

Weekly COVID-19 Update in Montana (as of 3/11/2022)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of March 11, 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 3/11/2022

| | TOTAL | RECENT WEEK | PERCENT CHANGE FROM PREVIOUS WEEK |
|------------------|------------------|---------------|-----------------------------------|
| REPORTED CASES | 271,737 | 636 | -75% |
| LABORATORY TESTS | 2,679,261 | 18,111 | -26% |
| HOSPITALIZATIONS | 11,766 | 78 | -24% |
| DEATHS | 3,223 | 15 | -29% |

Figure 1. COVID-19 Cases and Hospitalizations over Time – Montana, as of 3/11/2022

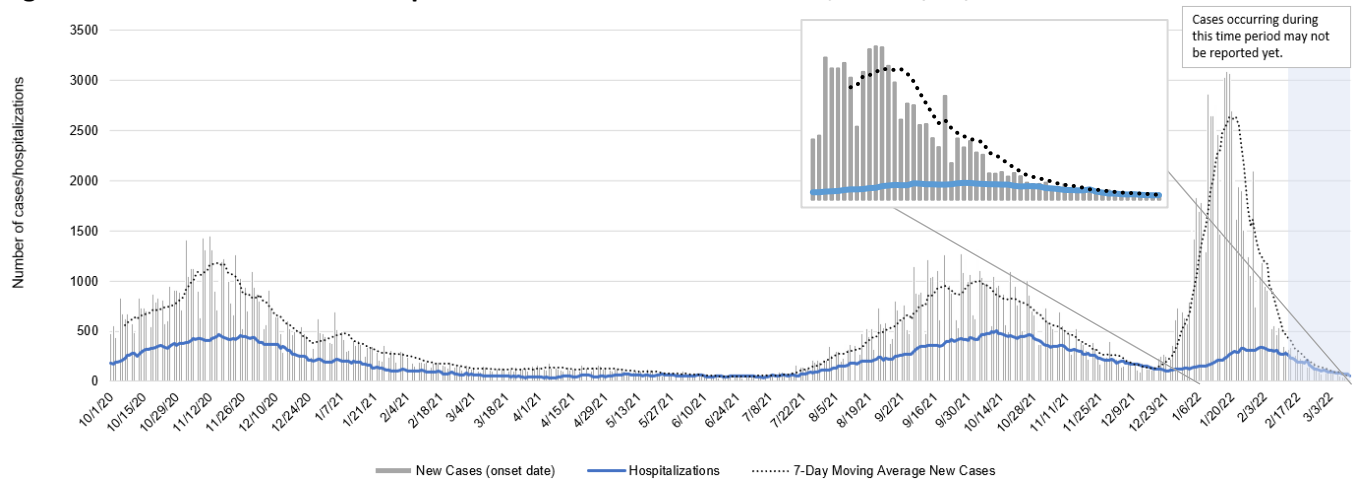


Figure 2: Status of Acute Care and ICU Beds – Hospitals in Montana, 3/2 - 3/15/2022

