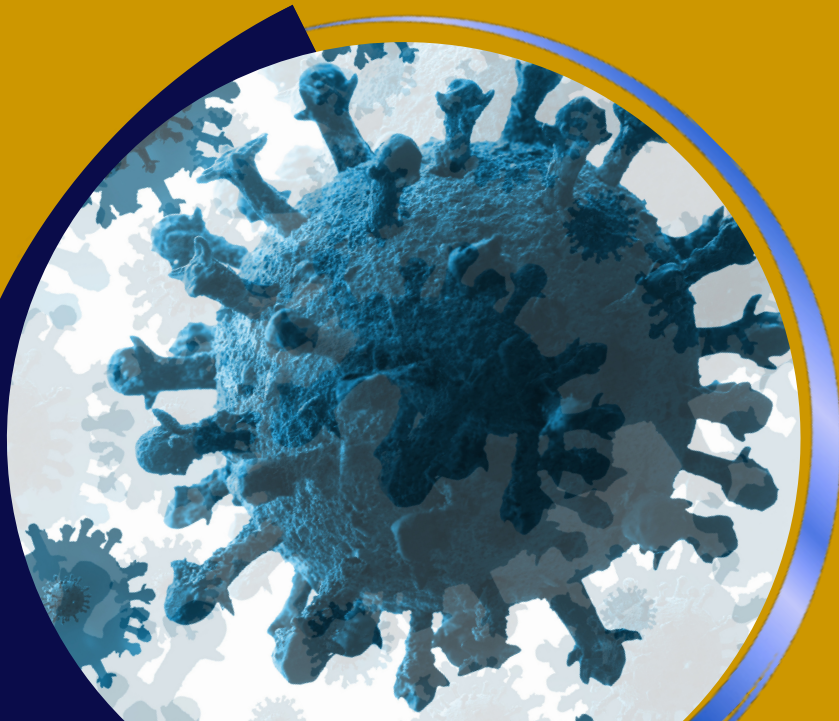


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# COVID-19 health disparities in Utah 2020–2021

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Race/ethnicity profile



Utah Department of  
**Health & Human Services**  
Health Equity

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# List of abbreviations

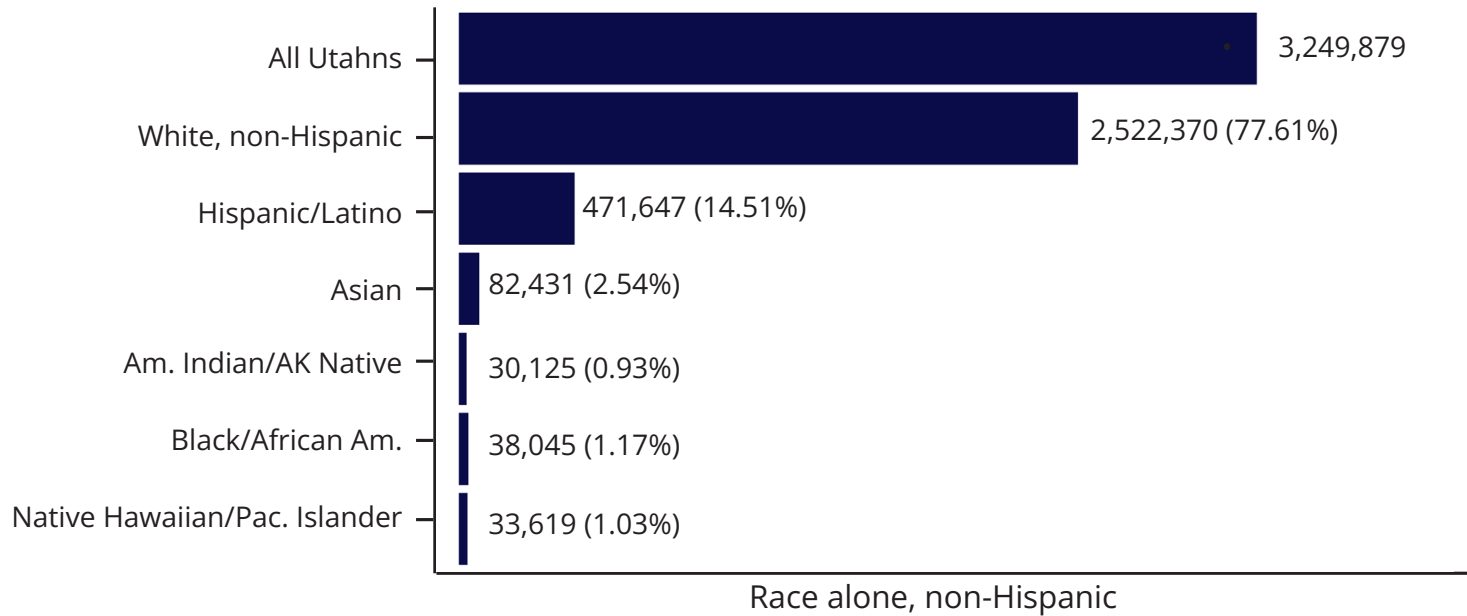
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|               |   |
|---------------|---|
| African Am.   | African American                                |
| AK Native     | Alaska Native                                   |
| Am. Indian    | American Indian                                 |
| CDC           | Centers for Disease Control and Prevention      |
| CI            | Confidence interval                             |
| COVID-19      | Coronavirus disease 2019                        |
| N. Hawaiian   | Native Hawaiian                                 |
| OHE           | Office of Health Equity                         |
| Pac. Islander | Pacific Islander                                |
| SARS-CoV-2    | Severe Acute Respiratory Syndrome Coronavirus 2 |
| DHHS          | Utah Department of Health and Human Services    |

