

Weekly COVID-19 Update in Montana (as of 4/8/2022)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of April 8, 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 4/8/2022

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	272,894	229	+1%
LABORATORY TESTS	2,742,695	11,919	-26%
HOSPITALIZATIONS	11,845	17	-39%
DEATHS	3,255	7	+133%

Figure 1. COVID-19 Cases and Hospitalizations over Time – Montana, as of 4/8/2022

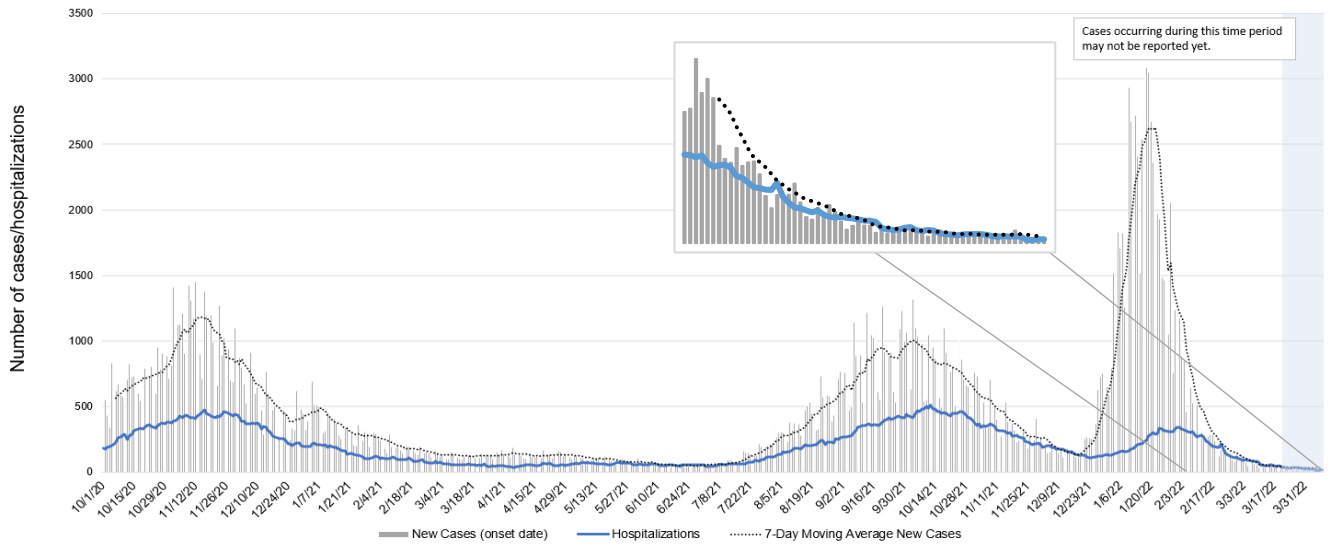


Figure 2: Status of Acute Care and ICU Beds – Hospitals in Montana, 3/30 – 4/12/2022