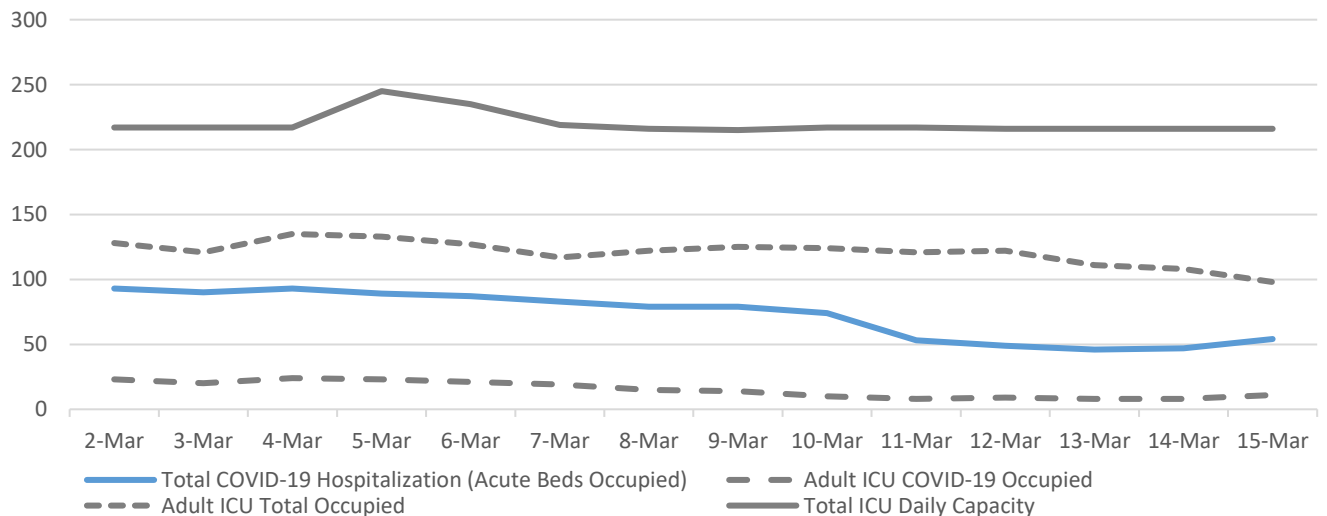
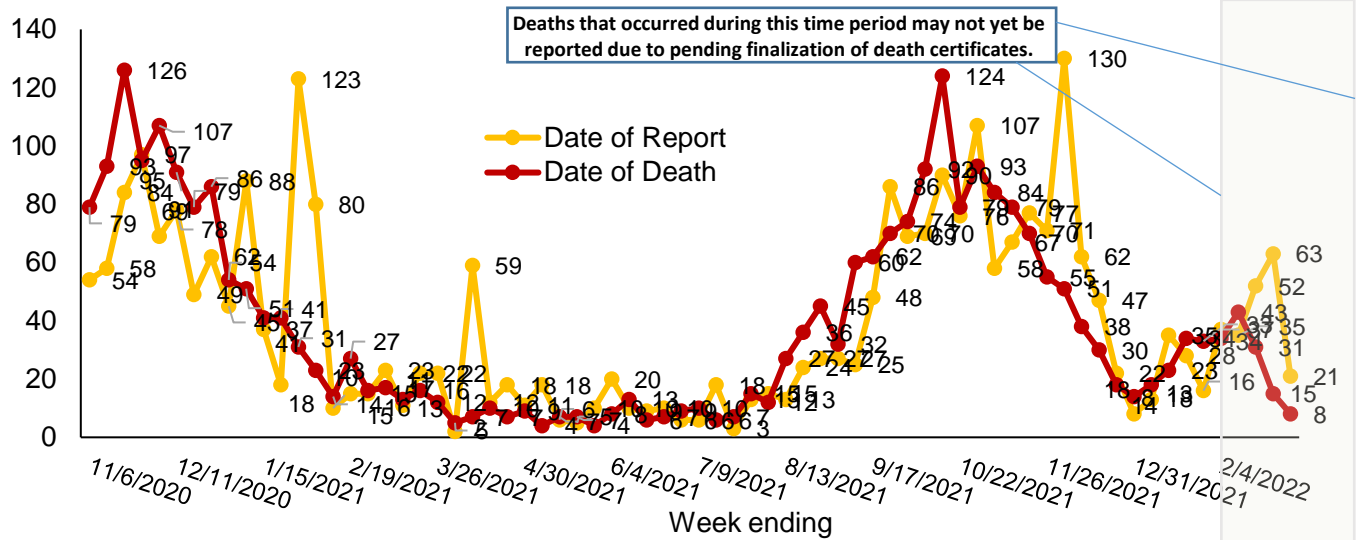


Figure 3. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 3/11/2022



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, 1,412,927 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 3/11/2022

| | NUMBER | PERCENT OF ELIGIBLE POPULATION | WEEK ENDING 2/25 | WEEK ENDING 3/4 | WEEK ENDING 3/11* |
|------------------------------|------------------|--------------------------------|------------------|-----------------|-------------------|
| TOTAL DOSES ADMINISTERED | 1,412,927 | | 3,081 | 2,795 | 2,066 |
| DOSE 1 ADMINISTERED | 629,654 | 62% | 741 | 626 | 478 |
| FULLY VACCINATED INDIVIDUALS | 557,732 | 55% | 1,067 | 918 | 706 |

