

## Weekly COVID-19 Update in Montana (as of 9/23/2022)

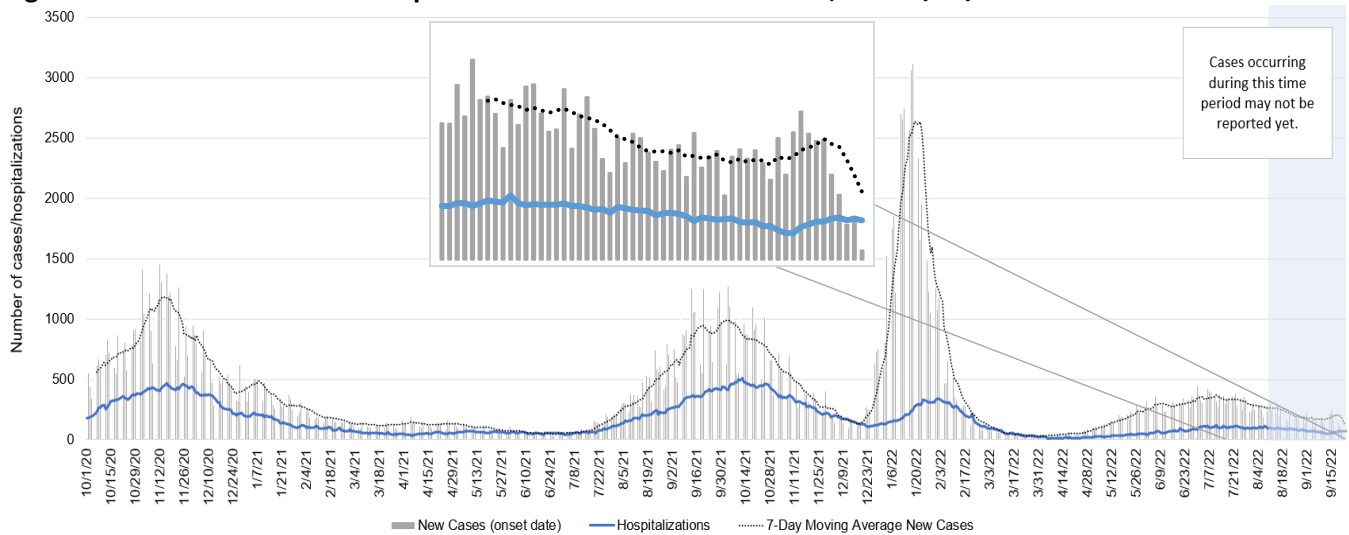
This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of September 23, 2022. Data are provisional and expected to change as more information is received.

### Case Data

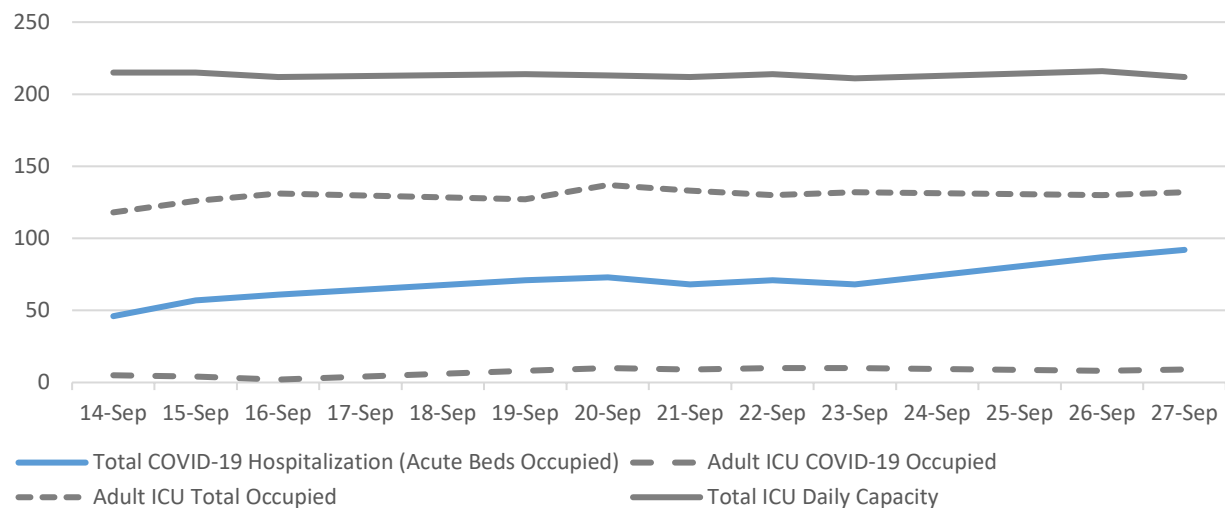
**Table 1. Summary of COVID-19 Activity – Montana, as of 9/23/2022**