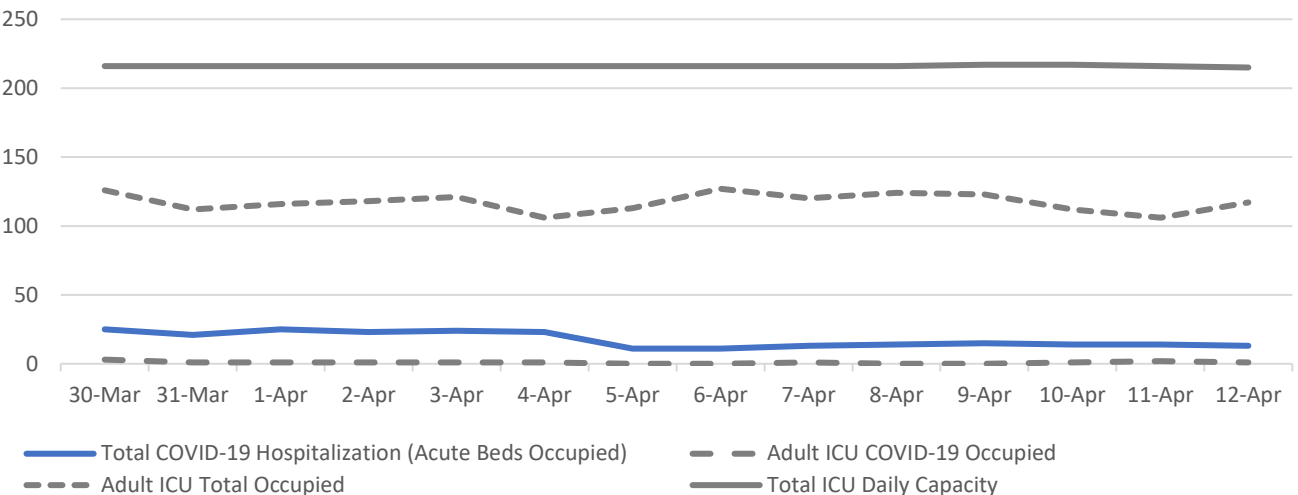
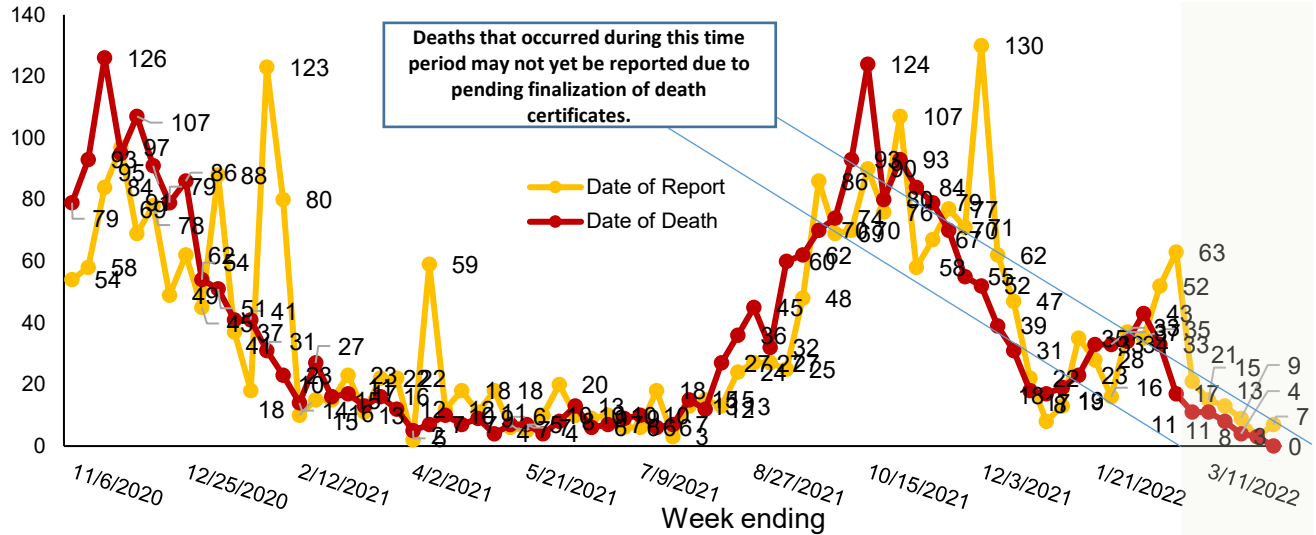


Figure 3. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 4/8/2022



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, 1,431,808 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 4/8/2022

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 3/25	WEEK ENDING 4/1	WEEK ENDING 4/8*
TOTAL DOSES ADMINISTERED	1,431,808		1,942	4,526	7,600
DOSE 1 ADMINISTERED	632,014	62%	466	501	525
FULLY VACCINATED INDIVIDUALS	560,999	55%	494	544	564