# Background

It is crucial to identify COVID-19 racial and ethnic health disparities to inform COVID-19 response efforts and future public health emergency efforts so these responses are accessible and effective for all Utahns. A comprehensive approach to address racial and ethnic health disparities must include individual, community and place-based, and system-based interventions that are strategic and culturally and linguistically responsive. As COVID-19 health disparities persist, all Utahns remain at risk.

**Figure 1: Overall Utah population in 2020 by race/ethnicity**



# Guide to this profile

This profile reports COVID-19 (coronavirus disease 2019) surveillance data in the state of Utah by race/ethnicity between March 27, 2020–December 31, 2021. The Utah Department of Health and Human Services (DHHS) Office of Health Equity (OHE) created this profile with data and visualizations to help in identifying/understanding COVID-19 health disparities by race/ethnicity status.

## What COVID-19 indicators are analyzed in this report?

- **COVID-19 cases:** A confirmed coronavirus disease 2019 (COVID-19) case is any person with a positive SARS-CoV2 PCR or antigen test. The DHHS assigns case status following the Centers for Disease Control and Prevention (CDC) national case definition, with an exception of considering positive antigen tests as confirmed rather than probable cases.<sup>1</sup>
- **COVID-19 hospitalizations:** COVID-19 hospitalizations represent the total number of COVID-19 cases who are admitted to hospitals. Hospitalization counts are either reported automatically if a person is an inpatient at the time of a positive lab or identified through local public health investigations.<sup>1</sup>
- **COVID-19 deaths:** Death due to COVID-19 is confirmed only if COVID-19 is a cause of death or underlying cause of death and is confirmed by the DHHS Office of the Medical Examiner. DHHS uses the “CDC Guidance for Certifying Deaths due to Coronavirus Disease 2019 (COVID-19)” to determine which deaths are due to COVID-19.<sup>1</sup>
- **COVID-19 vaccinations:**
  - a) People who received at least one dose is anyone who has received one or more doses of the Pfizer or Moderna two-dose vaccine, or one dose of the Janssen/Johnson and Johnson single dose vaccine. This represents all people vaccinated in Utah whether they are fully vaccinated or partially vaccinated.<sup>1</sup>
  - b) People fully vaccinated is anyone who has completed their vaccine series, either two doses of the Pfizer or Moderna two-dose vaccine, or one dose of the Johnson and Johnson single dose vaccine.<sup>1</sup>

## How are COVID-19 health disparities identified in this report?

A statistically significant difference (higher/lower) is defined as, the Utah overall rate (age-adjusted whenever possible) does not fall within the 95% confidence interval (age-adjusted whenever possible) of the rate for the racial/ethnic population.

A health disparity is identified when:

- The group analyzed is generally considered to be at economic, socio-cultural, environmental, and geographic disadvantage with respect to the COVID-19 indicator.

### AND

- The case rate is significantly higher than the overall Utah case rate; or
- The case-hospitalization rate is significantly higher than the overall Utah hospitalization rate; or
- The case-death rate is significantly higher than the overall Utah death rate; or
- The vaccination rate is significantly lower than the overall Utah vaccination rate.

Health disparities are identified in the tables of this report by the depicted color:



# COVID-19 cases

Table 1 shows COVID-19 case rates in Utah by race and ethnicity. American Indian/Alaska Native, Black/African American, Hispanic/Latino, and Native Hawaiian/Pacific Islander populations experienced higher COVID-19 case rates in general when compared with Utah overall.