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	310,098	1,474	+17%
LABORATORY TESTS	3,021,422	10,985	+3%
HOSPITALIZATIONS	13,283	69	+33%
DEATHS	3,519	3	-25%

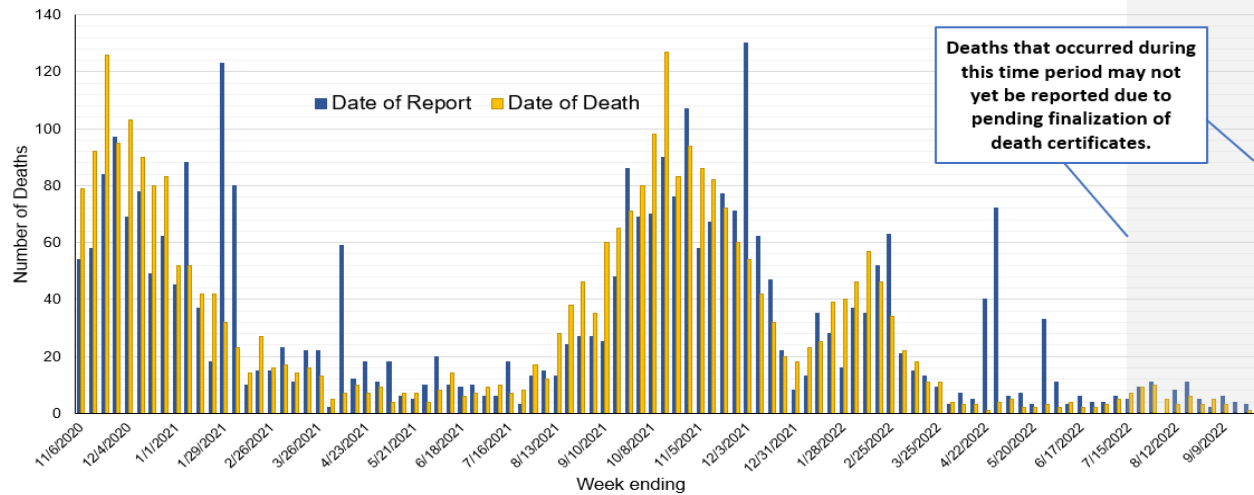
**Figure 1. COVID-19 Cases and Hospitalizations over Time – Montana, as of 9/23/2022**



