

## Weekly COVID-19 Update in Montana (as of 4/15/2022)

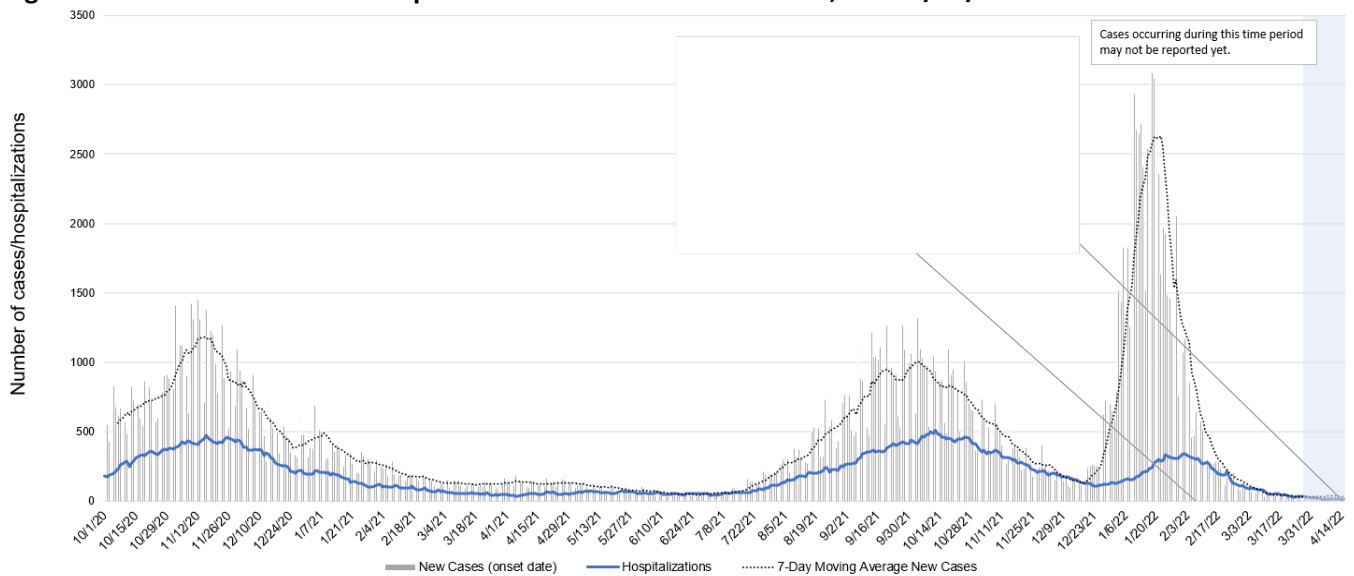
This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of April 15, 2022. Data are provisional and expected to change as more information is received.

### Case Data

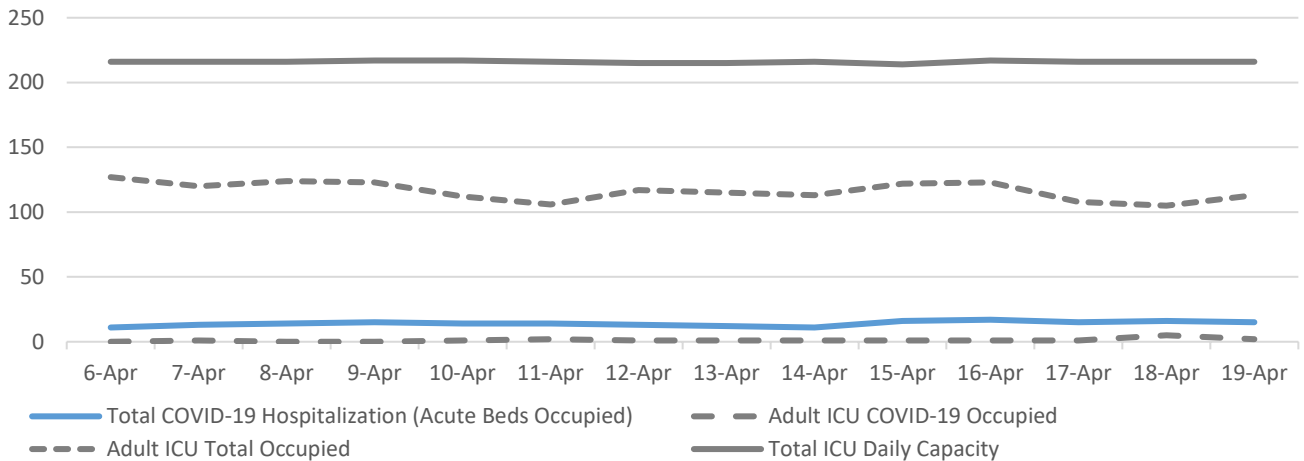
**Table 1. Summary of COVID-19 Activity – Montana, as of 4/15/2022**