**Table 1: COVID-19 case counts and case rates by race/ethnicity, Utah, 2020–2021**

| Race/ethnicity*   | Population\$ | Case count | Case rate+ (95% CI)                | Age-adjusted case rate (95% CI)^   |
|---|--------------|------------|------------------------------------|------------------------------------|
| Utah overall  | 3,249,879    | 608,795    | 18,732.85<br>(18,685.79–18,779.91) | 18,833.79<br>(18,786.18–18,881.51) |
| Am. Indian/AK Native  | 30,125       | 7,162      | 23,774.27<br>(23,223.66–24,324.89) | 23,828.92<br>(23,271.74–24,397.69) |
| Asian   | 82,431       | 11,926     | 14,467.86<br>(14,208.19–14,727.52) | 14,282.26<br>(14,025.52–14,542.97) |
| Black/African Am.   | 38,045       | 7,547      | 19,837.04<br>(19,389.48–20,284.59) | 19,113.09<br>(18,656.35–19,581.94) |
| Hispanic/Latino   | 471,647      | 1,16,579   | 24,717.43<br>(24,575.54–24,859.32) | 25,275.77<br>(25,120.34–25,432.22) |
| N. Hawaiian/Pac. Islander   | 33,619       | 12,807     | 38,094.53<br>(37,434.76–38,754.30) | 38,203.78<br>(37,513.00–38,906.88) |
| White, non-Hispanic   | 2,522,370    | 4,40,724   | 17,472.62<br>(17,421.03–17,524.20) | 17,605.19<br>(17,553.07–17,657.42) |
| Some other race   | ---          | 10,910     | ---                                | ---                                |
| Two or more races   | 71,642       | 1,140      | 1,591.25<br>(1,498.87–1,683.62)    | 1,661.66<br>(1,540.05–1,794.38)    |
| Data source: DHHS COVID-19 surveillance data<br>* Race is race alone, non-Hispanic and Hispanic/Latino is of any race.<br>\$ Population estimates by age, sex, race, and Hispanic origin for counties in Utah, U.S. Bureau of the Census, IBIS version 2020.<br>+ Case rate = (COVID-19 cases/100,000 population)<br>^Age adjusted based on U.S. 2000 standard population 3 Age group (0–44, 45–64, 65+) weights. |              |            |                                    |                                    |



Figure 2 provides a visual representation over time for 2020–2021 racial/ethnic disparities in COVID-19 age-adjusted case rates in Utah. It was created by subtracting the weekly COVID-19 age-adjusted case rates for each racial/ethnic group from the Utah overall age-adjusted case rate. When the colored COVID-19 age-adjusted case rate line is above zero, the weekly age-adjusted case rate for the racial/ethnic group was higher than the Utah overall age-adjusted case rate; therefore, a health disparity was present. Viewing the data in this way reveals when, during the course of the COVID-19 pandemic, racial/ethnic minority groups experienced health disparities.

**Figure 2: Weekly differences in the age-adjusted rate of COVID-19 cases between the overall Utah population and specific racial/ethnic populations (2020–2021)**

