Summary

In October, unvaccinated persons had:

- **3.9X** Risk of Testing Positive for COVID-19
- **15.2X** Risk of Dying from COVID-19

compared to fully vaccinated persons.

- COVID-19 vaccines are safe and effective tools to bring the pandemic under control.
- ADHS is working with CDC and local health departments to investigate SARS-CoV-2 infections among people who received COVID-19 vaccine to identify patterns or trends in patient characteristics, the administered vaccine, or variant strains.
- **Every week and across all age groups, people who were unvaccinated had a greater risk of testing positive for COVID-19 and a greater risk of dying from COVID-19 than people who were fully vaccinated.**

### Age-Adjusted Rates of COVID-19 Cases and Deaths per 100K by Specimen Collection Date Among Fully Vaccinated and Unvaccinated People

#### Cases Per 100K

<table>
<thead>
<tr>
<th>Date</th>
<th>Cases Per 100K</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/1/21</td>
<td>200</td>
</tr>
<tr>
<td>8/1/21</td>
<td>400</td>
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<td>9/1/21</td>
<td>600</td>
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<tr>
<td>10/1/21</td>
<td>800</td>
</tr>
<tr>
<td>11/1/21</td>
<td>1000</td>
</tr>
</tbody>
</table>

#### Deaths Per 100K

<table>
<thead>
<tr>
<th>Date</th>
<th>Deaths Per 100K</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/1/21</td>
<td>10</td>
</tr>
<tr>
<td>8/1/21</td>
<td>20</td>
</tr>
<tr>
<td>9/1/21</td>
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<tr>
<td>10/1/21</td>
<td>40</td>
</tr>
<tr>
<td>11/1/21</td>
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</tbody>
</table>
Rates of COVID-19 Cases per 100K by Specimen Collection Date Among Fully Vaccinated and Unvaccinated People

Stratified by Age Group

12–17 years

18–29 years

30–49 years

50–64 years

65–79 years

80 years and older

Arizona Department of Health Services
Rates of COVID-19 Deaths per 100K by Specimen Collection Date Among Fully Vaccinated and Unvaccinated People

Stratified by Age Group

12–17 years

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Percent of Fully Vaccinated vs. Unvaccinated COVID-19 Cases and Deaths by Month of Specimen Collection Date

Cases

Deaths

Arizona Department of Health Services
About the Data:

- Data timeframe included in the report was selected based off when the Delta variant became the dominant strain in Arizona. Data excludes those who were determined to be partially vaccinated.
    - Death data have a month lag in order to help with data completeness.
- Vaccination status:
  - Fully vaccinated: persons with SARS-CoV-2 RNA or antigen detected from a respiratory specimen collected ≥14 days after the completion of a primary series of an FDA-authorized or approved COVID-19 vaccine.
  - Unvaccinated: persons with SARS-CoV-2 RNA or antigen detected from a respiratory specimen with no verified record of receiving an FDA-authorized or approved COVID-19 vaccine.
  - Excluded were partially vaccinated persons with SARS-CoV-2 RNA or antigen detected from a respiratory specimen with at least one documented dose of an FDA-authorized or approved COVID-19 vaccine, but a primary series was not completed ≥14 days before a specimen was collected.
- Incidence rates in the report are weekly rates grouped by age and calculated by dividing the number of cases or deaths by the population fully vaccinated or unvaccinated then multiplied by 100,000. The overall incidence rates are standardized by age.
- Rates are not adjusted for the length of time since vaccination, underlying conditions, or most demographic factors, aside from age.
- Incidence rate ratios (IRRs) are provided for the most recent month with complete case and death data. These ratios are calculated by dividing the average weekly incidence rates among unvaccinated by the incidence rates of the fully vaccinated.
- Additional resources:
  - Rates of COVID-19 Cases and Deaths by Vaccination Status