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
LABORATORY TESTS	<b>2,753,346</b>	<b>10,651</b>	<b>-11%</b>
DEATHS	<b>3,260</b>	<b>5</b>	<b>-29%</b>

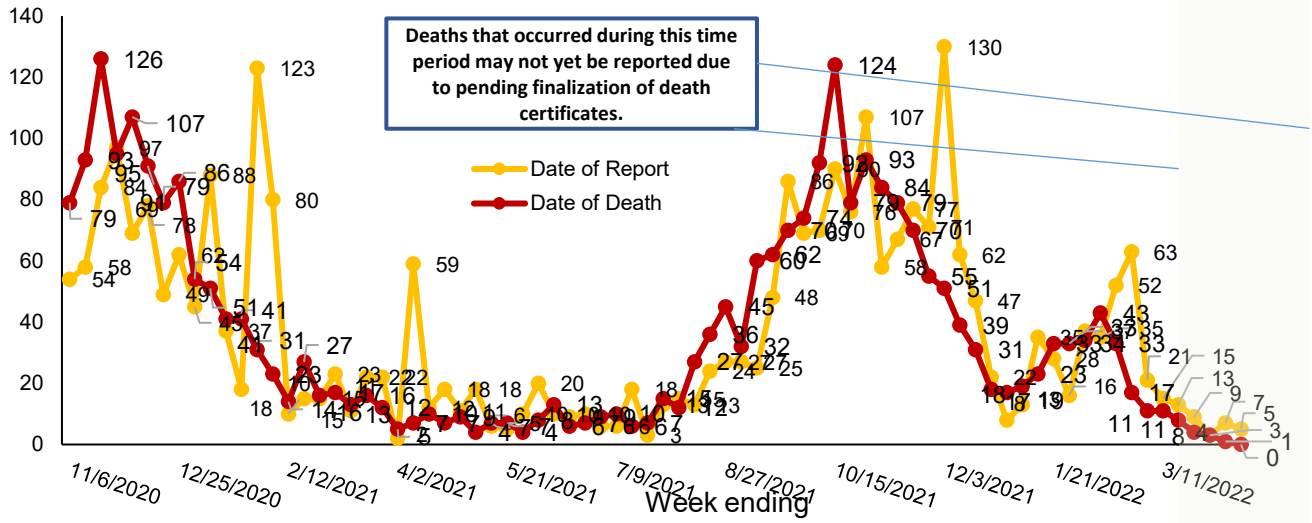
**Figure 1. COVID-19 Cases and Hospitalizations over Time – Montana, as of 4/15/2022**



**Figure 2: Status of Acute Care and ICU Beds – Hospitals in Montana, 4/6 – 4/19/2022**



**Figure 3. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 4/15/2022**



**Vaccine Data**

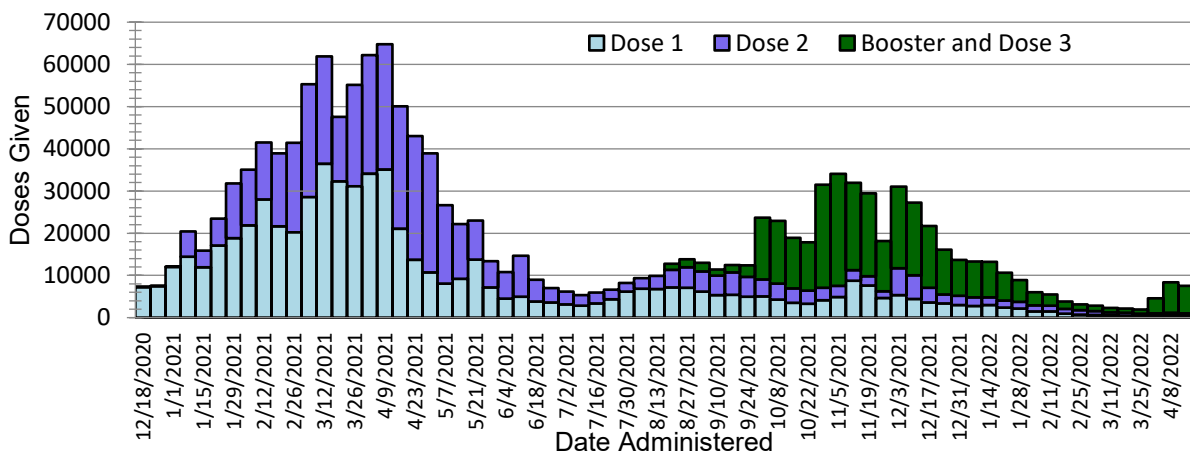
Montana began vaccinating individuals in mid-December 2020 with a phased process: Phase 1A on December 14, 2020, Phase 1B on January 19, 2021, and Phase 1B+ on March 8, 2021. Vaccinations were opened to all Montanans age 16+ on April 1, 2021 and expanded to all Montanans age 12+ on May 10<sup>th</sup>, 2021. Most recently, the Pfizer vaccine was approved for the 5-11 year old age group on October 29<sup>th</sup>, 2021. To date, 1,440,600 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 4/15/2022**