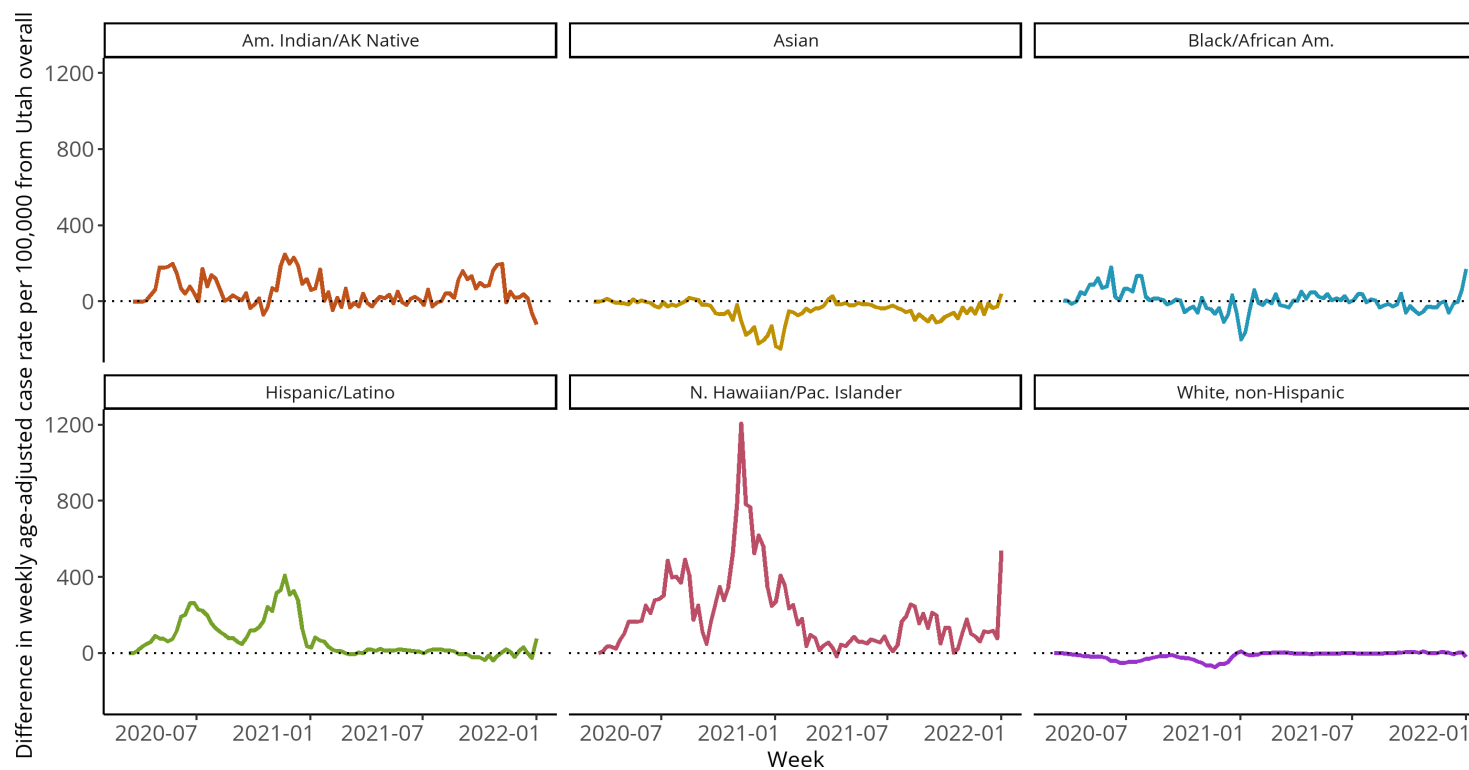


Figure 2 shows American Indian/Alaska Native, Black/African American, Hispanic/Latino, and Native Hawaiian/Pacific Islander populations in Utah experienced higher age-adjusted case rates when compared with Utah overall at different time points between March 1, 2020 and December 31, 2021. More detailed information for each racial/ethnic population can be found later on in this report.

Please note some populations are smaller than others, which could impact the accuracy of the age-adjusted case rates; however, examining case counts weekly likely helped mitigate this limitation.

# COVID-19 hospitalizations

Table 2 shows the rate of COVID-19 hospitalizations in Utah by race/ethnicity. American Indian/Alaska Native, Black/African American, Hispanic/Latino, Native Hawaiian/Pacific Islander populations experienced higher COVID-19 hospitalization rates in general when compared with Utah overall.

**Table 2: COVID-19 hospitalization counts and hospitalization rates by race/ethnicity, Utah 2020–2021**

| Race/ethnicity*  | Hospitalizations <sup>\$</sup> | Case count | Crude hospitalization rate/100,000 population (95% CI) | Age-adjusted hospitalization rate+ (95% CI) | Hospitalization rate/1,000 cases (95% CI) |
|--|--------------------------------|------------|--|---|---|
| Utah overall   | 24,891                         | 608,795    | 765.91<br>(756.39–775.42)                              | 818.29<br>(808.11–828.56)                   | 40.89<br>(40.38–41.39)                    |
| Am. Indian/AK Native   | 513                            | 7,162      | 1702.90<br>(1555.54–1850.27)                           | 1,928.65<br>(1,762.66–2,107.29)             | 71.63<br>(65.43–77.83)                    |
| Asian  | 477                            | 11,926     | 578.67<br>(526.74–630.60)                              | 654.05<br>(596.00–716.50)                   | 40.00<br>(36.41–43.59)                    |
| Black/African Am.  | 351                            | 7,547      | 922.59<br>(826.07–1019.11)                             | 1,221.26<br>(1,084.60–1,372.97)             | 46.51<br>(41.64–51.37)                    |
| Hispanic/Latino  | 4,785                          | 116,579    | 1014.53<br>(985.78–1043.28)                            | 1,416.54<br>(1,372.67–1,461.65)             | 41.05<br>(39.88–42.21)                    |
| N. Hawaiian/Pac. Islander  | 1,055                          | 12,807     | 3138.11<br>(2948.74–3327.47)                           | 3,935.03<br>(3,689.34–4,194.80)             | 82.38<br>(77.41–87.35)                    |
| White, non-Hispanic  | 17,230                         | 440,724    | 683.09<br>(672.89–693.29)                              | 687.97<br>(677.69–698.36)                   | 39.09<br>(38.51–39.68)                    |
| Two or more races  | 52                             | 1,140      | 72.58<br>(52.85–92.31)                                 | 139.23<br>(97.11–196.36)                    | 45.61<br>(33.22–58.01)                    |
| Some other race alone  | 428                            | 10,910     | ---  | ---   | 39.23<br>(35.51–42.95)                    |
| Data source: DHHS COVID-19 surveillance data<br>* Race is race alone, non-Hispanic and Hispanic/Latino is of any race.<br>\$ Population estimates by age, sex, race, and Hispanic origin for counties in Utah, U.S. Bureau of the Census, IBIS version 2020.<br>+Age adjusted based on U.S. 2000 standard population 3 Age group (0–44, 45–64, 65+) weights. |                                |            |  |   |   |

Figure 3 shows racial/ethnic disparities in COVID-19 age-adjusted hospitalization rates in Utah over time. It was created by subtracting the monthly COVID-19 age-adjusted hospitalization rates for each racial/ethnic group from the Utah overall age-adjusted hospitalization rate for 2020-2021. When the colored COVID-19 age-adjusted hospitalization rate line is above zero, the monthly age-adjusted hospitalization rate for the racial/ethnic group was higher than the Utah overall age-adjusted hospitalization rate; therefore, a health disparity was present. Viewing the data in this way reveals when, during the course of the COVID-19 pandemic, racial/ethnic minority groups experienced disparities.

