2022

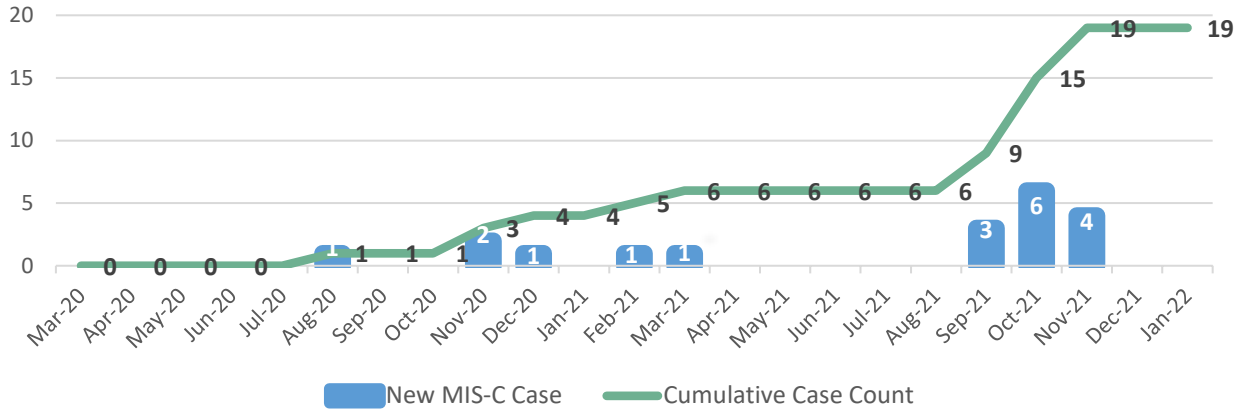
	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	**748**	**100**
UNVACCINATED	584 (78%)	78 (78%)
VACCINATED (BREAKTHROUGH CASE)	164 (22%)	22 (22%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**<1-99 (65)**	**37-99 (71)**
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**23-98 (72)**	**58-101 (80)**

[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. January 18, 2022.

Multisystem Inflammatory Syndrome in Children (MIS-C)

As of January 14, 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).

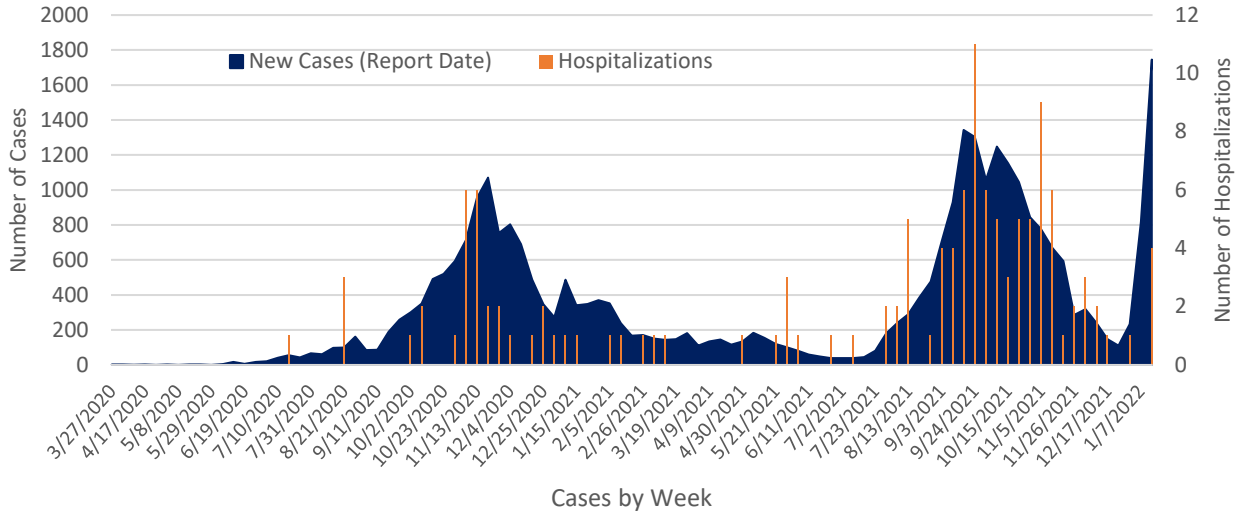
Figure 7. Montana MIS-C Cases by Month, March 2020 – January 2022



