

# COVID-19 Variant of Concern (VOC) Case Report

June 21, 2021

Cases reported here include cases with specimens sequenced at the Scientific Laboratory Division (SLD), University of New Mexico, Centers for Disease Control and Prevention (CDC), Aegis, LabCorp, Fulgent, and Gravity Genetics. Variants of concern (VOC) are defined by Centers for Disease Control and Prevention: <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/variant-surveillance/variant-info.html>.

## Cumulative number of Specimens Sequenced and Matched to Case Investigations

| Lineage                  | Sequenced Cases | Matched Cases* | Percent Matched |
|--------------------------|-----------------|----------------|-----------------|
| <b>B.1.1.7</b> (Alpha)   | 1083            | 748            | 69%             |
| <b>B.1.351</b> (Beta)    | 3               | 0              | 0%              |
| <b>B.1.427</b> (Epsilon) | 140             | 109            | 78%             |
| <b>B.1.429</b> (Epsilon) | 296             | 195            | 66%             |
| <b>P.1</b> (Gamma)       | 39              | 36             | 92%             |
| <b>B.1.617.2</b> (Delta) | 18              | 17             | 94%             |
| <b>Other lineage</b>     | 3741            | 2906           | 78%             |
| <b>Total</b>             | 5320            | 4011           | 75%             |

\*Cases are matched to NMDOH case investigation data to provide demographic, disease outcome, and other clinical information. This table includes 70 sequences from patients who reside outside New Mexico. These have been removed from the subsequent tables and figures.

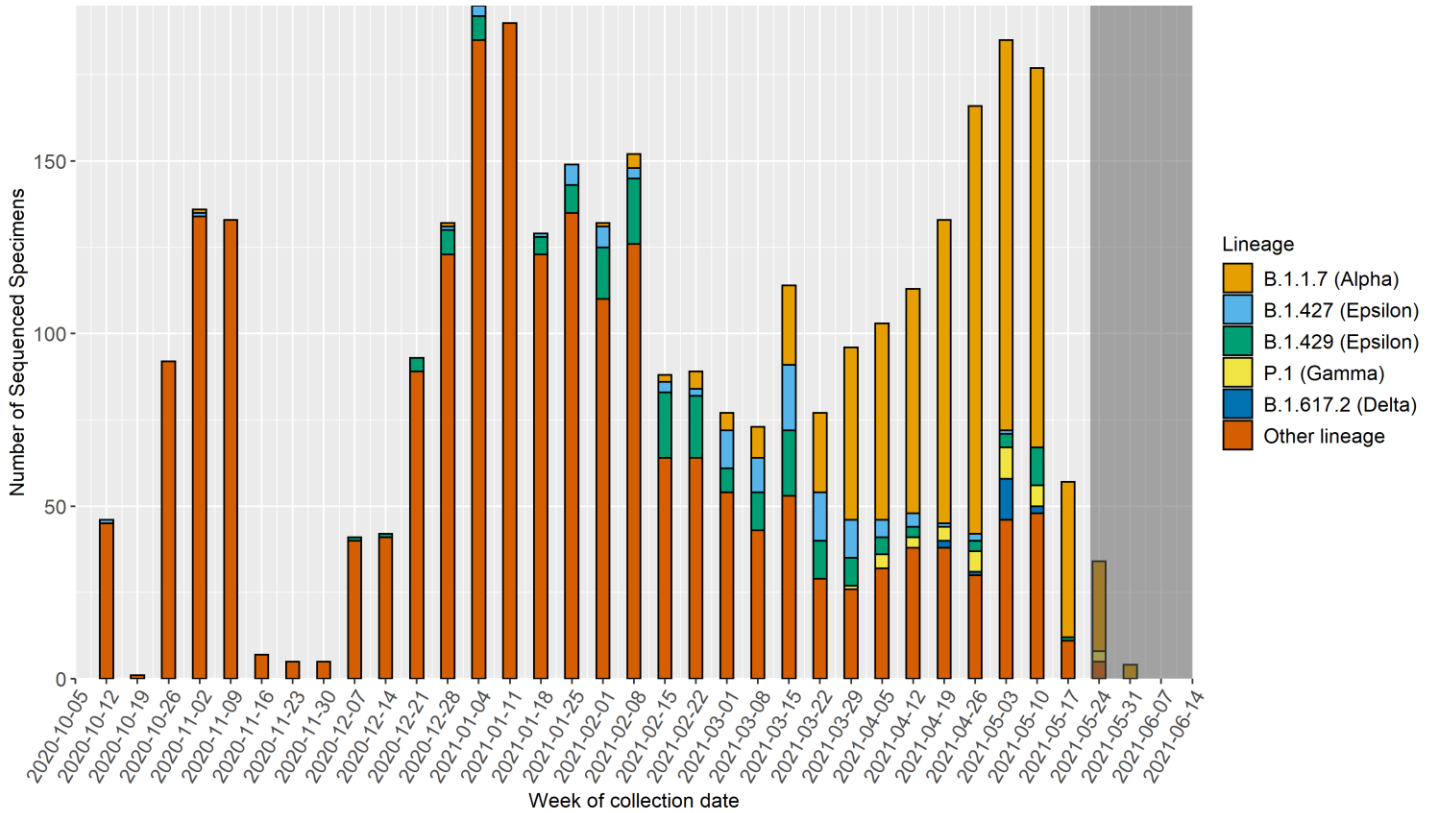
## Cumulative number of VOC cases, hospitalizations and deaths