**Figure 2: Status of Acute Care and ICU Beds – Hospitals in Montana, 9/14/2022-9/27/2022**



**Figure 3. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 9/23/2022**



**Vaccine Data**

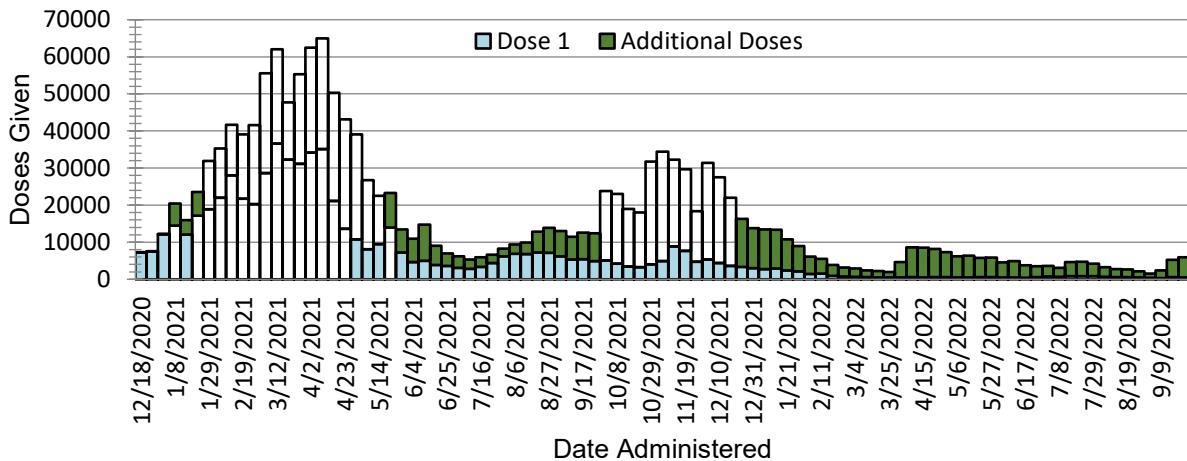
Montana began vaccinating individuals in mid-December 2020 with a phased process: Phase 1A on December 14, 2020, Phase 1B on January 19, 2021, and Phase 1B+ on March 8, 2021. Vaccinations were opened to all Montanans age 16+ on April 1, 2021, and expanded to all Montanans age 12+ on May 10<sup>th</sup>, 2021. The Pfizer vaccine was approved for the 5–11 year-old age group on October 29<sup>th</sup>, 2021. The Pfizer and Moderna vaccines were approved for all Montanans aged 6 months and older on June 18, 2022. To date, 1,554,238 doses have been given across the state and 53% of the eligible population is considered fully vaccinated (table 2).

**Table 2: COVID-19 Vaccine Doses Administered, 0+ years-old – Montana, as of 9/23/2022**

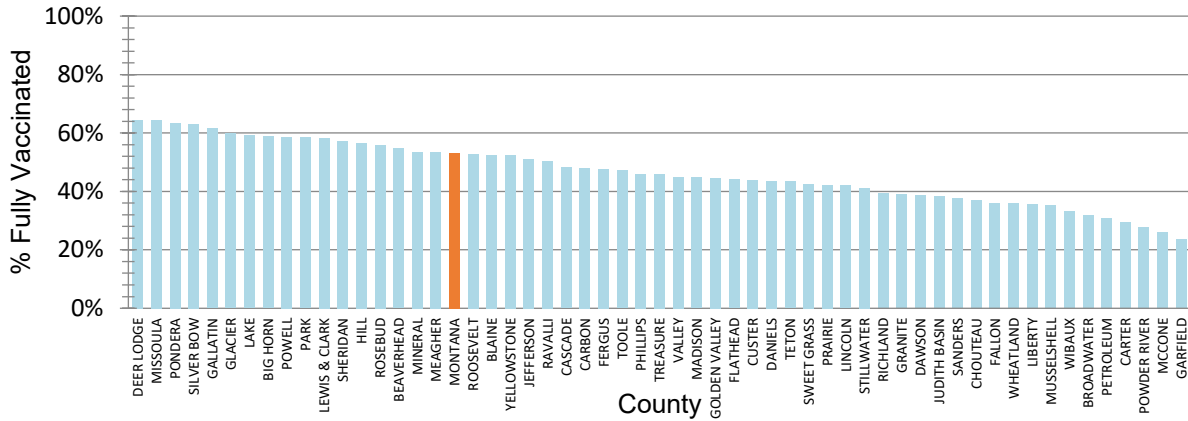
	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 9/9	WEEK ENDING 9/16	WEEK ENDING 9/23*
TOTAL DOSES ADMINISTERED	<b>1,554,238</b>		<b>2,424</b>	<b>5,229</b>	<b>5,956</b>
DOSE 1 ADMINISTERED	<b>648,960</b>	<b>60%</b>	<b>354</b>	<b>566</b>	<b>508</b>
FULLY VACCINATED INDIVIDUALS	<b>575,365</b>	<b>53%</b>	<b>322</b>	<b>357</b>	<b>251</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, 0+ years-old – Montana, as of 9/23/2022**