*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 4/8/2022

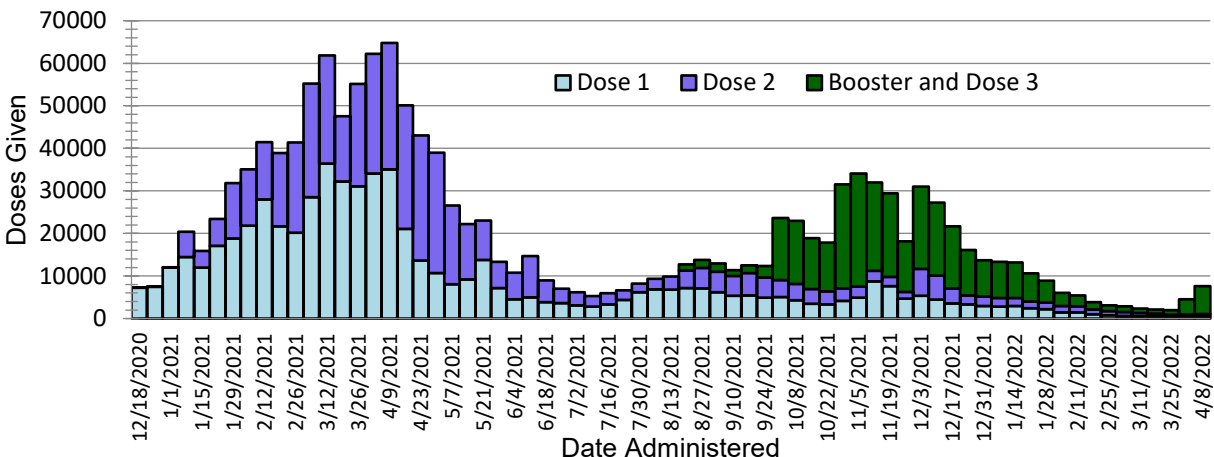
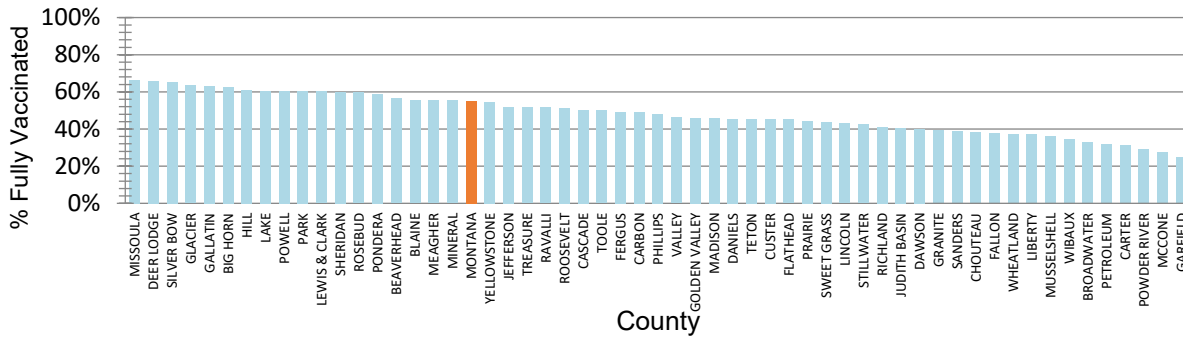


Figure 5. Percent of Eligible Montanans (5+ years) Fully Vaccinated by County – Montana, 4/8/2022



Variant and Breakthrough Cases

Figure 6 displays the number of Montana samples sequenced by week. Figure 7 displays the percentage of the most common SARS-CoV-2 lineages detected out of all Montana samples sequenced by week. There have been 14,550 samples from Montana that have been sequenced with their lineages reported to GISAID since September 2020. **Please note the relatively small number of samples sequenced in recent weeks limits interpretation of the available variant sequencing data.**

As of April 12, there have been 3,701 cases across Montana infected with Omicron variants—3,676 (99%) infected with BA.1/B.1.1.529 and 25 (1%) infected with BA.2. DPHHS is monitoring sublineages of the Omicron variant, including BA.2 (pink, below), which was first detected in Montana on January 30, 2022. In the past five weeks, 47 sequences have been reported to GISAID—42 (89%) BA.1/B.1.1.529 and 5 (11%) BA.2. Please note there were only 3 positive samples collected the week ending April 2, 2022 that were sequenced and reported to GISAID, all were Omicron BA.1. No positive samples collected last week have been sequenced and reported to GISAID yet.

Figure 6. Number of COVID-19 samples sequenced by collection date, Montana 4/8/2022