| Lineage                  | Total Cases | Number Hospitalized | Percent Hospitalized | Number Died | Percent Died |
|--------------------------|-------------|---------------------|----------------------|-------------|--------------|
| <b>B.1.1.7</b> (Alpha)   | 745         | 59                  | 8%                   | 5           | 1%           |
| <b>B.1.427</b> (Epsilon) | 107         | 3                   | 3%                   | 0           | 0%           |
| <b>B.1.429</b> (Epsilon) | 195         | 3                   | 2%                   | 1           | 1%           |
| <b>P.1</b> (Gamma)       | 36          | 12                  | 33%                  | 2           | 6%           |
| <b>B.1.617.2</b> (Delta) | 17          | 1                   | 6%                   | 1           | 6%           |
| <b>Other lineage</b>     | 2841        | 170                 | 6%                   | 58          | 2%           |

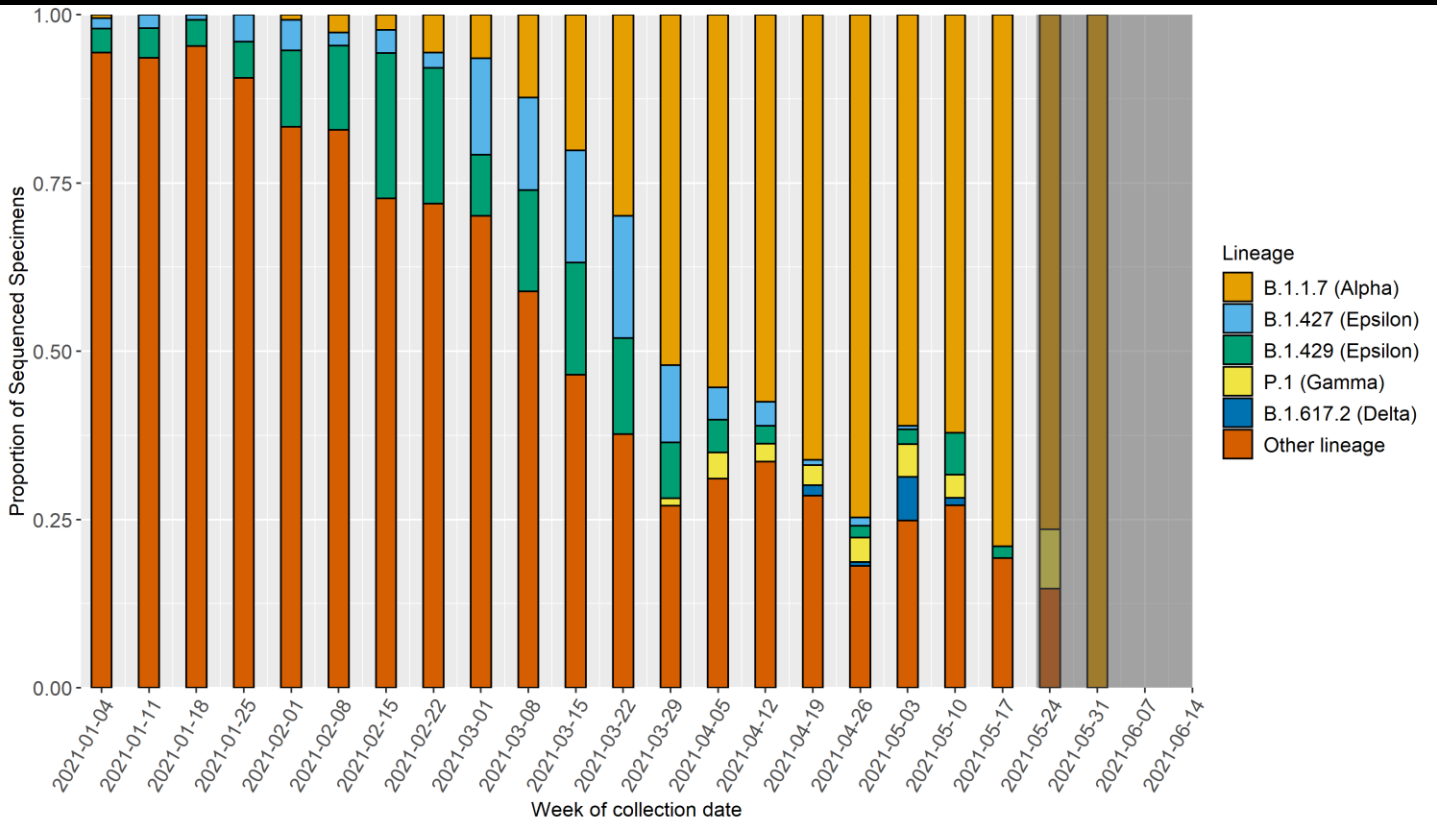
\*The specimen submission process for sequencing is not representative. Of the 36 P.1(Gamma) cases, 14 were collected from a single hospital in San Juan County that submitted specimens on hospital admissions, rather than on a representative set of cases in the county. This is likely increasing the apparent severity of this VOC.