**Figure 3: Monthly differences in the COVID-19 age-adjusted hospitalization rate between the overall Utah population and specific racial/ethnic populations (2020-2021)**

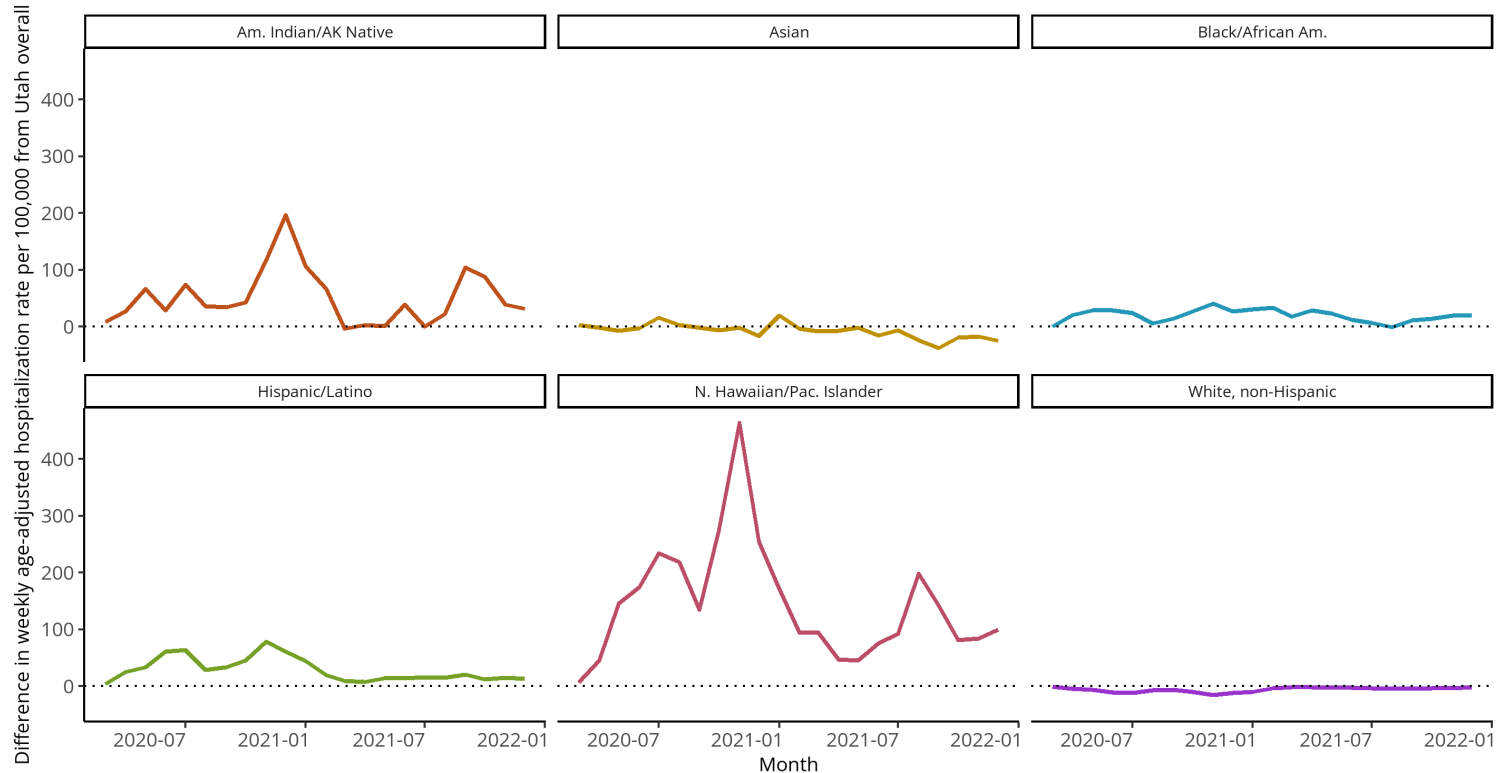


Figure 3 shows COVID-19 age-adjusted hospitalization rates for all the racial/ethnic communities in Utah. All racial/ethnic minority populations experienced higher monthly age-adjusted hospitalization rates when compared with Utah overall at different time points between March 1, 2020-December 31, 2021. More specifically, American Indian/Alaska Native and Native Hawaiian/Pacific Islander populations experienced the highest differences from Utah's overall age-adjusted hospitalizations. Furthermore, differences in Native Hawaiian/Pacific Islander populations were consistently higher than Utah overall. More detailed information for each racial/ethnic population can be found later on in this report.

Please note some populations are smaller than others, which could impact the accuracy of the age-adjusted hospitalization rates; however, examining hospitalization counts monthly likely helped mitigate this limitation.

# COVID-19 deaths

Table 3 shows death rates due to COVID-19 in Utah by race and ethnicity. American Indian/Alaska Native, Black/African American, Hispanic/Latino, Native Hawaiian/Pacific Islander, and White non-Hispanic populations experienced higher COVID-19 mortality rates in general when compared with Utah overall.