**Figure 5. Percent of Eligible Montanans (0+ years old) Fully Vaccinated by County – Montana, 9/23/2022**

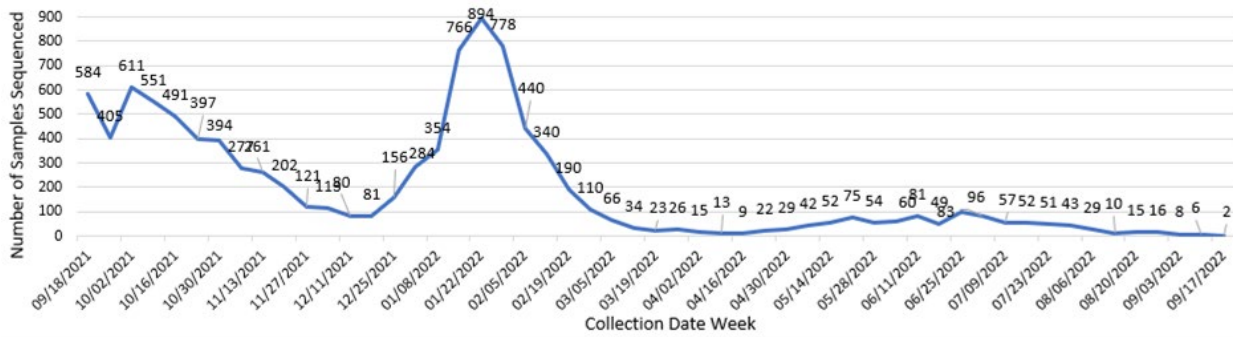


**Variant Information**

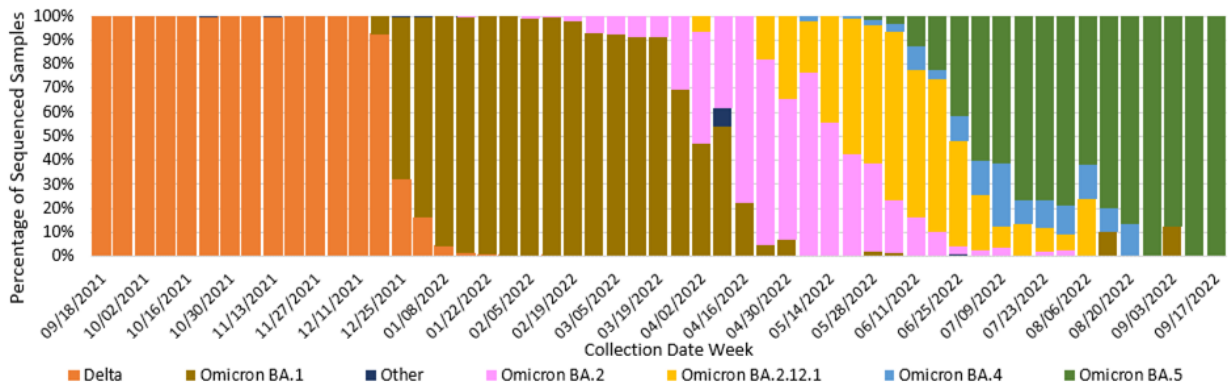
DPHHS is monitoring variants of the SARS-CoV-2 virus circulating in Montana. Figure 6 displays the number of COVID samples sequenced by week in the past year. Figure 7 displays the percentage of the most common SARS-CoV-2 lineages detected out of all COVID samples sequenced by week. Please note the relatively small number of samples sequenced in recent weeks limits interpretation of the available sequencing data. There was no sequencing performed for specimens collected during the week ending September 24, 2022.

Omicron BA.5 (green, below) has been the dominant variant circulating in Montana, since July 2. There were 32 sequences reported to GISAID from positive samples collected and sequenced in the last four weeks—31 (97%) BA.5 and 1 (3%) BA.1.

**Figure 6. Number of COVID-19 samples sequenced by collection date, Montana 9/24/2022**



**Figure 7. Percent of COVID-19 variants in sequenced samples by collection date, Montana 9/24/2022**



## Hospitalizations and Deaths by Vaccination Status

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. The CDC is monitoring national rates of COVID-19 cases and deaths by vaccination status. Data from July 2022 identified 4 key trends: (1) unvaccinated individuals 6 months and older were 2.4 times more likely to become infected with COVID-19, compared to individuals vaccinated with at least a primary series in the same age group; (2) unvaccinated individuals 6 months and older had 5 times the risk of dying from COVID-19 compared to individuals vaccinated with at least a primary series in the same age group; (3) unvaccinated individuals 50+ years were 12 times more likely to die from COVID-19 compared to individuals with a primary series and two or more booster doses; and (4) individuals 50+ years vaccinated with a primary series and one booster dose had 2 times the risk of dying from COVID-19 compared to individuals with a primary series and two or more booster doses.<sup>1</sup>

COVID-19-related hospitalizations and deaths were analyzed between **April 1, 2021 and September 23, 2022** to review vaccination status. Since the beginning of April 2021, 75% of Montanans who were hospitalized and 75% of those who died were unvaccinated at the time of infection (Table 3)<sup>†</sup>. Of the 8,441 individuals who were hospitalized during this time period, 179 (2%) were <18 years old, 1,111 (13%) were 18 to 44 years old, 2,578 (31%) were 45 to 64 years old and 4,573 (54%) were ≥65 years old.