Cases and Hospitalizations Associated with COVID-19 Among Children

To date, there have been 31,546 children <18 years old in Montana diagnosed with COVID-19. Of those, 132 (<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 1,746 cases of COVID-19 in children reported during the second week of January 2022, which is the highest number of cases reported in children in one week since the beginning of the pandemic. Four hospitalizations in children were reported that week.

Figure 8. COVID-19 Cases and Hospitalizations by Month, March 2020 – January 2022, Among Children <18



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

County	10 Dec	17 Dec	24 Dec	31 Dec	7 Jan	14 Jan	change from previous week*	Trendline
Beaverhead	10	4	1	15	38	52	14	
Big Horn	18	11	1	6	21	53	32	
Blaine	9	8	0	3	17	23	6	
Broadwater	15	11	7	5	17	26	9	
Carbon	15	16	4	19	43	83	40	
Carter	0	1	0	9	0	1	1	
Cascade	110	90	74	127	302	542	240	
Chouteau	8	2	3	9	15	26	11	
Custer	16	9	4	17	28	67	39	
Daniels	4	4	1	0	1	9	8	
Dawson	18	16	17	23	29	48	19	
Deer Lodge	7	5	5	18	38	95	57	
Fallon	12	5	6	0	9	2	-7	
Fergus	12	9	11	17	56	59	3	
Flathead	116	122	112	214	470	756	286	
Gallatin	183	162	255	593	1470	2635	1165	
Garfield	2	0	0	9	4	19	15	
Glacier	20	6	7	18	56	85	29	
Golden Valley	2	0	0	0	1	2	1	
Granite	0	0	0	1	22	19	-3	
Hill	14	8	7	9	39	106	67	
Jefferson	13	8	5	21	32	90	58	
Judith Basin	0	1	0	1	5	11	6	
Lake	71	35	21	41	92	146	54	
Lewis and Clark	102	57	86	149	428	497	69	
Liberty	1	1	0	1	7	33	26	
Lincoln	22	27	15	38	93	118	25	
Madison	11	13	8	15	44	67	23	
McCone	5	5	0	0	5	6	1	
Meagher	1	1	1	4	9	8	-1	

Missoula	109	102	151	426	913	1168	255	
Park	39	26	13	55	60	95	35	
Phillips	4	2	0	2	13	15	2	
Powder River	0	1	1	0	2	3	1	
Prairie	4	4	2	1	9	12	3	
Richland	17	21	23	36	65	66	1	
Rosebud	6	3	3	3	16	30	14	
Sheridan	1	1	1	1	4	3	-1	
Stillwater	1	0	1	3	5	34	29	
Teton	1	12	6	15	32	73	41	
Treasure	0	0	0	0	0	1	1	
Wheatland	1	0	4	0	2	2	0	
Yellowstone	206	139	136	319	765	1504	739	
MONTANA	**1357**	**1058**	**1071**	**2432**	**5734**	**9552**	**3818**	