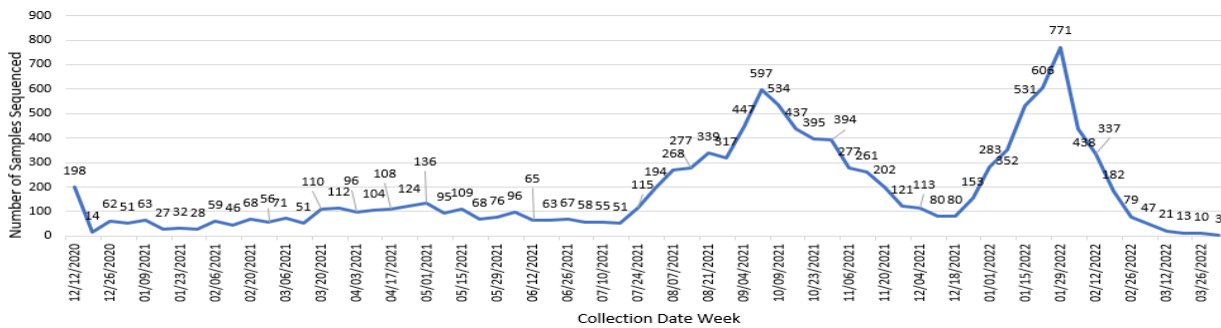
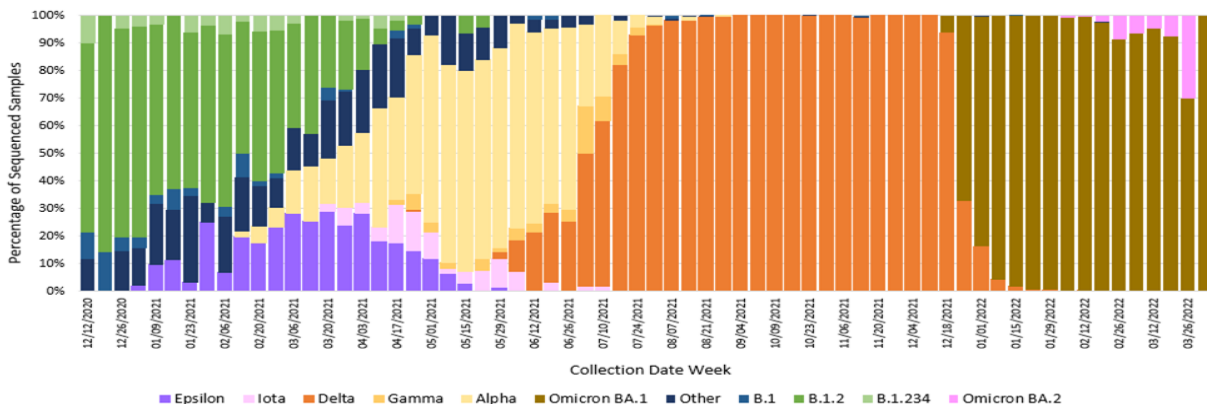


Figure 7. Percent of COVID-19 variants in sequenced samples by collection date, Montana 4/8/2022



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 eligible populations to protect against waning immunity. As of 4/8/2022, Montana reports 42,958 cases of confirmed breakthrough disease, which includes 1,425 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 8, 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 7,005 individuals who were hospitalized during this time period, 137 (2%) were <18 years old, 950 (14%) were 18 to 44 years old, 2,291 (33%) were 45 to 64 years old and 3,627 (52%) were ≥ 65 years old.

Additionally, COVID-19-related hospitalization and death data from **February 12– April 8, 2022** (last 8 weeks) were analyzed to review vaccination status. Sixty-six percent of Montanans who were hospitalized and 62% of those who died had not received a COVID-19 vaccine (Table 4)[†]. Of the 351 individuals who were hospitalized during this time period, 14 (4%) were <18 years old, 38 (11%) were 18 to 44 years old, 84 (24%) were 45 to 64 years old and 215 (61%) were ≥ 65 years old.

Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1, 2021 to April 8, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	7,005	1,664
UNVACCINATED	5,584 (80%)	1,276 (77%)
VACCINATED (BREAKTHROUGH CASE)	1,421 (20%)	388 (23%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-102 (63)	<1-103 (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 12 to April 8, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	351	87
UNVACCINATED	232 (66%)	54 (62%)
VACCINATED (BREAKTHROUGH CASE)	119 (34%)	33 (38%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-96 (70)	40-98 (74)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	19-103 (69)	39-97 (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.