*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 3/11/2022

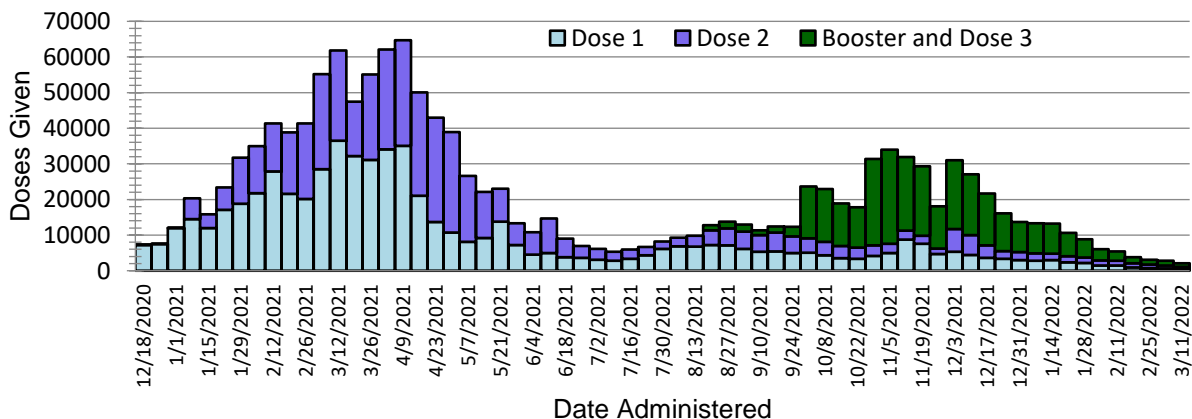
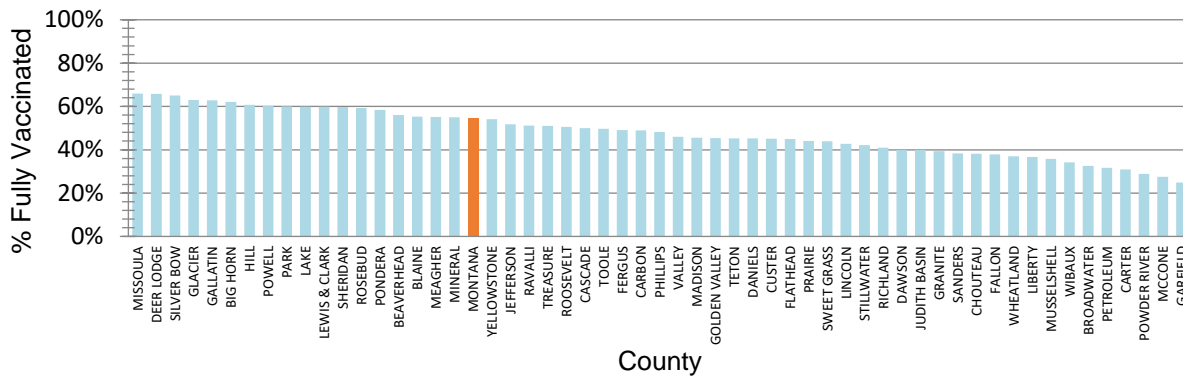


Figure 5. Percent of Eligible Montanans (5+ years) Fully Vaccinated by County – Montana, 3/11/2022



Variant and Breakthrough Cases

Figure 7 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 12,611 samples from Montana that were sequenced and their lineages were reported to GISAID since September 2020; figure 6 displays the number of specimens sequenced by week.

As of March 15, there have been 3,473 cases across Montana infected with the Omicron variant. In the last 3 weeks, 83/83 (100%) specimens that were collected and sequenced were Omicron. Omicron is the dominant circulating strain in the state and is displayed in brown on the chart below. DPHHS has been monitoring sublineages of the Omicron variant, including BA.2. There have been 16 cases of BA.2 reported, the first detection was January 30, 2022. During that same time period, Montana had 1004 detections of Omicron sublineages BA1.1 and BA.1.

Figure 6. Number of COVID-19 samples sequenced by collection date, Montana 3/12/2022