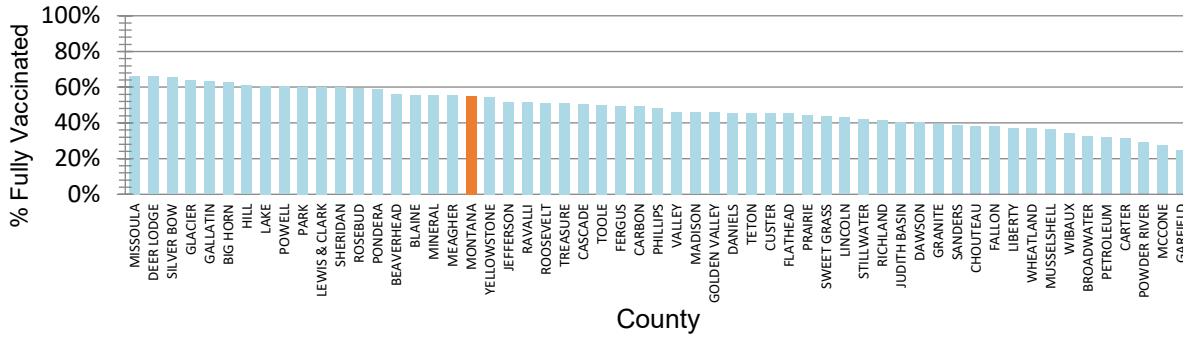
	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 4/1	WEEK ENDING 4/8	WEEK ENDING 4/15*
TOTAL DOSES ADMINISTERED	<b>1,440,600</b>		<b>4,541</b>	<b>8,400</b>	<b>7,541</b>
DOSE 1 ADMINISTERED	<b>632,641</b>	<b>62%</b>	<b>503</b>	<b>611</b>	<b>459</b>
FULLY VACCINATED INDIVIDUALS	<b>561,795</b>	<b>55%</b>	<b>547</b>	<b>638</b>	<b>552</b>