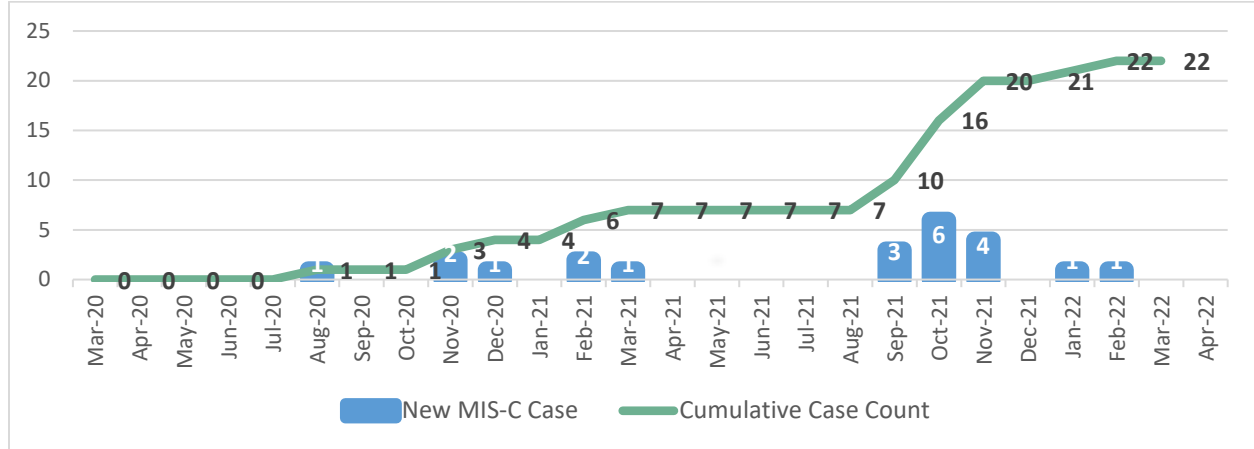
¹ CDC – COVID Data Tracker – Rates of COVID-19 Cases and Deaths by Vaccination Status.

<https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-status>. April 11, 2022.

Multisystem Inflammatory Syndrome in Children (MIS-C)

As of April 8, 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).

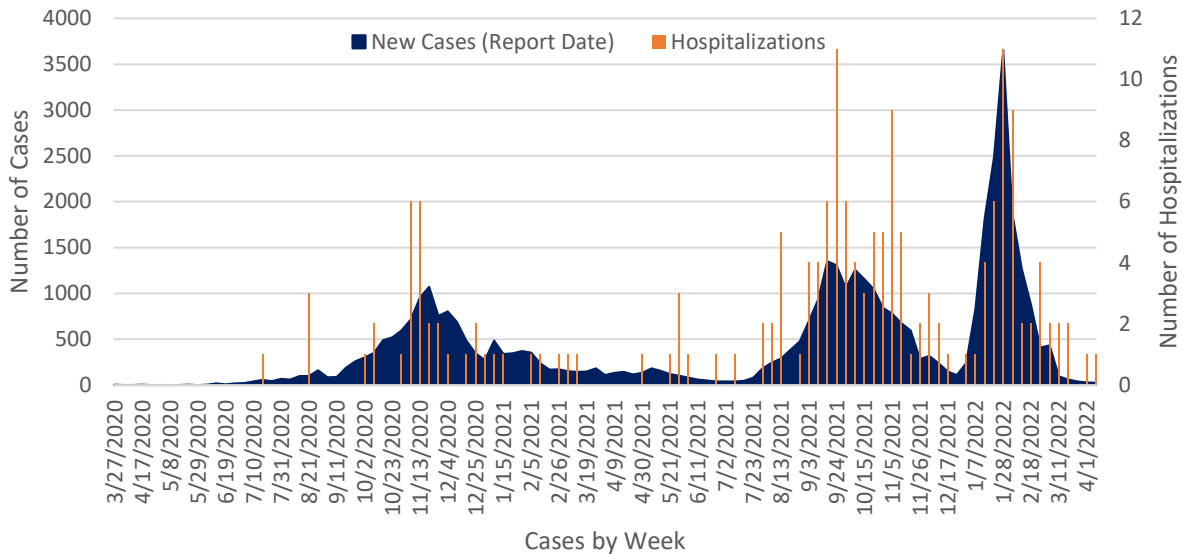
Figure 8. Montana MIS-C Cases by Month of Onset, March 2020 – April 2022



Cases and Hospitalizations Associated with COVID-19 Among Children


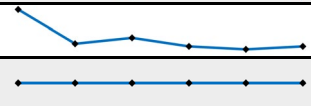
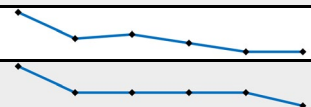
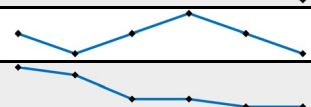