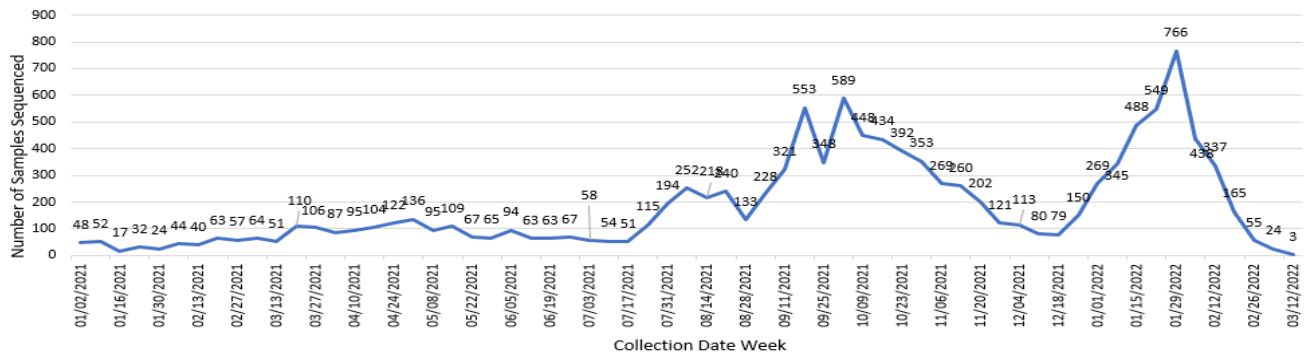
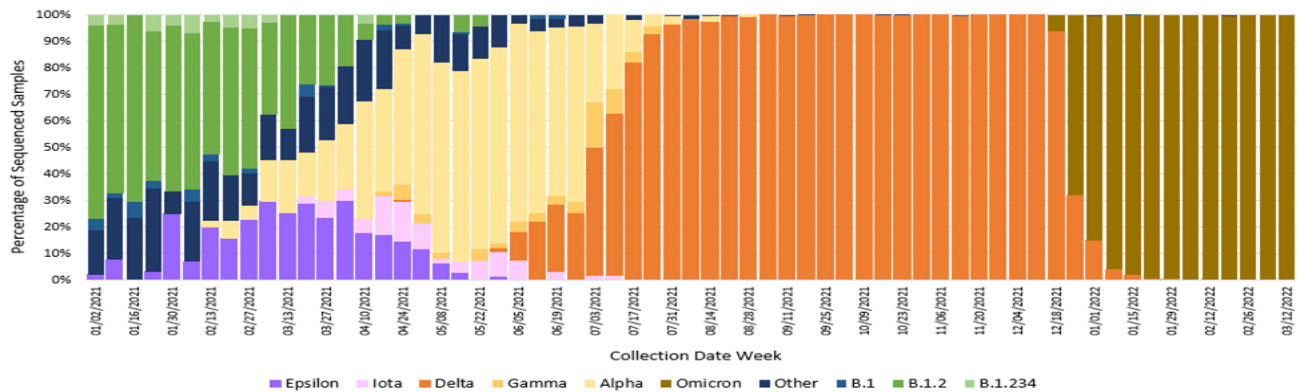


Figure 7. Percent of COVID-19 variants in sequenced samples by collection date, Montana 3/12/2022



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 3/11/2022, Montana reports 41,834 cases of confirmed breakthrough disease, which includes 1,391 hospitalizations and 376 deaths. CDC data from December show that unvaccinated adults were more than 3 times more likely to become infected with COVID, compared to fully vaccinated adults with a booster dose. Additionally, unvaccinated adults had 41 times the risk of dying from COVID-19 compared to fully vaccinated adults with booster doses.¹

Hospitalizations and Deaths and Vaccination Status

COVID-19-related hospitalizations and deaths were analyzed between **April 1, 2021 and March 11, 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 6,926 individuals who were hospitalized during this time period, 131 (2%) were <18 years old, 940 (14%) were 18 to 44 years old, 2,275 (33%) were 45 to 64 years old and 3,580 (52%) were ≥ 65 years old.

Additionally, COVID-19-related hospitalization and death data from **January 15– March 11, 2022** (last 8 weeks) were analyzed to review vaccination status. 66% of Montanans who were hospitalized and 68% of those who died had not received a COVID-19 vaccine (Table 4). Of the 1,079 individuals who were hospitalized during this time period, 37 (3%) were <18 years old, 110 (10%) were 18 to 44 years old, 272 (25%) were 45 to 64 years old and 660 (61%) were ≥ 65 years old.

Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1, 2021 to March 11, 2022

| | HOSPITALIZATIONS | DEATHS |
|--|-----------------------|--------------------|
| TOTAL REPORTED | 6,926 | 1,632 |
| UNVACCINATED | 5,543 (80%) | 1,257 (77%) |
| VACCINATED (BREAKTHROUGH CASE) | 1,383 (20%) | 375 (23%) |
| UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE) | <1-102 (63) | 23-103 (71) |
| VACCINATED AGE RANGE IN YEARS (MEDIAN AGE) | 7-103 (73) | 20-101 (81) |

Table 4. Vaccination status of COVID-19 hospitalizations and deaths – January 15 to March 11, 2022

