

Weekly COVID-19 Update in Montana (as of 8/20/2021)

This report is a weekly snapshot of COVID-19 activity in Montana. Data is analyzed based on information available as of August 20, 2021. Data is provisional and expected to change as more information is received.

Case Data

Table 1. Summary of COVID-19 Activity – Montana, as of 8/20/2021

| | TOTAL | RECENT WEEK | PERCENT CHANGE FROM PREVIOUS WEEK |
|------------------|------------------|---------------|-----------------------------------|
| REPORTED CASES | 122,799 | 2,652 | +33% |
| LABORATORY TESTS | 1,575,822 | 30,081 | +25% |
| HOSPITALIZATIONS | 6,147 | 197 | +19% |
| DEATHS | 1,760 | 18 | 0% |

Figure 1. COVID-19 Cases and Hospitalizations over Time - Montana, as of 8/20/2021

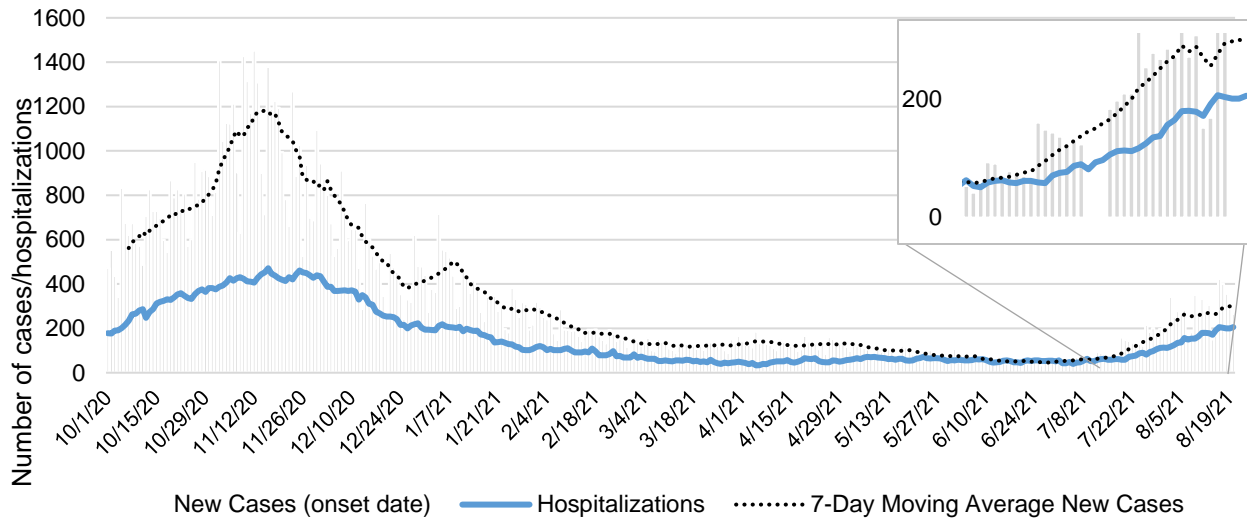
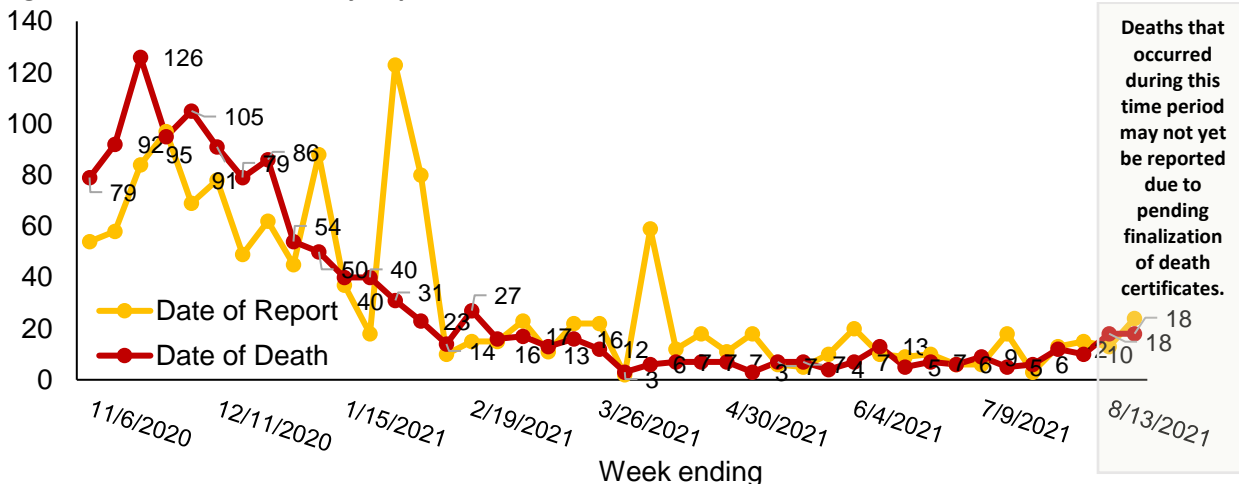


Figure 2. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 8/20/2021



Variant and Breakthrough Cases

A variant has one or more mutations that differentiate it from other variants in circulation. Multiple variants of SARS-CoV-2 have been documented throughout this pandemic. Of 1,922 samples that were sequenced and reported to [GISAID](https://gisaid.org/) since February 2021, 1,694 (88%) were identified as either a variant of concern or variant of interest. The most common variant identified overall (40% of all sequenced specimens) is B.1.1.7 (Alpha/UK). However, B.1.617.2 (Delta) has been the predominant variant in Montana in recent weeks. March through June, the Alpha/UK variant was predominant. Beginning in July, the Delta variant has been detected more commonly in sequenced samples. In the most current week for which data are available, Delta accounted for 100% of all samples sequenced (28 total samples were sequenced). Not all samples have enough genetic material to be sequenced. The charts below reflect information on specimens that were sequenced and reported to GISAID.

