### COVID-19 Variant Surveillance Report

Week ending May 21, 2022 (MMWR week 20)

#### Variant Surveillance– Cumulative Summary

<table>
<thead>
<tr>
<th>Lineage (WHO Classification)</th>
<th>Proportion of Variant Sequenced from Dec 20, 2020 (%)</th>
<th>Proportion of Variant Sequenced in last 4 weeks (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variant of Concern</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA.1.1.529 (Omicron)</td>
<td>7.6%</td>
<td>1.3%</td>
</tr>
<tr>
<td>BA.1.1 (Omicron)</td>
<td>6.1%</td>
<td>0.3%</td>
</tr>
<tr>
<td>BA.2 (Omicron)</td>
<td>14.8%</td>
<td>45.4%</td>
</tr>
<tr>
<td>BA.2.12.1 (Omicron)</td>
<td>7.7%</td>
<td>52.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Variants Being Monitored (VBM)</strong></th>
<th>Proportion of Variant Sequenced from Dec 20, 2020 (%)</th>
<th>Proportion of Variant Sequenced in last 4 weeks (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.1.617.2 (Delta)</td>
<td>36.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td>B.1.1.7 (Alpha)</td>
<td>10.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>B.1.351 (Beta)</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>P.1 (Gamma)</td>
<td>0.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>B.1.427, B.1.429 (Epsilon)</td>
<td>0.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>P.2 (Zeta)</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>B.1.525 (Eta)</td>
<td>0.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>B.1.526 (Iota)</td>
<td>6.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>B.1.526.1</td>
<td>0.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td>B.1.617</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>B.1.617.1 (Kappa)</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>B.1.621, B.1.621.1 (Mu)</td>
<td>0.2%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other Lineages</td>
<td>7.7%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

**Total Number of Specimens Sequenced**

<table>
<thead>
<tr>
<th>Specimen Collection Week</th>
<th>Total Count</th>
<th>Omicron (BA.2)</th>
<th>Omicron (BA.1.1)</th>
<th>Omicron (BA.1.1.529)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/27/2022 - 4/2/2022</td>
<td>81.2%</td>
<td>25.9%</td>
<td>38.6%</td>
<td>38.6%</td>
<td>0%</td>
</tr>
<tr>
<td>4/3/2022 - 4/9/2022</td>
<td>78.0%</td>
<td></td>
<td></td>
<td></td>
<td>12.9%</td>
</tr>
<tr>
<td>4/10/2022 - 4/16/2022</td>
<td>73.6%</td>
<td>20.0%</td>
<td></td>
<td></td>
<td>25.9%</td>
</tr>
<tr>
<td>4/17/2022 - 4/23/2022</td>
<td>69.9%</td>
<td>12.9%</td>
<td></td>
<td></td>
<td>38.6%</td>
</tr>
<tr>
<td>4/24/2022 - 4/30/2022</td>
<td>59.0%</td>
<td>9.9%</td>
<td></td>
<td></td>
<td>56.2%</td>
</tr>
<tr>
<td>5/1/2022 - 5/7/2022</td>
<td>56.2%</td>
<td>4.9%</td>
<td>56.2%</td>
<td></td>
<td>56.2%</td>
</tr>
<tr>
<td>5/8/2022 - 5/14/2022</td>
<td>56.0%</td>
<td></td>
<td>56.0%</td>
<td></td>
<td>56.0%</td>
</tr>
<tr>
<td>5/15/2022 - 5/21/2022</td>
<td>56.2%</td>
<td>4.9%</td>
<td>56.2%</td>
<td></td>
<td>56.2%</td>
</tr>
</tbody>
</table>

*Omicron B.1.1.529 includes BA.1, BA.3, BA.4 and all their sublineages (except BA.1.1 and its sublineages)

& Omicron BA.2 includes all sublineages except BA.2.12.1

§ Delta includes B.1.617.2 and all AY variants.

* Variant of Interest or Concern were downgraded to this list with significant reduction in its proportions and evidence the variant does not pose a significant public health risk.

**Includes sequencing results reported by Commercial Labs (LabCorp, Aegis Sciences Corporation, Helix, Infinity Biologix and Quest Diagnostics) and the State Public Health Lab that have been submitted for surveillance purposes.