†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	5,395	4,331	2,388	5,022	12,114	59%	55%
BIG HORN	11,975	7,983	6,793	2,391	7,162	17,167	67%	60%
BLAINE	6,044	3,584	2,886	1,299	3,092	7,769	59%	51%
BROADWATER	6,092	2,258	1,675	857	1,909	4,790	37%	31%
CARBON	10,476	5,466	4,701	2,430	5,044	12,597	52%	48%
CARTER	1,141	367	329	159	351	855	32%	31%
CASCADE	76,124	41,714	33,161	15,272	37,098	90,147	55%	49%
CHOUTEAU	5,430	2,180	1,825	1,204	2,003	5,209	40%	37%
CUSTER	10,692	5,248	4,211	2,119	4,716	11,578	49%	44%
DANIELS	1,559	731	630	315	684	1,676	47%	44%
DAWSON	8,071	3,447	2,854	1,358	3,159	7,659	43%	39%
DEER LODGE	8,887	6,223	5,139	2,934	5,707	14,296	70%	64%
FALLON	2,646	1,050	921	418	968	2,389	40%	37%
FERGUS	10,495	5,395	4,643	2,508	5,033	12,546	51%	48%
FLATHEAD	99,993	50,899	39,683	19,800	43,895	110,382	51%	44%
GALLATIN	110,900	80,780	61,856	28,938	67,917	171,574	73%	61%
GARFIELD	1,188	318	248	100	291	666	27%	24%
GLACIER	12,447	10,310	7,044	2,821	7,599	20,175	83%	61%
GOLDEN VALLEY	788	376	314	147	346	837	48%	44%
GRANITE	3,218	1,430	1,134	552	1,242	3,116	44%	39%
HILL	14,914	9,650	7,383	3,538	8,741	20,571	65%	59%
JEFFERSON	11,819	6,603	5,585	2,951	5,990	15,139	56%	51%
JUDITH BASIN	1,880	789	681	356	742	1,826	42%	39%
LAKE	29,280	19,436	15,904	7,852	17,091	43,192	66%	58%
LEWIS & CLARK	66,257	44,187	36,051	19,459	38,872	99,697	67%	59%
LIBERTY	2,234	850	713	416	812	1,979	38%	36%
LINCOLN	19,480	9,249	7,470	3,790	8,162	20,509	47%	42%
MADISON	8,589	4,322	3,424	1,914	3,853	9,660	50%	45%
MCCONE	1,562	443	413	219	422	1,075	28%	27%
MEAGHER	1,726	999	853	438	936	2,290	58%	54%
MINERAL	4,302	2,588	1,858	1,043	2,325	5,489	60%	54%
MISSOULA	115,881	83,293	69,023	36,429	74,985	188,745	72%	65%
MUSSELSHELL	4,458	1,683	1,360	654	1,556	3,697	38%	35%
PARK	15,969	10,992	8,490	4,470	9,398	23,952	69%	59%
PETROLEUM	483	159	140	81	149	380	33%	31%
PHILLIPS	3,675	1,864	1,429	827	1,737	4,120	51%	47%
PONDERA	5,389	3,493	2,689	1,328	3,059	7,510	65%	57%
POWDER RIVER	1,588	489	385	180	439	1,054	31%	28%
POWELL	6,534	4,124	3,059	1,597	3,845	8,780	63%	59%
PRAIRIE	994	458	406	222	428	1,086	46%	43%
RAVALLI	42,972	24,083	19,236	10,833	21,587	54,152	56%	50%
RICHLAND	10,310	4,330	3,404	1,629	4,080	9,363	42%	40%
ROOSEVELT	9,918	5,316	3,930	1,708	4,625	10,954	54%	47%
ROSEBUD	8,160	5,344	4,212	1,910	4,732	11,466	65%	58%
SANDERS	11,641	4,898	4,076	2,018	4,359	10,992	42%	37%
SHERIDAN	3,075	1,912	1,682	929	1,814	4,523	62%	59%
SILVER BOW	33,267	23,382	19,959	10,315	21,270	53,656	70%	64%
STILLWATER	9,451	4,266	3,365	1,877	3,913	9,508	45%	41%
SWEET GRASS	3,523	1,678	1,291	736	1,514	3,705	48%	43%
TETON	5,819	3,050	2,133	1,134	2,571	6,317	52%	44%
TOOLE	4,391	2,242	1,703	599	2,090	4,544	51%	48%
TREASURE	623	420	287	134	310	841	67%	50%
VALLEY	6,931	3,319	2,679	1,549	3,131	7,547	48%	45%
WHEATLAND	2,035	792	679	360	733	1,831	39%	36%
WIBAUX	898	347	287	116	295	750	39%	33%
YELLOWSTONE	153,378	90,191	74,620	35,224	80,760	200,035	59%	53%
MONTANA	**1,020,663**	**616,395**	**495,237**	**246,845**	**544,564**	**1,358,477**	**60%**	**53%**