Figure 5. Number of COVID-19 samples sequenced by collection date, Montana 8/20/2021 [n=1,922]

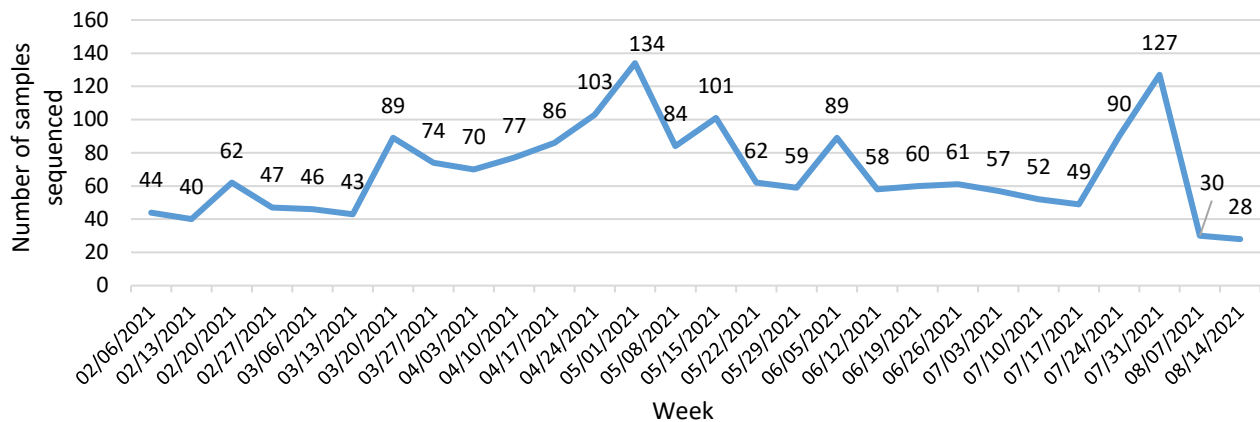
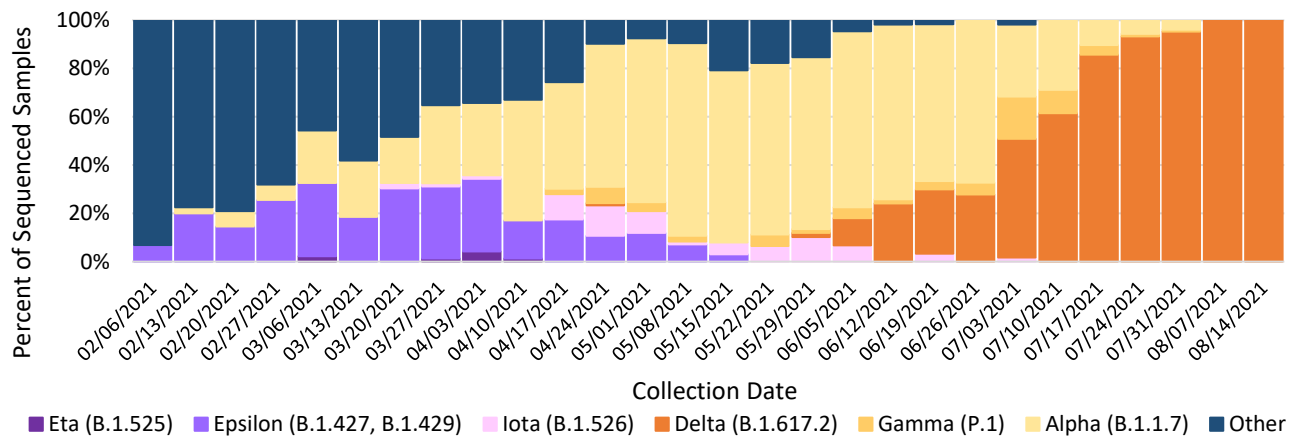


Figure 6. Percent of COVID-19 variants in sequenced samples by collection date, Montana 8/20/2021



A breakthrough COVID-19 infection is defined as a positive SARS-CoV-2 collected ≥ 14 days after completing the primary COVID-19 vaccine series of an FDA-authorized COVID-19 vaccine. Depending on the specific vaccine administered, completion of series could be one or two doses of vaccine. As of 8/24/21, Montana reports 1,997 cases of confirmed breakthrough disease, this includes 151 hospitalizations and 33 deaths, 187/195 with subtyping performed are known to be infected with variants of concern or interest.

Hospitalizations and Deaths and Vaccination Status

COVID-19 related hospitalization and death data from **June 26 – August 20** (last 8 weeks) were analyzed to review vaccination status. Eighty-three percent of Montanans who were hospitalized and 68% of those who had died had not received a COVID-19 vaccine (Table 3).

Table 3. Vaccination status of COVID-19 hospitalizations and deaths – June 26 – August 20, 2021

| | HOSPITALIZATIONS | DEATHS |
|--------------------------------|------------------|-----------------|
| TOTAL REPORTED | 638 | 71 |
| MEDIAN AGE (YEARS) | 66 | 78 |
| AGE RANGE (YEARS) | <1-97 | 42-96 |
| UNVACCINATED | 529 (83%) | 48 (68%) |
| VACCINATED (BREAKTHROUGH CASE) | 109 (17%) | 23 (32%) |