\*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 4/15/2022**



**Figure 5. Percent of Eligible Montanans (5+ years) Fully Vaccinated by County – Montana, 4/15/2022**

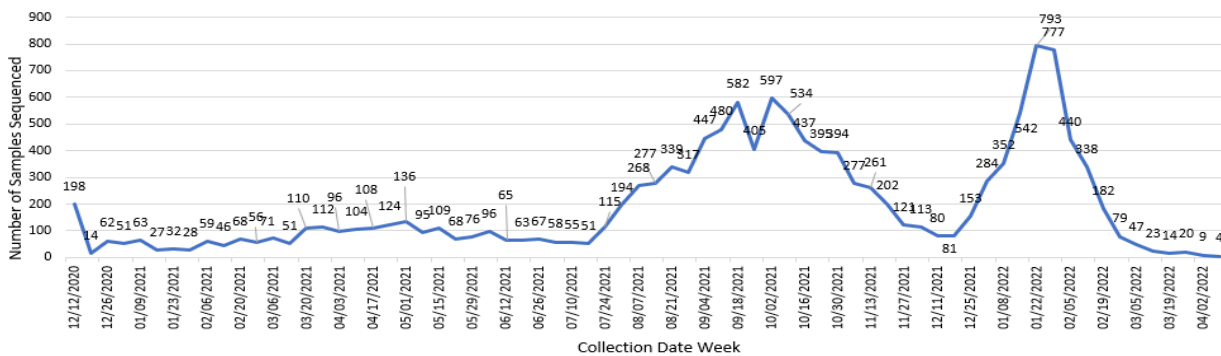


**Variant and Breakthrough Cases**

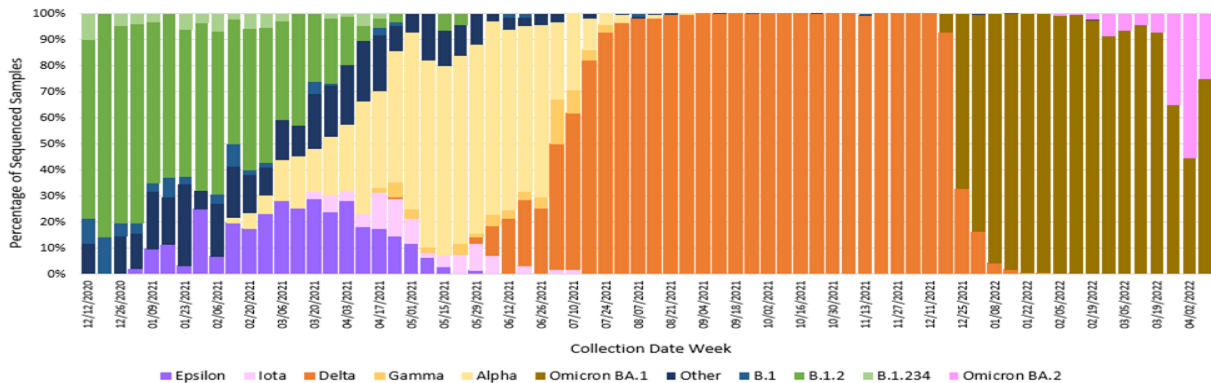
Figure 6 displays the number of Montana samples sequenced by week. Figure 7 displays the percentage of the most common SARS-CoV-2 lineages detected out of all Montana samples sequenced by week. There have been 16,335 samples from Montana that have been sequenced with their lineages reported to GISAID 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 19, there have been 3,932 cases across Montana infected with Omicron variants—3,897 (99%) infected with BA.1/B.1.1.529 and 35 (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—33 (70%) BA.1/B.1.1.529 and 14 (30%) BA.2. Please note only 4 positive samples were collected the week ending April 9, 2022 that were sequenced and reported to GISAID, one of which was BA.2 (25%). 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 4/16/2022**



**Figure 7. Percent of COVID-19 variants in sequenced samples by collection date, Montana 4/16/2022**



A breakthrough COVID-19 infection is defined as a positive SARS-CoV-2 specimen collected  $\geq 14$  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 4/15/2022, Montana reports 43,146 cases of confirmed breakthrough disease, which includes 1,431 hospitalizations and 390 deaths. CDC data from February 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 20 times the risk of dying from COVID-19 compared to fully vaccinated individuals in the same age group with booster doses.<sup>1</sup>

### Hospitalizations and Deaths and Vaccination Status

COVID-19-related hospitalizations and deaths were analyzed between **April 1, 2021 and April 15, 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 7,019 individuals who were hospitalized during this time period, 137 (2%) were <18 years old, 953 (14%) were 18 to 44 years old, 2,293 (33%) were 45 to 64 years old and 3,636 (52%) were  $\geq 65$  years old.

Additionally, COVID-19-related hospitalization and death data from **February 19– April 15, 2022** (last 8 weeks) were analyzed to review vaccination status. Sixty-three percent of Montanans who were hospitalized and 67% of those who died had not received a COVID-19 vaccine (Table 4)<sup>†</sup>. Of the 234 individuals who were hospitalized during this time period, 13 (6%) were <18 years old, 28 (12%) were 18 to 44 years old, 53 (23%) were 45 to 64 years old and 140 (60%) were  $\geq 65$  years old.

**Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1, 2021 to April 15, 2022**

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	<b>7,019</b>	<b>1,669</b>
UNVACCINATED	5,592 (80%)	1,281 (77%)
VACCINATED (BREAKTHROUGH CASE)	1,427 (20%)	388 (23%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>&lt;1-102 (63)</b>	<b>&lt;1-103 (71)</b>
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>7-103 (73)</b>	<b>20-101 (81)</b>

**Table 4. Vaccination status of COVID-19 hospitalizations and deaths – February 19 to April 15, 2022**

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	<b>234</b>	<b>55</b>
UNVACCINATED	147 (63%)	37 (67%)
VACCINATED (BREAKTHROUGH CASE)	87 (37%)	18 (33%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>&lt;1-95 (69)</b>	<b>54-95 (75)</b>
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>19-103 (71)</b>	<b>39-97 (79)</b>

<sup>†</sup>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-19<sup>1</sup>.

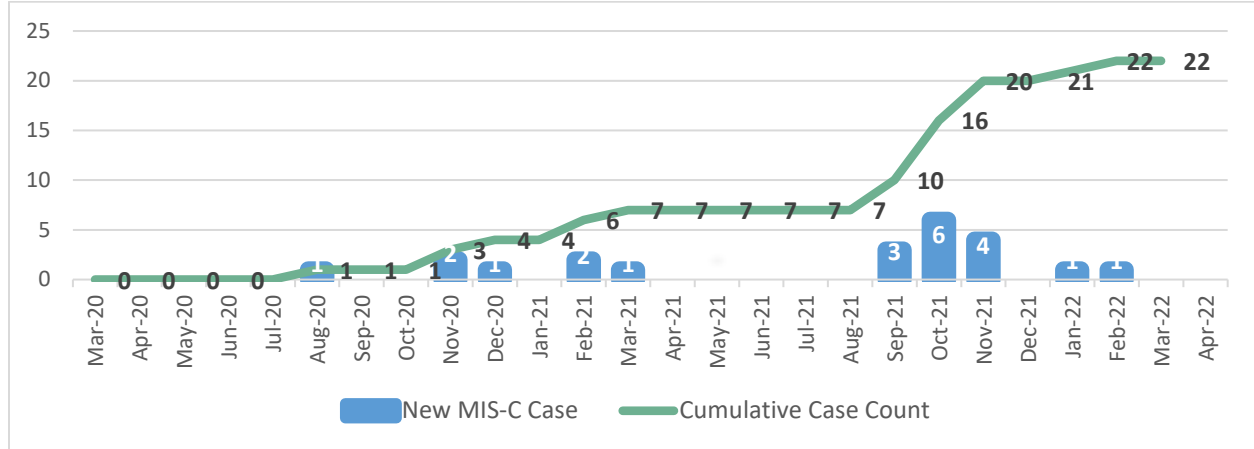
<sup>1</sup> CDC – COVID Data Tracker – Rates of COVID-19 Cases and Deaths by Vaccination Status.

<https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-status>. April 18, 2022.

## Multisystem Inflammatory Syndrome in Children (MIS-C)

As of April 15, 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).

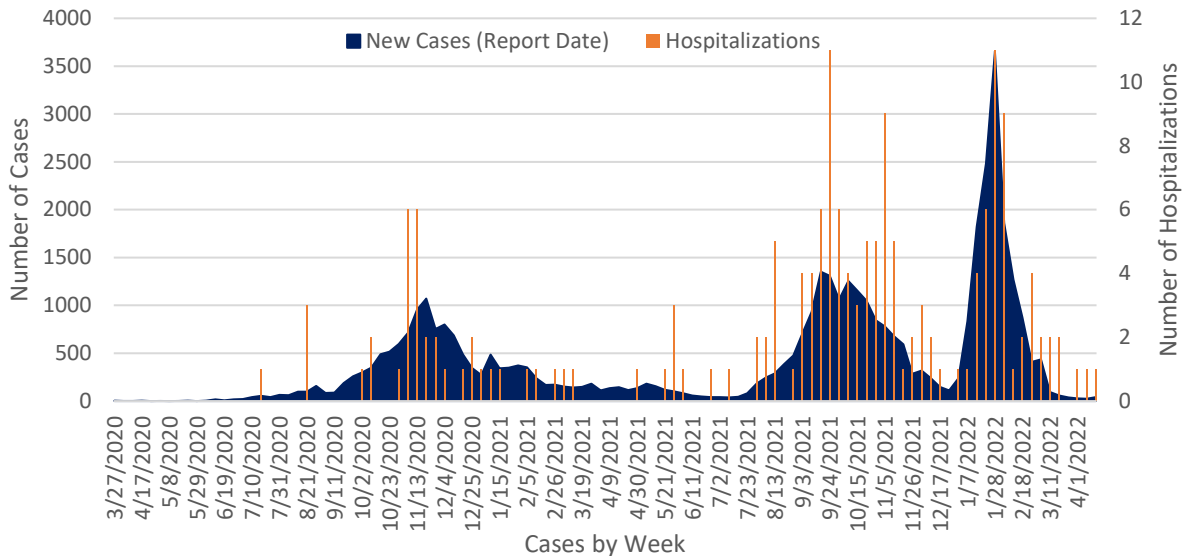
**Figure 8. Montana MIS-C Cases by Month of Onset, March 2020 – April 2022**