Additionally, COVID-19-related hospitalization and death data from **July 30 – September 23, 2022** (last 8 weeks) were analyzed to review vaccination status. Fifty-two percent of Montanans who were hospitalized and 42% of those who died had not received a COVID-19 vaccine (Table 4)<sup>†</sup>. Of the 428 individuals who were hospitalized during this time period, 13 (3%) were <18 years old, 34 (8%) were 18 to 44 years old, 93 (22%) were 45 to 64 years old and 288 (67%) were ≥65 years old.

**Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1, 2021 to September 23, 2022**

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	<b>8,441</b>	<b>1,913</b>
UNVACCINATED	6,302 (75%)	1,439 (75%)
VACCINATED (PRIMARY SERIES)	2,139 (25%)	474 (25%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>&lt;18-102 (63)</b>	<b>&lt;18-103 (71)</b>
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>&lt;18-103 (74)</b>	<b>20-101 (81)</b>

**Table 4. Vaccination status of COVID-19 hospitalizations and deaths – July 30 to September 23, 2022**

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	<b>428</b>	<b>26</b>
UNVACCINATED	223 (52%)	11 (42%)
VACCINATED (PRIMARY SERIES)	205 (48%)	15 (58%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>&lt;18-99 (69)</b>	<b>&lt;18-102 (77)</b>
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<b>&lt;18-102 (77)</b>	<b>62-96 (88)</b>

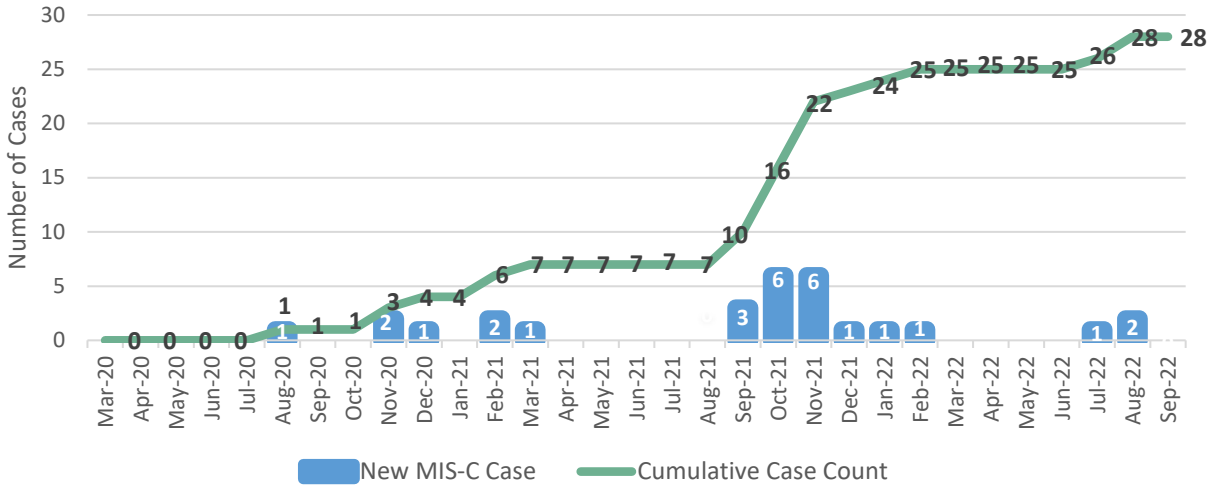
<sup>†</sup>The analysis of hospitalizations and deaths by vaccination status does not include data on booster doses. Booster doses are recommended by the CDC and have been shown to improve protection against death from COVID-19<sup>1</sup>.

<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>. September 20, 2022.