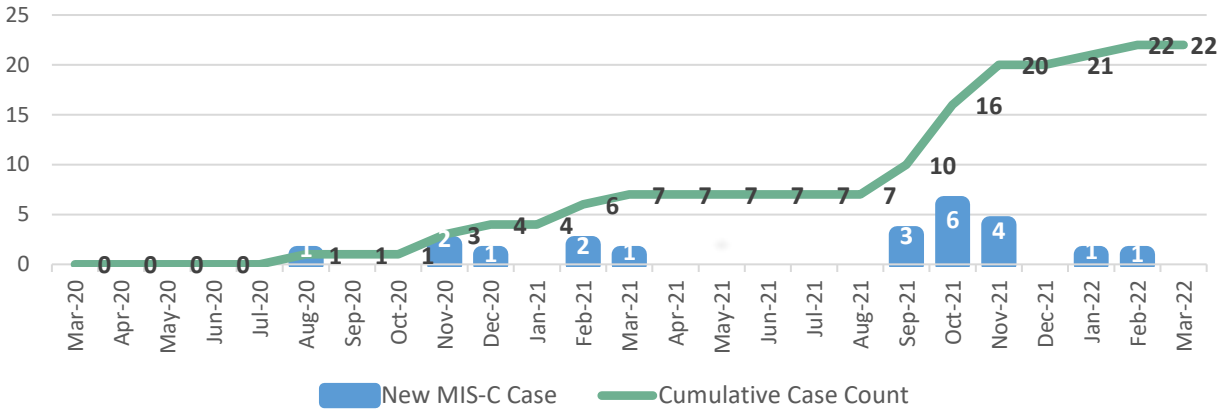
| | HOSPITALIZATIONS | DEATHS |
|--|-----------------------|--------------------|
| TOTAL REPORTED | 1,079 | 203 |
| UNVACCINATED | 709 (66%) | 139 (68%) |
| VACCINATED (BREAKTHROUGH CASE) | 370 (34%) | 64 (32%) |
| UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE) | <1-101 (68) | 40-101 (75) |
| VACCINATED AGE RANGE IN YEARS (MEDIAN AGE) | 7-103 (72) | 48-100 (79) |

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>. March 15, 2022.

Multisystem Inflammatory Syndrome in Children (MIS-C)

As of March 11, 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).

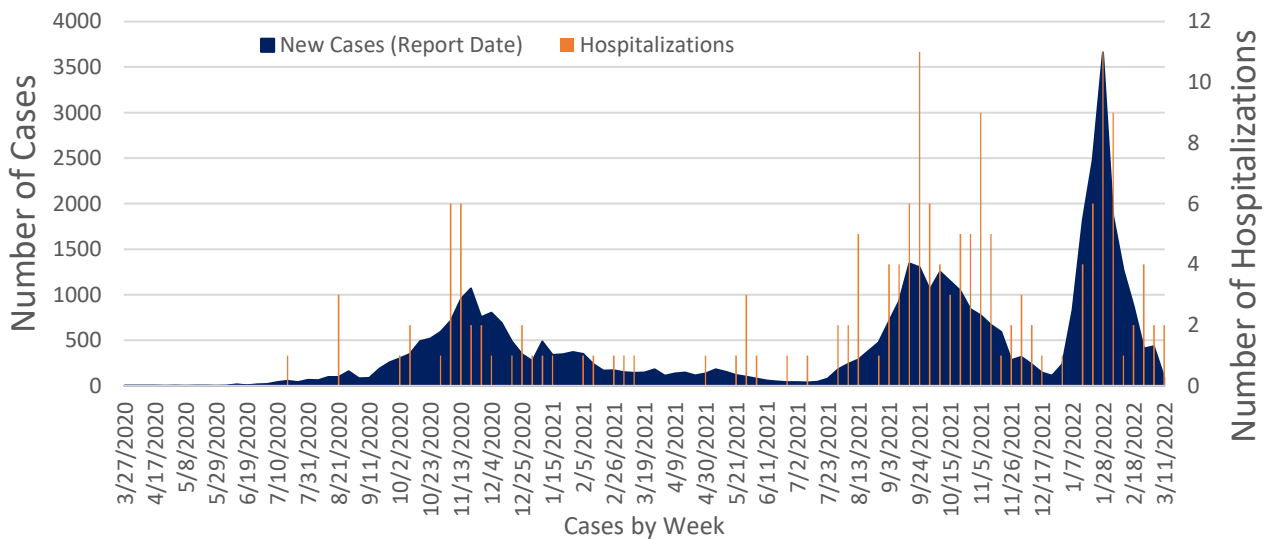
Figure 8. Montana MIS-C Cases by Month of Onset, March 2020 – March 2022



Cases and Hospitalizations Associated with COVID-19 Among Children

To date, there have been 42,756 children <18 years old in Montana diagnosed with COVID-19. Of those, 167 (<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 94 cases of COVID-19 in children reported during the week of March 5 – March 11, 2022, which is a 78% decrease in cases among that age group compared to the previous week. Two hospitalizations in children were reported that week. Two hospitalizations in children were reported that week.