## Cases and Hospitalizations Associated with COVID-19 Among Children

To date, there have been 42,945 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 40 cases of COVID-19 in children reported during the week of April 9 – April 15, 2022, which is a 54% increase in cases among that age group compared to the previous week. One hospitalization in a child was reported that week.

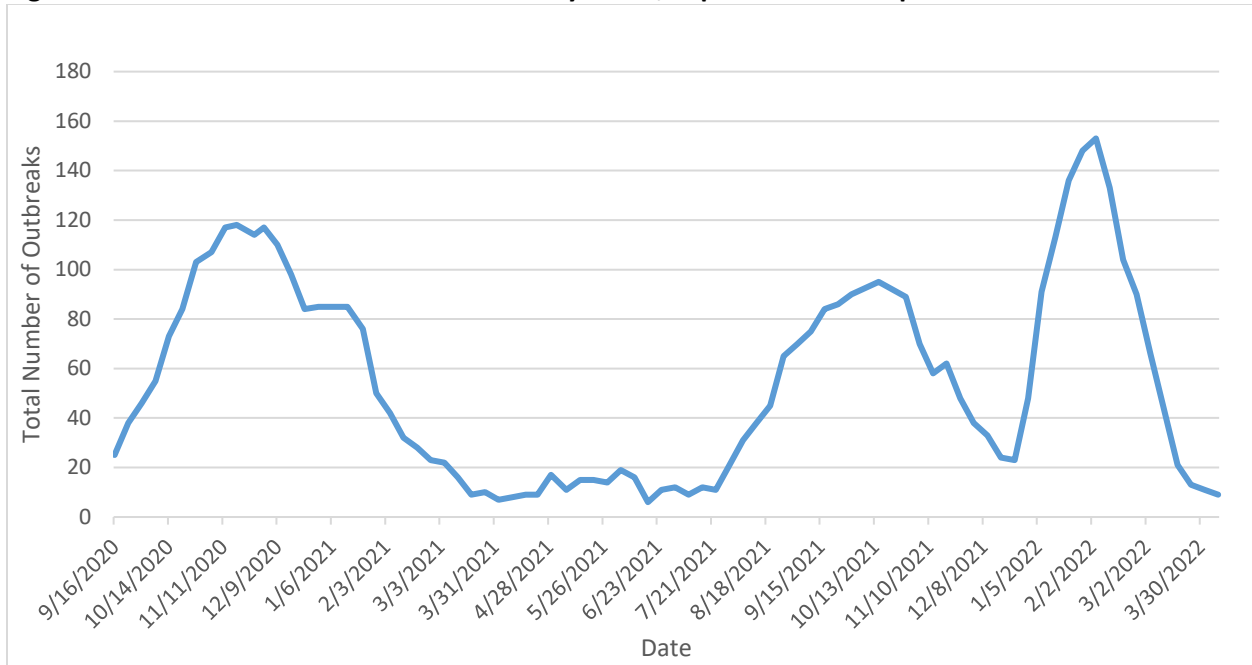
**Figure 9. COVID-19 Cases and Hospitalizations by Week, March 2020 – April 15, 2022, Children <18**



### Assisted Living Facility and Long Term Care Facility Cases and Hospitalizations


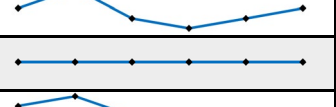
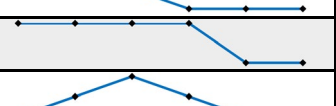
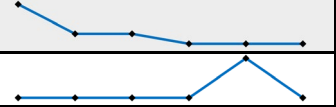