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

As of September 23, 2022, there have been a total of 28 cases of multisystem inflammatory syndrome in children, or MIS-C, reported in Montana. There has been 1 death. Ages range from less than 1 year to 20 years old; median is 7 years. Thirteen cases were female, 15 were male. A majority of cases are non-Hispanic White. Cases are from 14 counties around Montana. The first case of MIS-C was reported in August 2020; 21 of the 28 cases have been reported since September 2021 (Figure 8).

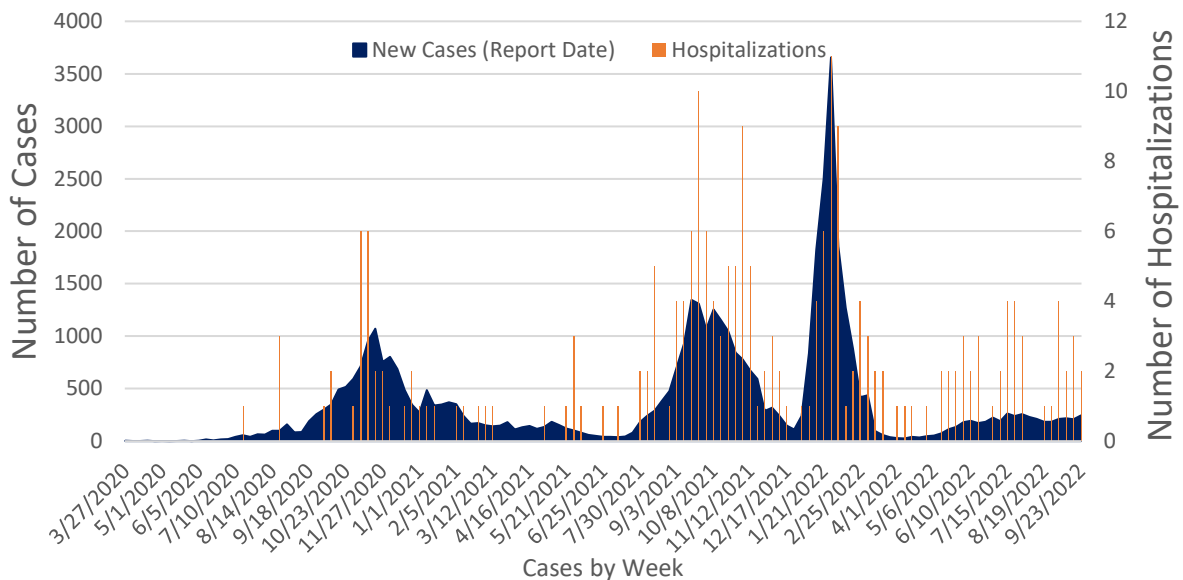
**Figure 8. Montana MIS-C Cases by Month of Onset, March 2020 – September 2022**



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

To date, there have been 47,023 children <18 years old in Montana diagnosed with COVID-19. Of those, 215 (<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 244 cases of COVID-19 in children reported during the week of September 17– September 23, 2022, which is a 17% increase 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 – September 23, 2022, Children <18**