Figure 9. COVID-19 Cases and Hospitalizations by Week, March 2020 – March 11, 2022, Children <18



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

| County | 4-Feb | 11-Feb | 18-Feb | 25-Feb | 4-Mar | 11-Mar | change from previous week* | Trendline |
|-----------------|-------|--------|--------|--------|-------|--------|----------------------------|-----------|
| Beaverhead | 61 | 29 | 12 | 12 | 10 | 1 | -9 | |
| Big Horn | 205 | 335 | 240 | 9 | 6 | 11 | 5 | |
| Blaine | 33 | 188 | 23 | 9 | 61 | 11 | -50 | |
| Broadwater | 34 | 25 | 30 | 13 | 6 | 5 | -1 | |
| Carbon | 52 | 33 | 15 | 11 | 15 | 8 | -7 | |
| Carter | 3 | 2 | 2 | 2 | 6 | 1 | -5 | |
| Cascade | 1176 | 960 | 963 | 717 | 462 | 90 | -372 | |
| Chouteau | 28 | 27 | 13 | 12 | 3 | 2 | -1 | |
| Custer | 80 | 53 | 35 | 8 | 8 | 4 | -4 | |
| Daniels | 11 | 13 | 1 | 3 | 3 | 0 | -3 | |
| Dawson | 110 | 37 | 8 | 8 | 11 | 2 | -9 | |
| Deer Lodge | 112 | 76 | 28 | 39 | 30 | 16 | -14 | |
| Fallon | 18 | 17 | 6 | 0 | 0 | 0 | 0 | |
| Fergus | 66 | 76 | 74 | 22 | 17 | 3 | -14 | |
| Flathead | 1007 | 634 | 1041 | 643 | 736 | 59 | -677 | |
| Gallatin | 723 | 423 | 257 | 180 | 127 | 81 | -46 | |
| Garfield | 2 | 4 | 3 | 0 | 0 | 1 | 1 | |
| Glacier | 273 | 175 | 204 | 32 | 86 | 12 | -74 | |
| Golden Valley | 6 | 5 | 0 | 1 | 0 | 0 | 0 | |
| Granite | 15 | 8 | 9 | 2 | 0 | 1 | 1 | |
| Hill | 157 | 158 | 32 | 24 | 87 | 7 | -80 | |
| Jefferson | 91 | 64 | 21 | 4 | 6 | 0 | -6 | |
| Judith Basin | 5 | 6 | 3 | 1 | 0 | 0 | 0 | |
| Lake | 170 | 128 | 234 | 65 | 17 | 8 | -9 | |
| Lewis and Clark | 966 | 327 | 171 | 93 | 62 | 34 | -28 | |
| Liberty | 15 | 10 | 5 | 7 | 5 | 0 | -5 | |
| Lincoln | 173 | 89 | 41 | 41 | 15 | 22 | 7 | |
| Madison | 47 | 24 | 12 | 4 | 1 | 3 | 2 | |
| McCone | 13 | 6 | 3 | 1 | 0 | 0 | 0 | |
| Meagher | 10 | 17 | 3 | 3 | 1 | 0 | -1 | |