**Table 3: COVID-19 death counts and mortality rates by race/ethnicity, Utah, 2020–2021**

| Race/ethnicity*           | Deaths | Population <sup>\$</sup> | Case count | Crude mortality rate/100,000 population (95% CI) | Age-adjusted mortality rate+ (95% CI) | Case death rate/1,000 cases (95% CI) |
|---------------------------|--------|--------------------------|------------|--|---------------------------------------|--------------------------------------|
| Utah overall              | 3,656  | 3,249,879                | 608,795    | 112.50<br>(108.85–116.14)                        | 122.66<br>(118.72–126.71)             | 6.01<br>(5.81–6.20)                  |
| Am. Indian/AK Native      | 112    | 30,125                   | 7,162      | 371.78<br>(302.93–440.64)                        | 470.78<br>(386.43–568.88)             | 15.64<br>(12.74–18.53)               |
| Asian                     | 82     | 82,431                   | 11,926     | 99.48<br>(77.95–121.01)                          | 125.51<br>(99.64–156.17)              | 6.88<br>(5.39–8.36)                  |
| Black/African Am.         | 38     | 38,045                   | 7,547      | 99.88<br>(68.12–131.64)                          | 182.29<br>(126.06 – 256.54)           | 5.04<br>(3.43 – 6.64)                |
| Hispanic/Latino           | 468    | 471,647                  | 116,579    | 99.23<br>(90.24–108.22)                          | 190.40<br>(172.53–209.72)             | 4.01<br>(3.65–4.38)                  |
| N. Hawaiian/Pac. Islander | 104    | 33,619                   | 12,807     | 309.35<br>(249.89–368.80)                        | 474.82<br>(384.60–581.13)             | 8.12<br>(6.56–9.68)                  |
| White, non-Hispanic       | 2,775  | 2,522,370                | 440,724    | 110.02<br>(105.92–114.11)                        | 107.22<br>(103.25–111.30)             | 6.30<br>(6.06–6.53)                  |
| Two or more races         | 6      | 71,642                   | 1,140      | 8.37<br>(1.67–15.08)                             | 30.30<br>(10.65–68.76)                | 5.26<br>(1.05–9.47)                  |
| Some other race alone     | 71     | ---                      | 10,910     | ---  | ---                                   | 6.51<br>(4.99–8.02)                  |

Data source: DHHS COVID-19 Surveillance data

\* Race is race alone, non-Hispanic and Hispanic/Latino is of any race.

<sup>\$</sup> Population estimates by age, sex, race, and Hispanic origin for counties in Utah, U.S. Bureau of the Census, IBIS version 2020.

+Age adjusted based on U.S. 2000 standard population 3 Age group (0–44, 45–64, 65+) weights.

Figure 4 shows racial/ethnic disparities in COVID-19 age-adjusted death rates in Utah over time. It was created by subtracting the monthly COVID-19 age-adjusted death rates for each racial/ethnic group from the Utah overall age-adjusted death rate for 2020–2021. When the colored COVID-19 age-adjusted death rate line is above zero, the monthly age-adjusted death rate for that race/ethnicity was higher than the Utah overall death rate; therefore, a health disparity was present. Viewing the data in this way reveals when, during the course of the pandemic, racial/ethnic minority groups experienced disparities.

**Figure 4: Monthly differences in the COVID-19 age-adjusted death rate between the overall Utah population and specific racial/ethnic populations (2020–2021)**