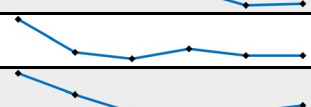


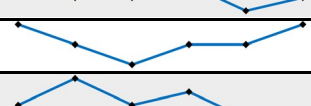
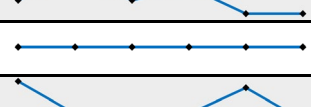

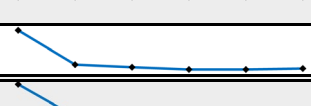
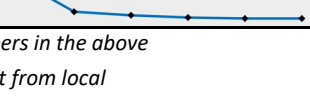
To date, there have been 42,904 children <18 years old in Montana diagnosed with COVID-19. Of those, 173 (<1%) have been hospitalized. Case rates among children follow a similar pattern to COVID-19 cases among all age groups (see Figure 1 for comparison) and increased sharply during the recent Omicron surge (Figure 9). There were 26 cases of COVID-19 in children reported during the week of April 2 – April 8, 2022, which is a 7% 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 8, 2022, Children <18



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

County	4 Mar	11 Mar	18 Mar	25 Mar	1 Apr	8 Apr	change from previous week*	Trendline
Beaverhead	10	1	3	4	5	0	-5	
Big Horn	6	11	0	4	2	0	-2	
Blaine	61	11	2	1	2	0	-2	
Broadwater	6	5	4	1	0	1	1	
Carbon	15	8	2	4	1	4	3	
Carter	6	1	2	0	0	0	0	
Cascade	461	90	29	21	13	22	9	
Chouteau	3	2	0	0	7	3	-4	
Custer	8	4	6	2	3	0	-3	
Daniels	3	0	0	0	0	0	0	
Dawson	11	2	1	1	1	0	-1	
Deer Lodge	30	15	5	8	2	2	0	
Fallon	0	0	0	0	1	0	-1	
Fergus	17	3	7	7	3	1	-2	
Flathead	734	51	20	30	16	16	0	
Gallatin	127	81	37	32	35	45	10	
Garfield	0	1	0	0	0	0	0	
Glacier	86	12	6	3	0	2	2	
Golden Valley	0	0	0	0	0	0	0	
Granite	0	1	1	1	0	0	0	
Hill	87	8	4	3	2	2	0	
Jefferson	6	0	1	0	2	3	1	
Judith Basin	0	0	1	0	1	0	-1	
Lake	17	10	4	14	8	3	-5	
Lewis and Clark	61	33	53	27	11	18	7	
Liberty	5	0	0	2	1	0	-1	
Lincoln	15	22	21	12	3	4	1	
Madison	1	3	1	0	1	1	0	
McCone	0	0	0	0	0	0	0	
Meagher	1	0	0	0	0	0	0	

Missoula	<u>129</u>	<u>76</u>	<u>68</u>	<u>31</u>	<u>40</u>	<u>29</u>	<u>-11</u>		
Park	<u>19</u>	<u>7</u>	<u>9</u>	<u>6</u>	<u>5</u>	<u>6</u>	<u>1</u>		
Phillips	<u>9</u>	<u>3</u>	<u>4</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>		
Powder River	<u>1</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>-1</u>		
Prairie	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>		
Richland	<u>20</u>	<u>31</u>	<u>27</u>	<u>3</u>	<u>4</u>	<u>4</u>	<u>0</u>		
Rosebud	<u>12</u>	<u>2</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>0</u>		
Sheridan	<u>8</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>		
Stillwater	<u>26</u>	<u>0</u>	<u>2</u>	<u>3</u>	<u>2</u>	<u>2</u>	<u>0</u>		
Teton	<u>2</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>1</u>		
Treasure	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		
Wheatland	<u>2</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		
Yellowstone	<u>461</u>	<u>77</u>	<u>47</u>	<u>24</u>	<u>24</u>	<u>33</u>	<u>9</u>		
MONTANA	<u>2576</u>	<u>630</u>	<u>412</u>	<u>288</u>	<u>227</u>	<u>229</u>	<u>2</u>		