| County | 4-Feb | 11-Feb | 18-Feb | 25-Feb | 4-Mar | 11-Mar | change from previous week* | Trendline |
|----------------|--------------|-------------|-------------|-------------|-------------|------------|----------------------------|-----------|
| Mineral | 37 | 23 | 14 | 4 | 4 | 1 | -3 | |
| Missoula | 1561 | 534 | 307 | 160 | 130 | 75 | -55 | |
| Musselshell | 14 | 21 | 5 | 4 | 3 | 1 | -2 | |
| Park | 130 | 176 | 87 | 14 | 20 | 7 | -13 | |
| Petroleum | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| Phillips | 21 | 23 | 9 | 1 | 9 | 3 | -6 | |
| Pondera | 58 | 32 | 8 | 4 | 3 | 1 | -2 | |
| Powder River | 6 | 6 | 5 | 2 | 1 | 0 | -1 | |
| Powell | 45 | 51 | 9 | 5 | 5 | 4 | -1 | |
| Prairie | 14 | 6 | 3 | 0 | 0 | 0 | 0 | |
| Ravalli | 214 | 119 | 42 | 46 | 26 | 23 | -3 | |
| Richland | 80 | 44 | 20 | 13 | 20 | 31 | 11 | |
| Roosevelt | 203 | 156 | 67 | 26 | 28 | 7 | -21 | |
| Rosebud | 81 | 356 | 142 | 68 | 12 | 2 | -10 | |
| Sanders | 36 | 42 | 16 | 11 | 13 | 7 | -6 | |
| Sheridan | 22 | 24 | 8 | 1 | 8 | 0 | -8 | |
| Silver Bow | 181 | 134 | 71 | 40 | 18 | 8 | -10 | |
| Stillwater | 41 | 30 | 14 | 7 | 26 | 0 | -26 | |
| Sweet Grass | 21 | 9 | 2 | 7 | 2 | 1 | -1 | |
| Teton | 33 | 14 | 11 | 9 | 2 | 1 | -1 | |
| Toole | 63 | 23 | 8 | 3 | 1 | 3 | 2 | |
| Treasure | 6 | 2 | 0 | 0 | 0 | 0 | 0 | |
| Valley | 53 | 41 | 18 | 12 | 7 | 2 | -5 | |
| Wheatland | 23 | 18 | 6 | 0 | 2 | 1 | -1 | |
| Wibaux | 5 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Yellowstone | 1487 | 656 | 325 | 204 | 460 | 76 | -384 | |
| MONTANA | 10097 | 6490 | 4687 | 2607 | 2581 | 636 | -1945 | |