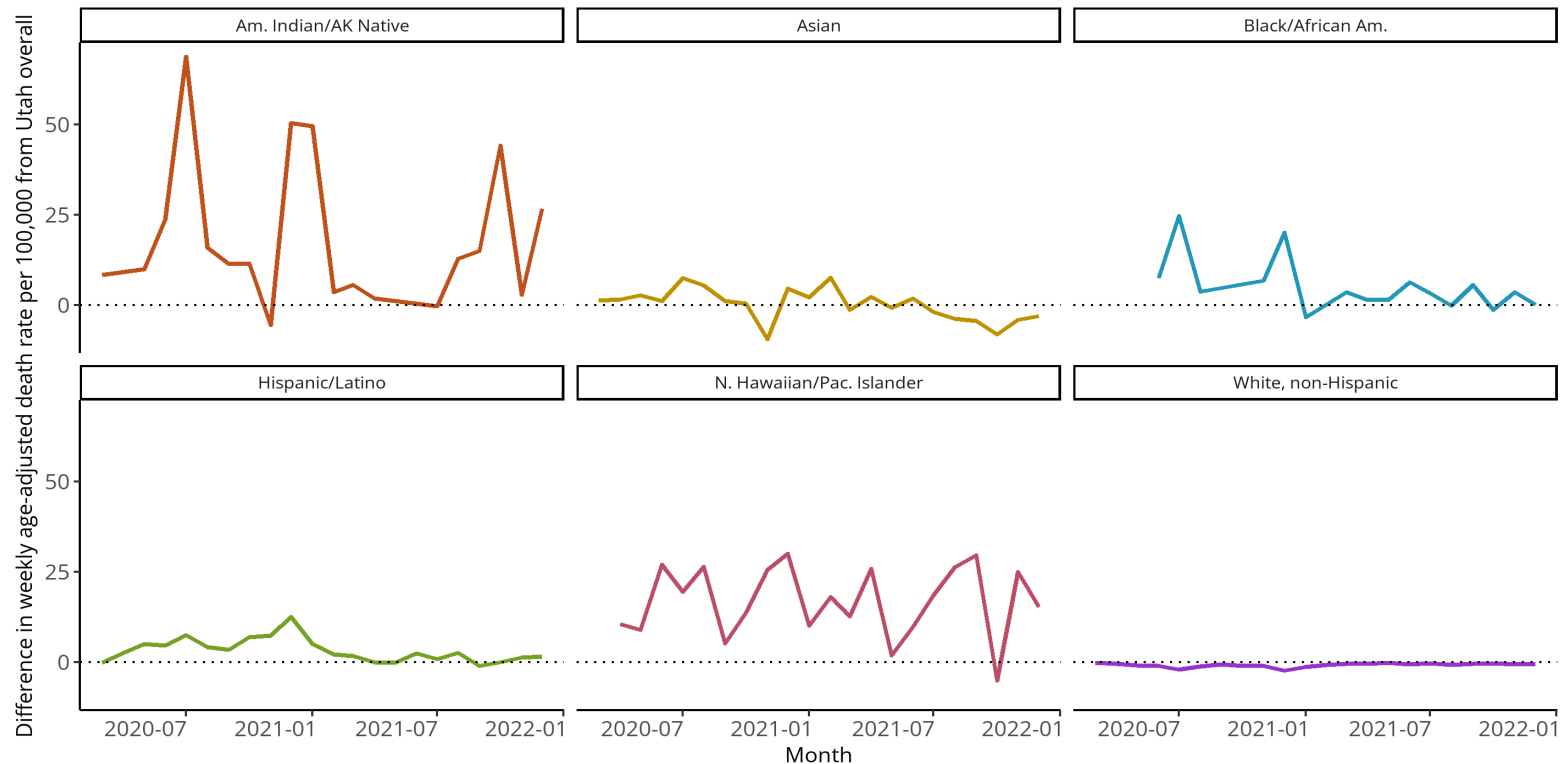


Figure 4 shows COVID-19 age-adjusted death rates for all the racial/ethnic communities in Utah. American Indian/Alaska Native and Native Hawaiian/Pacific Islander populations experienced the highest differences from Utah overall age-adjusted death rates for the entire time. More detailed information for each racial/ethnic population can be found later on in this report.

Please note some populations are smaller than others, which could impact the accuracy of the age-adjusted death rates; however, examining death counts monthly likely helped mitigate this limitation.

# COVID-19 vaccination

Table 4 shows percentages of the populations who received at least one COVID-19 dose or is fully vaccinated by each racial/ethnic population. Black/African American, Hispanic/Latino, Native Hawaiian/Pacific Islander populations experienced lower COVID-19 vaccination percentages in general when compared with the overall Utah population.

**Table 4: People vaccinated by race/ethnicity, Utah, 2020–2021**

| Race/ethnicity*   | Population <sup>§</sup> | 1st dose vaccines received | % received at least one dose (95% CI) | Fully vaccinated | % fully vaccinated (95% CI) |
|---|-------------------------|----------------------------|---------------------------------------|------------------|-----------------------------|
| Utah overall  | 3,249,879               | 2,042,275                  | 62.84<br>(62.76–62.93)                | 1,732,777        | 53.32<br>(53.24–53.40)      |
| Am. Indian/AK Native  | 30,125                  | 21,292                     | 70.68<br>(69.73–71.63)                | 18,060           | 59.95<br>(59.08–60.82)      |
| Asian   | 82,431                  | 64,182                     | 77.86<br>(77.26–78.46)                | 54,349           | 65.93<br>(65.38–66.49)      |
| Black/African Am.   | 38,045                  | 24,239                     | 63.71<br>(62.91–64.51)                | 19,610           | 51.54<br>(50.82–52.27)      |
| Hispanic/Latino   | 471,647                 | 2,54,352                   | 53.93<br>(53.72–54.14)                | 213,728          | 45.32<br>(45.12–45.51)      |
| N. Hawaiian/Pac. Islander   | 33,619                  | 19,265                     | 57.30<br>(56.49–58.11)                | 16,292           | 48.46<br>(47.72–49.20)      |
| White, non-Hispanic   | 2,522,370               | 1,629,926                  | 64.62<br>(64.52–64.72)                | 1,395,185        | 55.31<br>(55.22–55.40)      |
| Some other race alone, non-Hispanic   | ---                     | 29,019                     | ---                                   | 23,145           | ---                         |
| Data source: DHHS COVID-19 Surveillance data<br>* Race is race alone, non-Hispanic and Hispanic/Latino is of any race.<br>§ Population estimates by age, sex, race, and Hispanic origin for counties in Utah, U.S. Bureau of the Census, IBIS version 2020. |                         |                            |                                       |                  |                             |