## Identified SARS-CoV-2 lineages by week

\*The dark grey shaded region represents the lag period between specimen collection and genomic sequencing results.

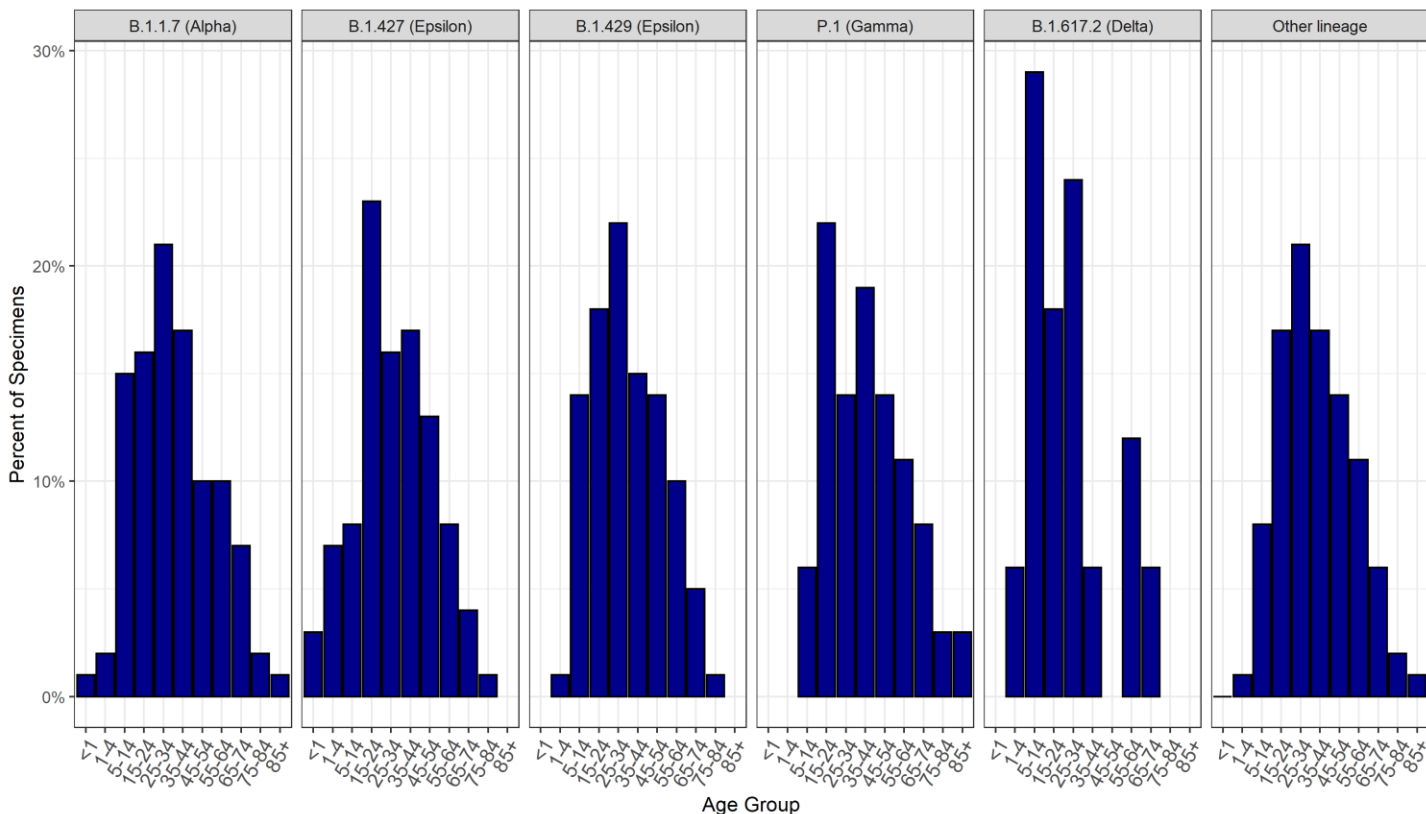


## Proportion of identified SARS-CoV-2 lineages by week

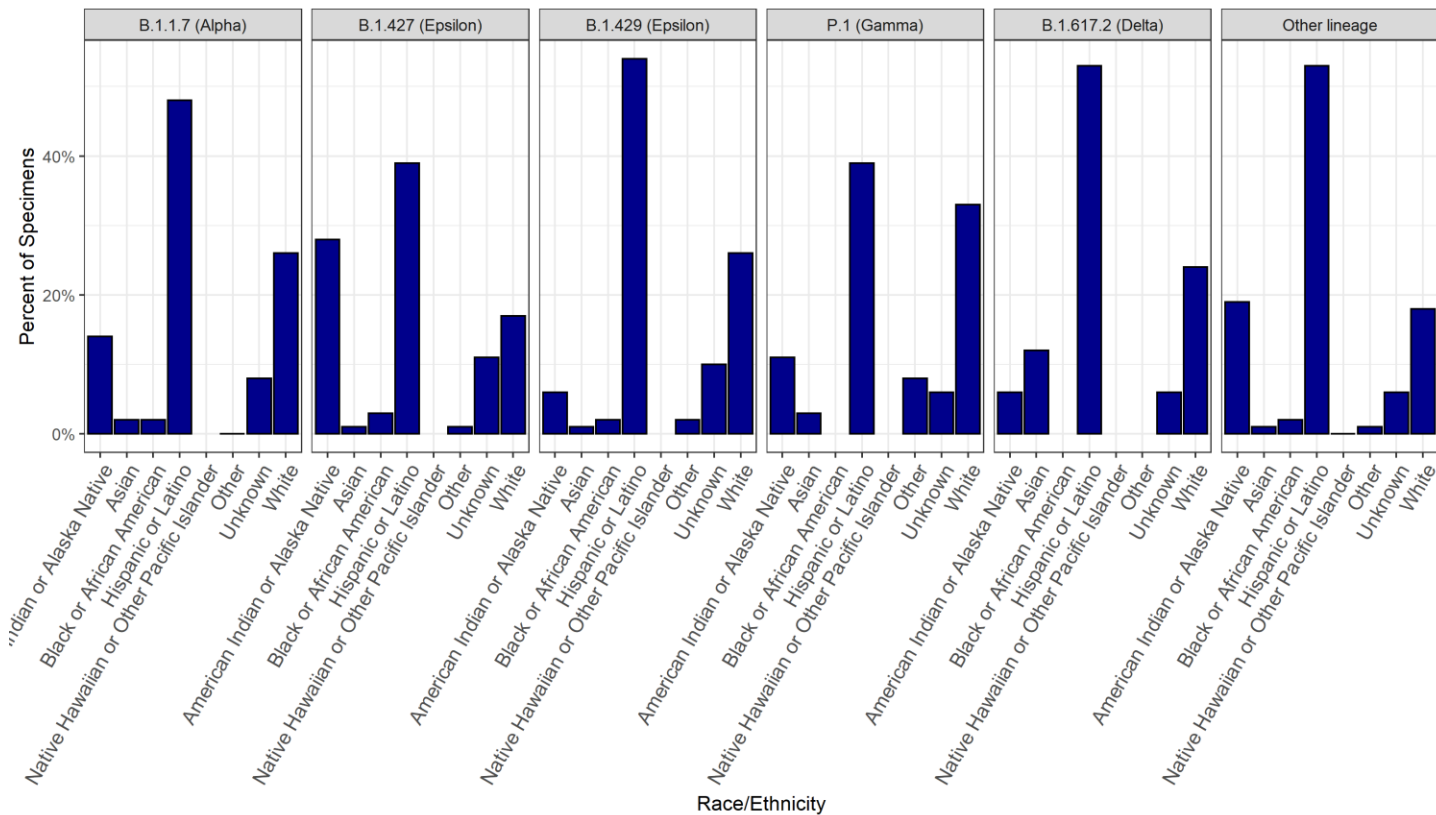


\*The dark grey shaded region represents the lag period between specimen collection and genomic sequencing results

## Cumulative proportion of VOC cases by age group



## Cumulative proportion of VOC cases by race/ethnicity



## Cumulative number of VOC cases by county of residence

Counties with less than 5 matched sequenced cases are not included in the table below.

| County     | B.1.1.7<br>(Alpha) | B.1.427<br>(Epsilon) | B.1.429<br>(Epsilon) | P.1<br>(Gamma) | B.1.617.2<br>(Delta) | Non-VOC lineages |
|------------|--------------------|----------------------|----------------------|----------------|----------------------|------------------|
| Bernalillo | 193                | 36                   | 77                   | 6              | 0                    | 801              |
| Chaves     | 11                 | 0                    | 0                    | 0              | 0                    | 58               |
| Cibola     | 6                  | 26                   | 4                    | 0              | 5                    | 98               |
| Colfax     | 12                 | 0                    | 1                    | 0              | 0                    | 26               |