*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 | 5,484 | 4,400 | 2,590 | 5,098 | 12,474 | 60% | 56% |
| BIG HORN | 11,975 | 8,227 | 7,057 | 2,751 | 7,431 | 18,035 | 69% | 62% |
| BLAINE | 6,044 | 3,729 | 3,130 | 1,499 | 3,339 | 8,358 | 62% | 55% |
| BROADWATER | 6,092 | 2,376 | 1,740 | 937 | 1,981 | 5,053 | 39% | 33% |
| CARBON | 10,476 | 5,583 | 4,773 | 2,663 | 5,122 | 13,019 | 53% | 49% |
| CARTER | 1,141 | 376 | 331 | 181 | 353 | 888 | 33% | 31% |
| CASCADE | 76,124 | 42,782 | 34,005 | 17,534 | 38,068 | 94,321 | 56% | 50% |
| CHOUTEAU | 5,430 | 2,226 | 1,885 | 1,285 | 2,072 | 5,396 | 41% | 38% |
| CUSTER | 10,692 | 5,349 | 4,305 | 2,333 | 4,815 | 11,987 | 50% | 45% |
| DANIELS | 1,559 | 742 | 650 | 343 | 705 | 1,735 | 48% | 45% |
| DAWSON | 8,071 | 3,519 | 2,911 | 1,596 | 3,220 | 8,026 | 44% | 40% |
| DEER LODGE | 8,887 | 6,352 | 5,266 | 3,219 | 5,842 | 14,837 | 71% | 66% |
| FALLON | 2,646 | 1,083 | 952 | 468 | 1,002 | 2,503 | 41% | 38% |
| FERGUS | 10,495 | 5,477 | 4,751 | 2,753 | 5,149 | 12,981 | 52% | 49% |
| FLATHEAD | 99,993 | 51,992 | 40,649 | 22,109 | 44,939 | 114,750 | 52% | 45% |
| GALLATIN | 110,900 | 82,651 | 63,394 | 33,280 | 69,597 | 179,325 | 75% | 63% |
| GARFIELD | 1,188 | 319 | 253 | 104 | 296 | 676 | 27% | 25% |
| GLACIER | 12,447 | 10,461 | 7,282 | 3,159 | 7,840 | 20,902 | 84% | 63% |
| GOLDEN VALLEY | 788 | 387 | 326 | 158 | 358 | 871 | 49% | 45% |
| GRANITE | 3,218 | 1,447 | 1,157 | 607 | 1,264 | 3,211 | 45% | 39% |
| HILL | 14,914 | 9,895 | 7,680 | 4,057 | 9,067 | 21,632 | 66% | 61% |
| JEFFERSON | 11,819 | 6,730 | 5,702 | 3,255 | 6,115 | 15,687 | 57% | 52% |
| JUDITH BASIN | 1,880 | 797 | 688 | 385 | 750 | 1,870 | 42% | 40% |
| LAKE | 29,280 | 19,882 | 16,336 | 8,758 | 17,551 | 44,976 | 68% | 60% |
| LEWIS & CLARK | 66,257 | 45,053 | 36,767 | 21,278 | 39,642 | 103,098 | 68% | 60% |
| LIBERTY | 2,234 | 856 | 721 | 444 | 821 | 2,021 | 38% | 37% |
| LINCOLN | 19,480 | 9,432 | 7,622 | 4,189 | 8,330 | 21,243 | 48% | 43% |
| MADISON | 8,589 | 4,395 | 3,478 | 2,059 | 3,915 | 9,932 | 51% | 46% |
| MCCONE | 1,562 | 453 | 420 | 237 | 429 | 1,110 | 29% | 27% |
| MEAGHER | 1,726 | 1,005 | 869 | 495 | 953 | 2,369 | 58% | 55% |
| MINERAL | 4,302 | 2,626 | 1,895 | 1,182 | 2,364 | 5,703 | 61% | 55% |
| MISSOULA | 115,881 | 84,793 | 70,299 | 40,592 | 76,344 | 195,684 | 73% | 66% |
| MUSSELSHELL | 4,458 | 1,725 | 1,403 | 722 | 1,599 | 3,850 | 39% | 36% |
| PARK | 15,969 | 11,162 | 8,667 | 4,949 | 9,594 | 24,778 | 70% | 60% |
| PETROLEUM | 483 | 163 | 142 | 85 | 153 | 390 | 34% | 32% |
| PHILLIPS | 3,675 | 1,902 | 1,464 | 902 | 1,771 | 4,268 | 52% | 48% |
| PONDERA | 5,389 | 3,545 | 2,773 | 1,441 | 3,150 | 7,759 | 66% | 58% |
| POWDER RIVER | 1,588 | 499 | 401 | 203 | 458 | 1,103 | 31% | 29% |
| POWELL | 6,534 | 4,215 | 3,144 | 1,889 | 3,934 | 9,248 | 65% | 60% |
| PRAIRIE | 994 | 465 | 414 | 242 | 438 | 1,121 | 47% | 44% |
| RAVALLI | 42,972 | 24,444 | 19,618 | 11,856 | 22,001 | 55,918 | 57% | 51% |
| RICHLAND | 10,310 | 4,459 | 3,534 | 1,843 | 4,217 | 9,836 | 43% | 41% |
| ROOSEVELT | 9,918 | 5,676 | 4,263 | 2,109 | 5,015 | 12,048 | 57% | 51% |
| ROSEBUD | 8,160 | 5,436 | 4,311 | 2,171 | 4,836 | 11,918 | 67% | 59% |
| SANDERS | 11,641 | 5,029 | 4,160 | 2,311 | 4,461 | 11,500 | 43% | 38% |
| SHERIDAN | 3,075 | 1,929 | 1,704 | 977 | 1,837 | 4,610 | 63% | 60% |
| SILVER BOW | 33,267 | 23,769 | 20,306 | 11,216 | 21,656 | 55,291 | 71% | 65% |
| STILLWATER | 9,451 | 4,335 | 3,425 | 2,038 | 3,977 | 9,798 | 46% | 42% |
| SWEET GRASS | 3,523 | 1,699 | 1,322 | 790 | 1,547 | 3,811 | 48% | 44% |
| TETON | 5,819 | 3,109 | 2,193 | 1,243 | 2,634 | 6,545 | 53% | 45% |
| TOOLE | 4,391 | 2,335 | 1,769 | 831 | 2,183 | 4,935 | 53% | 50% |
| TREASURE | 623 | 425 | 295 | 141 | 318 | 861 | 68% | 51% |
| VALLEY | 6,931 | 3,372 | 2,727 | 1,678 | 3,185 | 7,777 | 49% | 46% |
| WHEATLAND | 2,035 | 805 | 698 | 398 | 753 | 1,901 | 40% | 37% |
| WIBAUX | 898 | 355 | 299 | 128 | 307 | 782 | 40% | 34% |
| YELLOWSTONE | 153,378 | 92,322 | 76,661 | 39,223 | 82,936 | 208,206 | 60% | 54% |
| MONTANA | 1,020,663 | 629,654 | 507,387 | 275,886 | 557,732 | 1,412,927 | 62% | 55% |