For CDC definitions of variant of concern and variant of interest visit: [https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/variant-surveillance/variant-info.html](https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/variant-surveillance/variant-info.html)
Percentages represent the proportion found in the specified variant lineage. “Other” represents 168 additional and unassigned lineages not classified as variants of concern or variants of interest.

* Specimens collected 5/8/2022 – 5/21/2022 reflects data for 1 weeks with a total of 3536 specimens.

**Variant Details**

<table>
<thead>
<tr>
<th>WHO Label</th>
<th>Pango Lineage</th>
<th>First Detected</th>
<th>CDC Variant Classification</th>
<th>CDC Date of Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha</td>
<td>B.1.1.7</td>
<td>United Kingdom</td>
<td>Variants Being Monitored (VBM)</td>
<td>September 12, 2021</td>
</tr>
<tr>
<td>Beta</td>
<td>B.1.351</td>
<td>South Africa</td>
<td>Variants Being Monitored (VBM)</td>
<td>September 12, 2021</td>
</tr>
<tr>
<td>Delta</td>
<td>B.1.617/2, AY.1 – AY.122</td>
<td>India</td>
<td>Variants Being Monitored (VBM)</td>
<td>April, 2022</td>
</tr>
<tr>
<td>Gamma</td>
<td>P.1</td>
<td>Brazil</td>
<td>Variants Being Monitored (VBM)</td>
<td>September 12, 2021</td>
</tr>
<tr>
<td>Epsilon</td>
<td>B.1.427, B.1.429</td>
<td>USA-California</td>
<td>Variants Being Monitored (VBM)</td>
<td>September 12, 2021</td>
</tr>
<tr>
<td>Eta</td>
<td>B.1.525</td>
<td>USA-New York</td>
<td>Variants Being Monitored (VBM)</td>
<td>September 12, 2021</td>
</tr>
<tr>
<td>Iota</td>
<td>B.1.526</td>
<td>USA-New York</td>
<td>Variants Being Monitored (VBM)</td>
<td>September 12, 2021</td>
</tr>
<tr>
<td>N/A</td>
<td>B.1.526.1</td>
<td>USA-New York</td>
<td>Variants Being Monitored (VBM)</td>
<td>September 12, 2021</td>
</tr>
<tr>
<td>Zeta</td>
<td>P.2</td>
<td>Brazil</td>
<td>Variants Being Monitored (VBM)</td>
<td>September 12, 2021</td>
</tr>
<tr>
<td>N/A</td>
<td>B.1.617</td>
<td>India</td>
<td>Variants Being Monitored (VBM)</td>
<td>September 12, 2021</td>
</tr>
<tr>
<td>Kappa</td>
<td>B.1.617.1</td>
<td>India</td>
<td>Variants Being Monitored (VBM)</td>
<td>September 12, 2021</td>
</tr>
<tr>
<td>Mu</td>
<td>B.1.621, B.1.621.1</td>
<td>Columbia</td>
<td>Variants Being Monitored (VBM)</td>
<td>September 12, 2021</td>
</tr>
<tr>
<td>Omicron</td>
<td>B.1.1.529, BA.1, BA.1.1, BA.2-BA.4</td>
<td>South Africa</td>
<td>Variant of Concern (VOC)</td>
<td>November, 2021</td>
</tr>
</tbody>
</table>
COVID-19 Variant Surveillance by State Region - Previous 4 weeks Summary*

Northern Region
n= 2832

Omicron (BA.2)
Omicron (BA.1.1)
Other

Central Region
n= 2168

Omicron (BA.2)
Omicron (BA.2.12.1)

Southern Region
n= 2362

Omicron (BA.2)
Omicron (BA.2.12.1)

*Each regional chart represents the proportion of the specified variant lineage and is based on sequencing results from the 4 weeks prior to the week of May 14, 2022. There is an approximately 14-24-day time lag between specimen collection and report of sequencing results to NJDOH. “Other” represents additional lineages which include other COVID-19 variants not classified as variants of concern or variants of interest.

Includes all sequencing results reported by Commercial Labs (LabCorp, Aegis Sciences Corporation, Helix, Infinity Biologix and Quest Diagnostics) and the State Public Health Lab that have been submitted for surveillance purposes.

Data reported is based on a subset of sampled specimens from NJ residents sequenced for COVID-19 variant surveillance.