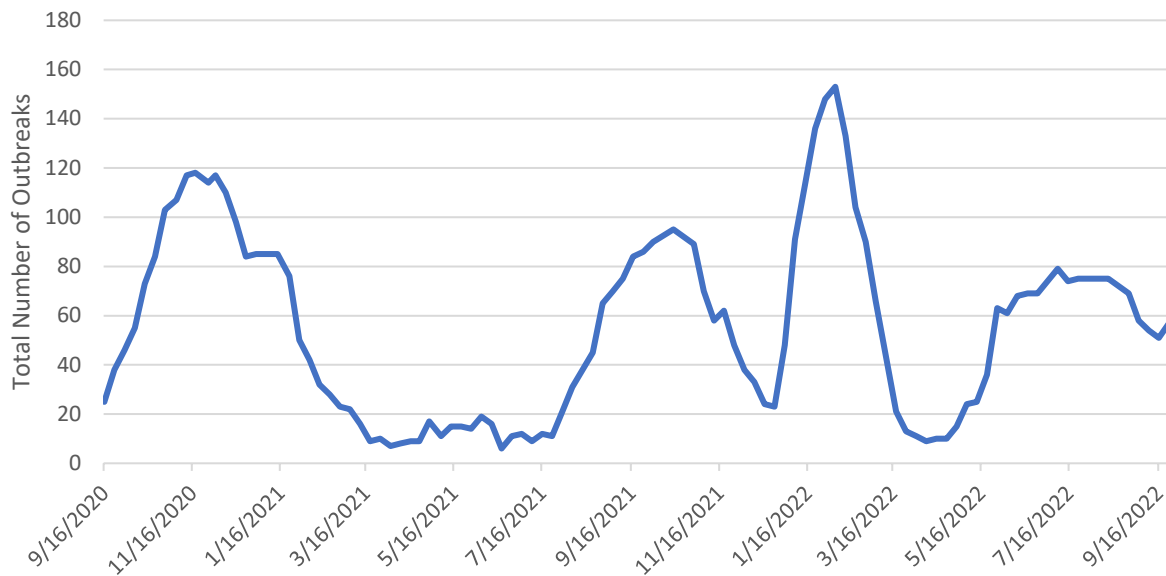


## Assisted Living Facility and Long-Term Care Facility Cases and Hospitalizations

There are 71 long-term care facilities (LTCFs) and 211 assisted living facilities (ALFs) in Montana. As of September 16, 2022, there have been 13,551 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 have been 671 COVID-related deaths associated with ALFs and LTCFs in Montana, which accounts for 19% of the COVID-related deaths that Montana has reported since the beginning of the pandemic.

Facilities that have identified a case of COVID-19 in a resident or staff member within the last 14 days are considered to be actively responding to an outbreak. There were 57 LTCFs and ALFs that were actively responding to a COVID outbreak as of September 23, 2022, which is an increase of 6 active outbreaks among ALFs and LTCFs compared to the previous week (Figure 10).

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



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

County	19 Aug	26 Aug	2 Sep	9 Sep	16 Sep	23 Sep	change from previous week*	Trendline
Beaverhead	6	2	8	8	8	11	3	
Big Horn	22	23	18	9	7	4	-3	
Blaine	24	11	21	6	13	17	4	
Broadwater	23	9	6	9	7	7	0	
Carbon	15	13	3	12	8	9	1	
Carter	1	1	0	1	0	1	1	
Cascade	155	287	128	128	122	109	-13	
Chouteau	17	10	1	9	6	34	28	
Custer	19	11	29	16	8	19	11	
Daniels	1	1	0	0	1	0	-1	
Dawson	5	5	7	3	5	5	0	
Deer Lodge	15	7	9	17	26	25	-1	
Fallon	0	0	7	1	4	4	0	
Fergus	36	38	20	9	2	9	7	
Flathead	146	152	111	73	126	134	8	
Gallatin	127	137	137	115	146	207	61	
Garfield	0	0	0	0	0	0	0	
Glacier	7	43	14	20	14	40	26	
Golden Valley	1	0	1	0	0	0	0	
Granite	4	2	0	4	2	6	4	
Hill	33	34	18	11	15	15	0	
Jefferson	13	18	4	6	12	13	1	
Judith Basin	4	3	1	1	2	1	-1	
Lake	42	37	32	46	37	65	28	
Lewis and Clark	99	90	93	99	105	100	-5	
Liberty	5	7	4	2	1	2	1	
Lincoln	17	17	35	20	22	17	-5	
Madison	9	14	14	11	19	25	6	
McCone	5	7	0	2	1	1	0	
Meagher	4	6	4	12	6	7	1	



<b>Missoula</b>	157	144	154	144	183	193	10		
<b>Park</b>	16	15	14	7	9	24	15		
<b>Phillips</b>	17	5	1	0	1	0	-1		
<b>Powder River</b>	2	2	1	2	1	0	-1		
<b>Prairie</b>	1	1	4	0	0	0	0		
<b>Richland</b>	16	5	13	9	17	5	-12		
<b>Rosebud</b>	44	47	6	6	4	4	0		
<b>Sheridan</b>	8	8	7	7	7	4	-3		
<b>Stillwater</b>	3	5	6	6	8	8	0		
<b>Teton</b>	13	6	12	5	4	5	1		
<b>Treasure</b>	1	0	0	0	0	0	0		
<b>Wheatland</b>	1	4	1	3	0	0	0		
<b>Yellowstone</b>	310	306	234	203	178	196	18		
<b>MONTANA</b>	<b>1654</b>	<b>1669</b>	<b>1324</b>	<b>1166</b>	<b>1263</b>	<b>1474</b>	<b>211</b>		