*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	5,495	4,425	2,659	5,122	12,579	60%	56%
BIG HORN	11,975	8,254	7,122	2,877	7,496	18,253	69%	63%
BLAINE	6,044	3,738	3,139	1,552	3,348	8,429	62%	55%
BROADWATER	6,092	2,379	1,748	968	1,991	5,095	39%	33%
CARBON	10,476	5,598	4,792	2,744	5,146	13,134	53%	49%
CARTER	1,141	379	336	182	358	897	33%	31%
CASCADE	76,124	43,027	34,240	18,484	38,333	95,751	57%	50%
CHOUTEAU	5,430	2,232	1,891	1,351	2,078	5,474	41%	38%
CUSTER	10,692	5,373	4,331	2,405	4,839	12,109	50%	45%
DANIELS	1,559	743	654	349	709	1,746	48%	45%
DAWSON	8,071	3,550	2,932	1,649	3,245	8,131	44%	40%
DEER LODGE	8,887	6,375	5,284	3,358	5,861	15,017	72%	66%
FALLON	2,646	1,083	955	481	1,005	2,519	41%	38%
FERGUS	10,495	5,497	4,768	2,864	5,169	13,129	52%	49%
FLATHEAD	99,993	52,115	40,892	23,235	45,199	116,242	52%	45%
GALLATIN	110,900	83,017	63,743	34,718	69,979	181,478	75%	63%
GARFIELD	1,188	319	254	104	297	677	27%	25%
GLACIER	12,447	10,495	7,331	3,283	7,893	21,109	84%	63%
GOLDEN VALLEY	788	389	330	175	362	894	49%	46%
GRANITE	3,218	1,456	1,165	629	1,270	3,250	45%	39%
HILL	14,914	9,923	7,709	4,182	9,103	21,814	67%	61%
JEFFERSON	11,819	6,742	5,717	3,442	6,131	15,901	57%	52%
JUDITH BASIN	1,880	805	696	413	760	1,914	43%	40%
LAKE	29,280	20,035	16,489	9,301	17,721	45,825	68%	61%
LEWIS & CLARK	66,257	45,207	36,956	22,306	39,838	104,469	68%	60%
LIBERTY	2,234	857	727	451	827	2,035	38%	37%
LINCOLN	19,480	9,460	7,666	4,447	8,373	21,573	49%	43%
MADISON	8,589	4,405	3,495	2,129	3,931	10,029	51%	46%
MCCONE	1,562	454	421	248	430	1,123	29%	28%
MEAGHER	1,726	1,009	871	502	956	2,382	58%	55%
MINERAL	4,302	2,626	1,910	1,219	2,381	5,755	61%	55%
MISSOULA	115,881	85,045	70,811	42,930	76,881	198,786	73%	66%
MUSSELSHELL	4,458	1,733	1,414	760	1,614	3,907	39%	36%
PARK	15,969	11,189	8,704	5,141	9,633	25,034	70%	60%
PETROLEUM	483	163	142	87	153	392	34%	32%
PHILLIPS	3,675	1,906	1,467	933	1,773	4,306	52%	48%
PONDERA	5,389	3,558	2,791	1,499	3,169	7,848	66%	59%
POWDER RIVER	1,588	498	406	210	463	1,114	31%	29%
POWELL	6,534	4,235	3,160	1,972	3,951	9,367	65%	60%
PRAIRIE	994	466	416	244	440	1,126	47%	44%
RAVALLI	42,972	24,518	19,732	12,499	22,131	56,749	57%	52%
RICHLAND	10,310	4,485	3,554	1,892	4,242	9,931	44%	41%
ROOSEVELT	9,918	5,722	4,302	2,229	5,069	12,253	58%	51%
ROSEBUD	8,160	5,446	4,340	2,227	4,865	12,013	67%	60%
SANDERS	11,641	5,046	4,183	2,370	4,486	11,599	43%	39%
SHERIDAN	3,075	1,935	1,710	1,023	1,843	4,668	63%	60%
SILVER BOW	33,267	23,850	20,404	11,905	21,759	56,159	72%	65%
STILLWATER	9,451	4,357	3,445	2,143	4,002	9,945	46%	42%
SWEET GRASS	3,523	1,703	1,322	858	1,548	3,883	48%	44%
TETON	5,819	3,116	2,202	1,293	2,644	6,611	54%	45%
TOOLE	4,391	2,340	1,771	858	2,192	4,969	53%	50%
TREASURE	623	427	298	145	321	870	69%	52%
VALLEY	6,931	3,378	2,737	1,687	3,199	7,802	49%	46%
WHEATLAND	2,035	808	700	435	755	1,943	40%	37%
WIBAUX	898	355	300	135	309	790	40%	34%
YELLOWSTONE	153,378	92,698	77,108	41,204	83,406	211,010	60%	54%
MONTANA	1,020,663	632,014	510,408	289,386	560,999	1,431,808	62%	55%