| Curry      | 6                  | 2                    | 0                    | 0              | 0                    | 28               |
| Dona Ana   | 48                 | 3                    | 23                   | 1              | 0                    | 284              |
| Eddy       | 15                 | 2                    | 1                    | 0              | 0                    | 80               |
| Grant      | 8                  | 0                    | 7                    | 0              | 0                    | 23               |
| Guadalupe  | 0                  | 0                    | 4                    | 0              | 9                    | 15               |
| Lea        | 5                  | 0                    | 0                    | 0              | 0                    | 99               |
| Lincoln    | 3                  | 0                    | 0                    | 0              | 0                    | 30               |
| Los Alamos | 8                  | 3                    | 1                    | 0              | 2                    | 15               |
| Luna       | 9                  | 0                    | 0                    | 0              | 0                    | 13               |
| McKinley   | 14                 | 0                    | 2                    | 0              | 0                    | 121              |
| Otero      | 21                 | 0                    | 14                   | 2              | 0                    | 181              |
| Rio Arriba | 35                 | 1                    | 1                    | 0              | 0                    | 33               |
| Roosevelt  | 0                  | 0                    | 0                    | 0              | 0                    | 11               |
| San Juan   | 218                | 6                    | 6                    | 27             | 0                    | 269              |
| San Miguel | 3                  | 1                    | 1                    | 0              | 1                    | 46               |
| Sandoval   | 24                 | 7                    | 7                    | 0              | 0                    | 166              |
| Santa Fe   | 52                 | 8                    | 28                   | 0              | 0                    | 256              |
| Sierra     | 2                  | 0                    | 0                    | 0              | 0                    | 4                |
| Socorro    | 2                  | 2                    | 0                    | 0              | 0                    | 25               |
| Taos       | 10                 | 1                    | 6                    | 0              | 0                    | 29               |
| Torrance   | 4                  | 6                    | 1                    | 0              | 0                    | 49               |
| Valencia   | 34                 | 3                    | 11                   | 0              | 0                    | 77               |

