Summary

In May, unvaccinated individuals 12 years and older had:

- **1.8X** Risk of Testing Positive for COVID-19 compared to individuals who were fully vaccinated with a booster.
- **8.0X** Risk of Hospitalization from COVID-19 compared to individuals who were fully vaccinated with a booster.
- **21X** Risk of Dying from COVID-19 compared to individuals who were fully vaccinated with a booster.
- **3.4X** Risk of Testing Positive for COVID-19 compared to individuals who were fully vaccinated without a booster.
- **6.6X** Risk of Hospitalization from COVID-19 compared to individuals who were fully vaccinated without a booster.
- **15X** Risk of Dying from COVID-19 compared to individuals who were fully vaccinated without a booster.

- 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 hospitalization from COVID-19 and a greater risk of dying from COVID-19 than people who were fully vaccinated with a booster.

Age-Adjusted Rates of COVID-19 Cases, Hospitalizations, and Deaths per 100K by Specimen Collection Date Among Fully Vaccinated with a Booster, Fully Vaccinated without a Booster, and Unvaccinated in Individuals 12 Years and Older
Rates of COVID-19 Cases per 100K by Specimen Collection Date
Among Fully Vaccinated with a Booster, Fully Vaccinated without a Booster, 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 Hospitalizations per 100K by Specimen Collection Date Among Fully Vaccinated with a Booster, Fully Vaccinated without a Booster, 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 with a Booster, Fully Vaccinated without a Booster, 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
Percent of **Fully Vaccinated with a Booster**, **Fully Vaccinated without a Booster**, and **Unvaccinated** COVID-19 Cases, Hospitalizations, and Deaths by Month of Specimen Collection Date in Individuals 12 Years and Older

**Cases**

- **December**: 65.3% (65.3%), 54.9% (54.9%), 53.0% (53.0%), 49.2% (49.2%), 38.1% (38.1%), 38.0% (38.0%)
- **January**: 34.5% (34.5%), 42.5% (42.5%), 30.6% (30.6%), 26.0% (26.0%), 26.8% (26.8%), 25.6% (25.6%)
- **February**: 16.4% (16.4%), 16.4% (16.4%), 16.4% (16.4%), 16.4% (16.4%), 16.4% (16.4%), 16.4% (16.4%)
- **March**: 24.8% (24.8%), 24.8% (24.8%), 24.8% (24.8%), 24.8% (24.8%), 24.8% (24.8%), 24.8% (24.8%)
- **April**: 35.1% (35.1%), 35.1% (35.1%), 35.1% (35.1%), 35.1% (35.1%), 35.1% (35.1%), 35.1% (35.1%)
- **May**: 36.4% (36.4%), 36.4% (36.4%), 36.4% (36.4%), 36.4% (36.4%), 36.4% (36.4%), 36.4% (36.4%)

**Hospitalizations**

- **December**: 79.6% (79.6%), 66.8% (66.8%), 64.3% (64.3%), 53.1% (53.1%), 43.8% (43.8%), 43.6% (43.6%)
- **January**: 20.2% (20.2%), 31.0% (31.0%), 24.7% (24.7%), 27.0% (27.0%), 26.1% (26.1%), 24.9% (24.9%)
- **February**: 0.2% (0.2%), 11.0% (11.0%), 11.0% (11.0%), 11.0% (11.0%), 11.0% (11.0%), 11.0% (11.0%)
- **March**: 19.9% (19.9%), 19.9% (19.9%), 19.9% (19.9%), 19.9% (19.9%), 19.9% (19.9%), 19.9% (19.9%)
- **April**: 30.1% (30.1%), 30.1% (30.1%), 30.1% (30.1%), 30.1% (30.1%), 30.1% (30.1%), 30.1% (30.1%)
- **May**: 31.5% (31.5%), 31.5% (31.5%), 31.5% (31.5%), 31.5% (31.5%), 31.5% (31.5%), 31.5% (31.5%)

**Deaths**

- **December**: 81.8% (81.8%), 68.0% (68.0%), 63.7% (63.7%), 52.7% (52.7%), 44.6% (44.6%), 54.8% (54.8%)
- **January**: 18.2% (18.2%), 29.2% (29.2%), 25.9% (25.9%), 20.9% (20.9%), 28.4% (28.4%), 19.2% (19.2%)
- **February**: 2.8% (2.8%), 10.4% (10.4%), 26.4% (26.4%), 27.0% (27.0%), 26.0% (26.0%), 26.0% (26.0%)
- **March**: 0% (0%), 10% (10%), 20% (20%), 30% (30%), 40% (40%), 50% (50%)
- **April**: 100% (100%), 90% (90%), 80% (80%), 70% (70%), 60% (60%), 50% (50%)
- **May**: 100% (100%), 90% (90%), 80% (80%), 70% (70%), 60% (60%), 50% (50%)
About the Data:

• Data included in the report are on a rolling 6-month timeframe. Data excludes those who were determined to be partially vaccinated.
  • Rates of COVID-19 Cases: 12/5/2021 – 6/11/2022
    • Death data have a month lag in order to help with data completeness.
• Vaccination status:
  • Fully vaccinated with a booster: persons with SARS-CoV-2 RNA or antigen detected from a respiratory specimen collected ≥14 days after receipt of an additional or booster dose of any COVID-19 vaccine after completion of a primary series.
    • Booster timeframes: 5 months after an mRNA vaccine or 2 months after J&J
  • 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.
• Boosters were recommended for 12-17 year olds on 1/5/22. Beginning 4/27/22, 12-17 year olds will now have booster dose data represented in the report.
• 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, hospitalization, 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