\*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 0+	Dose 1	Fully Immunized	Total Doses Administered	Percent eligible with first dose (0+)	Percent Fully Vaccinated (0+)
BEAVERHEAD	9,483	5,586	5,182	13,431	59%	55%
BIG HORN	13,063	8,469	7,682	19,484	65%	59%
BLAINE	6,568	3,828	3,447	9,125	58%	52%
BROADWATER	6,444	2,448	2,059	5,626	38%	32%
CARBON	10,921	5,694	5,249	14,111	52%	48%
CARTER	1,235	384	363	941	31%	29%
CASCADE	81,346	43,985	39,188	103,148	54%	48%
CHOUTEAU	5,699	2,277	2,115	5,877	40%	37%
CUSTER	11,292	5,459	4,947	12,874	48%	44%
DANIELS	1,638	745	712	1,841	45%	43%
DAWSON	8,555	3,595	3,302	8,714	42%	39%
DEER LODGE	9,204	6,478	5,937	16,229	70%	65%
FALLON	2,826	1,093	1,017	2,636	39%	36%
FERGUS	11,104	5,644	5,297	14,382	51%	48%
FLATHEAD	105,851	53,862	46,593	126,678	51%	44%
GALLATIN	116,806	85,073	71,900	197,171	73%	62%
GARFIELD	1,268	319	299	695	25%	24%
GLACIER	13,594	10,787	8,135	22,705	79%	60%
GOLDEN VALLEY	827	405	369	951	49%	45%
GRANITE	3,317	1,476	1,294	3,519	44%	39%
HILL	16,358	10,117	9,266	23,469	62%	57%
JEFFERSON	12,360	6,931	6,308	17,461	56%	51%
JUDITH BASIN	1,994	820	766	2,030	41%	38%
LAKE	30,986	20,720	18,320	50,289	67%	59%
LEWIS & CLARK	70,229	46,892	40,972	115,372	67%	58%
LIBERTY	2,369	870	844	2,217	37%	36%
LINCOLN	20,343	9,639	8,554	23,328	47%	42%
MADISON	8,959	4,518	4,016	10,926	50%	45%
MCCONE	1,648	451	429	1,174	27%	26%
MEAGHER	1,831	1,034	979	2,623	56%	53%
MINERAL	4,544	2,666	2,430	6,276	59%	53%
MISSOULA	121,630	87,071	78,304	215,404	72%	64%
MUSSELSHELL	4,669	1,776	1,649	4,180	38%	35%
PARK	16,760	11,422	9,802	26,857	68%	58%
PETROLEUM	500	165	155	409	33%	31%
PHILLIPS	3,919	1,932	1,803	4,573	49%	46%
PONDERA	5,782	4,164	3,665	8,941	72%	63%
POWDER RIVER	1,681	504	467	1,196	30%	28%
POWELL	6,817	4,317	4,001	10,029	63%	59%
PRAIRIE	1,067	477	451	1,222	45%	42%
RAVALLI	45,002	25,106	22,696	62,212	56%	50%
RICHLAND	11,043	4,624	4,357	10,715	42%	39%
ROOSEVELT	10,964	6,352	5,785	14,237	58%	53%
ROSEBUD	8,836	5,546	4,945	12,899	63%	56%
SANDERS	12,157	5,141	4,568	12,518	42%	38%
SHERIDAN	3,261	1,968	1,866	5,117	60%	57%
SILVER BOW	35,180	24,291	22,171	61,060	69%	63%
STILLWATER	9,888	4,428	4,069	10,621	45%	41%
SWEET GRASS	3,684	1,733	1,571	4,134	47%	43%
TETON	6,249	3,168	2,712	7,192	51%	43%
TOOLE	4,686	2,372	2,209	5,240	51%	47%
TREASURE	695	435	319	944	63%	46%
VALLEY	7,359	3,483	3,307	8,633	47%	45%
WHEATLAND	2,157	830	774	2,061	38%	36%
WIBAUX	939	365	312	838	39%	33%
YELLOWSTONE	162,990	95,025	85,436	227,703	58%	52%
<b>MONTANA</b>	<b>1,080,577</b>	<b>648,960</b>	<b>575,365</b>	<b>1,554,238</b>	<b>60%</b>	<b>53%</b>