## Percentage of VOC cases reporting any symptoms

| Lineage                  | No Symptoms | Unknown Symptoms | Yes Symptoms | Total Cases | Percent Symptomatic |
|--------------------------|-------------|------------------|--------------|-------------|---------------------|
| <b>B.1.1.7 (Alpha)</b>   | 45          | 141              | 559          | 745         | 75%                 |
| <b>B.1.427 (Epsilon)</b> | 9           | 36               | 62           | 107         | 58%                 |
| <b>B.1.429 (Epsilon)</b> | 14          | 25               | 156          | 195         | 80%                 |
| <b>P.1 (Gamma)</b>       | 3           | 7                | 26           | 36          | 72%                 |
| <b>B.1.617.2 (Delta)</b> | 1           | 2                | 14           | 17          | 82%                 |
| <b>Other lineage</b>     | 308         | 717              | 1816         | 2841        | 64%                 |

## Percentage of specific symptoms reported by symptomatic VOC cases

The table below includes data ONLY from symptomatic cases

| Symptom                               | B.1.1.7 (n) | B.1.427 (n) | B.1.429 (n) | P.1 (n)  | B.1.617.2 (n) | Non-VOC (n) |
|---------------------------------------|-------------|-------------|-------------|----------|---------------|-------------|
| <b>Fever (Measured or Subjective)</b> | 46% (252)   | 47% (29)    | 47% (73)    | 56% (14) | 50% (7)       | 44% (790)   |
| <b>Chills</b>                         | 46% (253)   | 55% (34)    | 46% (71)    | 76% (19) | 43% (6)       | 44% (796)   |
| <b>Muscle Aches</b>                   | 57% (312)   | 61% (38)    | 63% (97)    | 68% (17) | 71% (10)      | 55% (989)   |
| <b>Runny Nose</b>                     | 57% (312)   | 65% (40)    | 62% (96)    | 44% (11) | 29% (4)       | 53% (941)   |
| <b>Sore Throat</b>                    | 47% (260)   | 48% (30)    | 46% (71)    | 44% (11) | 36% (5)       | 42% (748)   |
| <b>Cough</b>                          | 74% (404)   | 74% (46)    | 63% (97)    | 92% (23) | 64% (9)       | 64% (1148)  |
| <b>Shortness of Breath</b>            | 29% (159)   | 34% (21)    | 17% (27)    | 56% (14) | 14% (2)       | 25% (453)   |
| <b>Nausea/Vomiting</b>                | 27% (149)   | 26% (16)    | 24% (37)    | 40% (10) | 7% (1)        | 23% (405)   |
| <b>Headache</b>                       | 66% (361)   | 58% (36)    | 73% (113)   | 56% (14) | 71% (10)      | 65% (1154)  |
| <b>Abdominal Pain</b>                 | 17% (91)    | 15% (9)     | 14% (21)    | 12% (3)  | 21% (3)       | 14% (259)   |
| <b>Diarrhea</b>                       | 30% (162)   | 24% (15)    | 27% (42)    | 28% (7)  | 21% (3)       | 27% (477)   |
| <b>Fatigue</b>                        | 70% (383)   | 73% (45)    | 68% (105)   | 88% (22) | 57% (8)       | 65% (1164)  |
| <b>Loss of Appetite</b>               | 38% (210)   | 37% (23)    | 35% (55)    | 44% (11) | 43% (6)       | 37% (658)   |
| <b>Loss of Taste or Smell</b>         | 38% (208)   | 40% (25)    | 56% (87)    | 48% (12) | 43% (6)       | 44% (779)   |