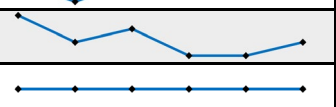
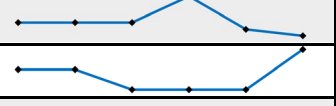
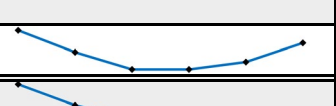
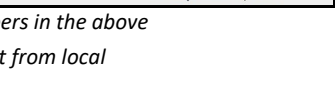


There are 71 long-term care facilities (LTCFs) and 211 assisted living facilities (ALFs) in Montana. As of April 8, 2022, there have been 10,814 cases associated with ALFs and LTCFs since the beginning of the pandemic, which comprises 4% of the total number of COVID-19 cases Montana has reported. There are 10 facilities that are currently responding to a COVID outbreak, meaning they have identified a case of COVID-19 in a resident or staff member within the last 7-days (Figure 10).

**Figure 10. Montana ALF and LTCF Outbreaks by Week, September 2020-April 2022**



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

County	11 Mar	18 Mar	25 Mar	1 Apr	8 Apr	15 Apr	change from previous week*	Trendline
Beaverhead	1	3	4	5	0	0	0	
Big Horn	11	0	4	2	0	5	5	
Blaine	11	2	1	2	0	1	1	
Broadwater	5	4	1	0	1	1	0	
Carbon	8	2	4	1	4	8	4	
Carter	1	2	0	0	0	0	0	
Cascade	90	29	21	13	22	16	-6	
Chouteau	2	0	0	7	3	0	-3	
Custer	4	6	2	3	0	4	4	
Daniels	0	0	0	0	0	0	0	
Dawson	2	1	1	1	0	1	1	
Deer Lodge	15	5	8	2	2	3	1	
Fallon	0	0	0	1	0	0	0	
Fergus	3	7	7	3	1	1	0	
Flathead	51	20	31	16	15	17	2	
Gallatin	81	37	32	34	45	41	-4	
Garfield	1	0	0	0	0	0	0	
Glacier	12	6	3	0	2	3	1	
Golden Valley	0	0	0	0	0	0	0	
Granite	1	1	1	0	0	0	0	
Hill	8	4	3	2	2	3	1	
Jefferson	0	1	0	2	3	1	-2	
Judith Basin	0	1	0	1	0	1	1	
Lake	10	4	14	9	3	2	-1	
Lewis and Clark	33	53	27	11	18	26	8	
Liberty	0	0	2	1	0	1	1	
Lincoln	22	21	12	3	4	6	2	
Madison	3	1	0	1	1	0	-1	
McCone	0	0	0	0	0	0	0	
Meagher	0	0	0	0	0	0	0	