## Percentage of VOC cases reporting underlying conditions

| Lineage                  | No  | Unknown | Yes | Total Cases | Percent with underlying conditions |
|--------------------------|-----|---------|-----|-------------|------------------------------------|
| <b>B.1.1.7</b> (Alpha)   | 340 | 155     | 250 | 745         | 34%                                |
| <b>B.1.427</b> (Epsilon) | 39  | 45      | 23  | 107         | 22%                                |
| <b>B.1.429</b> (Epsilon) | 90  | 50      | 55  | 195         | 28%                                |
| <b>P.1</b> (Gamma)       | 12  | 7       | 17  | 36          | 47%                                |
| <b>B.1.617.2</b> (Delta) | 7   | 2       | 8   | 17          | 47%                                |
| <b>Other lineage</b>     | 922 | 1154    | 765 | 2841        | 27%                                |

## Percentage of specific underlying conditions reported by VOC cases

Data below includes ONLY cases who report having a pre-existing condition.

| Condition                       | B.1.1.7 (n) | B.1.427 (n) | B.1.429 (n) | P.1 (n)  | B.1.617.2 (n) | Non-VOC (n) |
|---------------------------------|-------------|-------------|-------------|----------|---------------|-------------|
| <b>Chronic Lung Disease</b>     | 26% (63)    | 36% (8)     | 15% (8)     | 25% (4)  | 25% (2)       | 27% (195)   |
| <b>Chronic Liver Disease</b>    | 2% (6)      | 0% (0)      | 0% (0)      | 0% (0)   | 0% (0)        | 5% (33)     |
| <b>Chronic Renal Disease</b>    | 2% (6)      | 9% (2)      | 2% (1)      | 12% (2)  | 12% (1)       | 4% (30)     |
| <b>Diabetes Mellitus</b>        | 18% (44)    | 5% (1)      | 17% (9)     | 25% (4)  | 0% (0)        | 23% (169)   |
| <b>Cardiovascular Disease</b>   | 35% (86)    | 23% (5)     | 19% (10)    | 38% (6)  | 25% (2)       | 27% (196)   |
| <b>Autoimmune Disease</b>       | 6% (15)     | 14% (3)     | 4% (2)      | 12% (2)  | 0% (0)        | 4% (32)     |
| <b>Neurological Disability</b>  | 7% (17)     | 18% (4)     | 2% (1)      | 19% (3)  | 0% (0)        | 10% (70)    |
| <b>Current or Former Smoker</b> | 55% (135)   | 32% (7)     | 70% (37)    | 62% (10) | 50% (4)       | 48% (347)   |

\* Note: One P.1 variant case reported an underlying condition that is not included on the list above.

## Data Sources

- **COVID-19 data**
  - **New Mexico Electronic Disease Surveillance System (NM-EDSS)**, Infectious Disease Epidemiology Bureau, Epidemiology and Response Division, New Mexico Department of Health.
  - **Salesforce/MTX COVID-19 Case Investigation Platform.**
- **Sequencing data**
  - New Mexico Department of Health (NMDOH) receives sequencing data for specimens sequenced at the NMDOH Scientific Laboratory Division (SLD), University of New Mexico, Centers for Disease Control and Prevention (CDC), Aegis, LabCorp, and Fulgent Genetics.
- **Variants of concern (VOC)** are defined by Centers for Disease Control and Prevention:  
<https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/variant-surveillance/variant-info.html>.

## Data Notes

- **The data reported in this weekly update may not match the daily numbers that are reported in the New Mexico Department of Health (NMDOH) press releases and/or the NMDOH COVID-19 data dashboard. This may be due to variation in the date and time of data extraction from NM-EDSS, corrections after quality assurance review, and differences in the exclusion criteria.**
- **New Mexico Electronic Disease Surveillance System (NM-EDSS).** Disease incidence data are derived from reports of notifiable infectious diseases. NMDOH relies on health care providers, laboratories, hospitals, clinics, institutions and individuals to report suspected and confirmed notifiable infectious diseases in accordance with New Mexico Administrative Code 7.4.3.13. Under-reporting can occur due to of lack of awareness about reporting requirements or lack of compliance with those requirements. Not all cases of infectious diseases can be detected for various reasons including lack of access to health care services, lack of laboratory testing or concerns about confidentiality. Specific and standardized national case definitions are used to classify disease reports by case status.
- **Race/Ethnicity.** Race/Ethnicity are reported as a single variable according to the selection of the case. Any case who is Hispanic is in the Hispanic category and all other races are non-Hispanic.