<b>Missoula</b>	<u>76</u>	<u>68</u>	<u>31</u>	<u>40</u>	<u>28</u>	<u>67</u>	<u>39</u>		
<b>Park</b>	<u>7</u>	<u>9</u>	<u>6</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>1</u>		
<b>Phillips</b>	<u>3</u>	<u>4</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		
<b>Powder River</b>	<u>0</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>		
<b>Prairie</b>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>-1</u>		
<b>Richland</b>	<u>31</u>	<u>27</u>	<u>3</u>	<u>4</u>	<u>4</u>	<u>0</u>	<u>-4</u>		
<b>Rosebud</b>	<u>2</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>0</u>		
<b>Sheridan</b>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		
<b>Stillwater</b>	<u>0</u>	<u>2</u>	<u>3</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>0</u>		
<b>Teton</b>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>0</u>		
<b>Treasure</b>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		
<b>Wheatland</b>	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>2</u>		
<b>Yellowstone</b>	<u>77</u>	<u>47</u>	<u>24</u>	<u>24</u>	<u>34</u>	<u>60</u>	<u>26</u>		
<b>MONTANA</b>	<u>630</u>	<u>412</u>	<u>289</u>	<u>227</u>	<u>228</u>	<u>301</u>	<u>73</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	5,491	4,428	2,685	5,120	12,604	60%	56%
BIG HORN	11,975	8,261	7,132	2,904	7,507	18,297	69%	63%
BLAINE	6,044	3,748	3,146	1,593	3,358	8,487	62%	56%
BROADWATER	6,092	2,379	1,753	987	1,994	5,119	39%	33%
CARBON	10,476	5,602	4,798	2,781	5,152	13,181	53%	49%
CARTER	1,141	378	335	182	357	895	33%	31%
CASCADE	76,124	43,078	34,301	19,018	38,400	96,397	57%	50%
CHOUTEAU	5,430	2,240	1,897	1,397	2,085	5,534	41%	38%
CUSTER	10,692	5,389	4,343	2,417	4,857	12,149	50%	45%
DANIELS	1,559	743	656	350	711	1,749	48%	46%
DAWSON	8,071	3,548	2,930	1,647	3,243	8,125	44%	40%
DEER LODGE	8,887	6,373	5,281	3,471	5,858	15,125	72%	66%
FALLON	2,646	1,084	957	482	1,007	2,523	41%	38%
FERGUS	10,495	5,504	4,774	2,947	5,177	13,225	52%	49%
FLATHEAD	99,993	52,136	40,949	23,953	45,263	117,038	52%	45%
GALLATIN	110,900	83,126	63,871	35,602	70,114	182,599	75%	63%
GARFIELD	1,188	319	254	106	297	679	27%	25%
GLACIER	12,447	10,507	7,355	3,345	7,918	21,207	84%	64%
GOLDEN VALLEY	788	388	329	176	361	893	49%	46%
GRANITE	3,218	1,456	1,165	635	1,271	3,256	45%	39%
HILL	14,914	9,921	7,718	4,255	9,108	21,894	67%	61%
JEFFERSON	11,819	6,744	5,723	3,534	6,136	16,001	57%	52%
JUDITH BASIN	1,880	802	694	416	757	1,912	43%	40%
LAKE	29,280	20,071	16,539	9,621	17,776	46,231	69%	61%
LEWIS & CLARK	66,257	45,245	37,009	22,898	39,892	105,152	68%	60%
LIBERTY	2,234	859	731	466	831	2,056	38%	37%
LINCOLN	19,480	9,473	7,685	4,602	8,392	21,760	49%	43%
MADISON	8,589	4,415	3,506	2,198	3,945	10,119	51%	46%
MCCONE	1,562	454	421	248	430	1,123	29%	28%
MEAGHER	1,726	1,010	870	525	957	2,405	59%	55%
MINERAL	4,302	2,632	1,917	1,295	2,387	5,844	61%	55%
MISSOULA	115,881	85,108	70,866	44,269	76,936	200,243	73%	66%
MUSSELSHELL	4,458	1,734	1,415	763	1,614	3,912	39%	36%
PARK	15,969	11,191	8,709	5,258	9,637	25,158	70%	60%
PETROLEUM	483	163	142	88	153	393	34%	32%
PHILLIPS	3,675	1,906	1,465	941	1,772	4,312	52%	48%
PONDERA	5,389	3,560	2,792	1,513	3,172	7,865	66%	59%
POWDER RIVER	1,588	501	409	211	466	1,121	32%	29%
POWELL	6,534	4,238	3,165	1,997	3,955	9,400	65%	61%
PRAIRIE	994	466	416	245	440	1,127	47%	44%
RAVALLI	42,972	24,549	19,778	12,937	22,178	57,264	57%	52%
RICHLAND	10,310	4,492	3,560	1,897	4,248	9,949	44%	41%
ROOSEVELT	9,918	5,729	4,306	2,248	5,078	12,283	58%	51%
ROSEBUD	8,160	5,447	4,343	2,260	4,865	12,050	67%	60%
SANDERS	11,641	5,057	4,193	2,418	4,496	11,668	43%	39%
SHERIDAN	3,075	1,935	1,711	1,052	1,844	4,698	63%	60%
SILVER BOW	33,267	23,891	20,441	12,305	21,802	56,637	72%	66%
STILLWATER	9,451	4,361	3,450	2,193	4,007	10,004	46%	42%
SWEET GRASS	3,523	1,706	1,324	895	1,550	3,925	48%	44%
TETON	5,819	3,123	2,206	1,319	2,653	6,648	54%	46%
TOOLE	4,391	2,348	1,774	873	2,197	4,995	53%	50%
TREASURE	623	424	295	144	318	863	68%	51%
VALLEY	6,931	3,376	2,738	1,693	3,199	7,807	49%	46%
WHEATLAND	2,035	808	699	438	754	1,945	40%	37%
WIBAUX	898	355	300	135	309	790	40%	34%
YELLOWSTONE	153,378	92,797	77,175	41,992	83,491	211,964	61%	54%
<b>MONTANA</b>	<b>1,020,663</b>	<b>632,641</b>	<b>511,139</b>	<b>296,820</b>	<b>561,795</b>	<b>1,440,600</b>	<b>62%</b>	<b>55%</b>