**Figure 5: Percentage of people received at least 1 dose of COVID-19 vaccination by race/ethnicity in Utah (2021)**

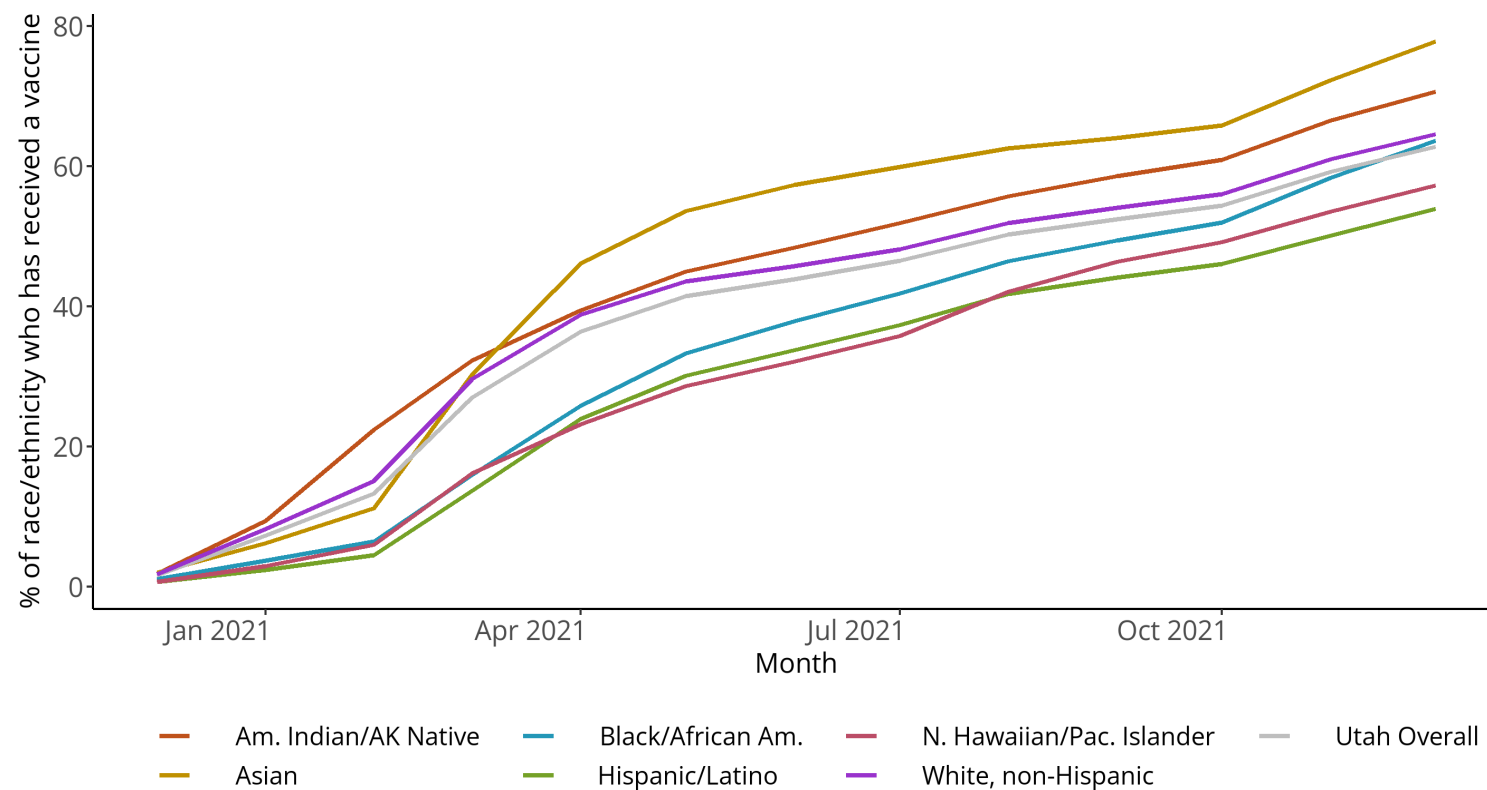


Figure 5 shows the percentage of people who received at least one dose of COVID-19 vaccines for all the racial/ethnic communities in Utah. Native Hawaiian/Pacific Islander, and Hispanic/Latino populations experienced lower cumulative percentages of first dose vaccination when compared with Utah overall by the end of December 2021. The initial first dose vaccination percentages were lower among Asian populations when compared with Utah overall. However, by December 2021, Asian populations had the highest percentage of first dose COVID-19 vaccination when compared with other racial/ethnic populations. The Black/African American population had lower cumulative percentages than Utah overall until November 2021 but the cumulative percentage was higher than Utah overall by the end of December 2021. American Indian/Alaska Native and White, non-Hispanic populations had higher cumulative first dose percentages than Utah overall between January–December 2021. More detailed information for each racial/ethnic population can be found later on in this report.

**Figure 6: Percentage of people fully vaccinated by race/ethnicity in Utah (2021)**

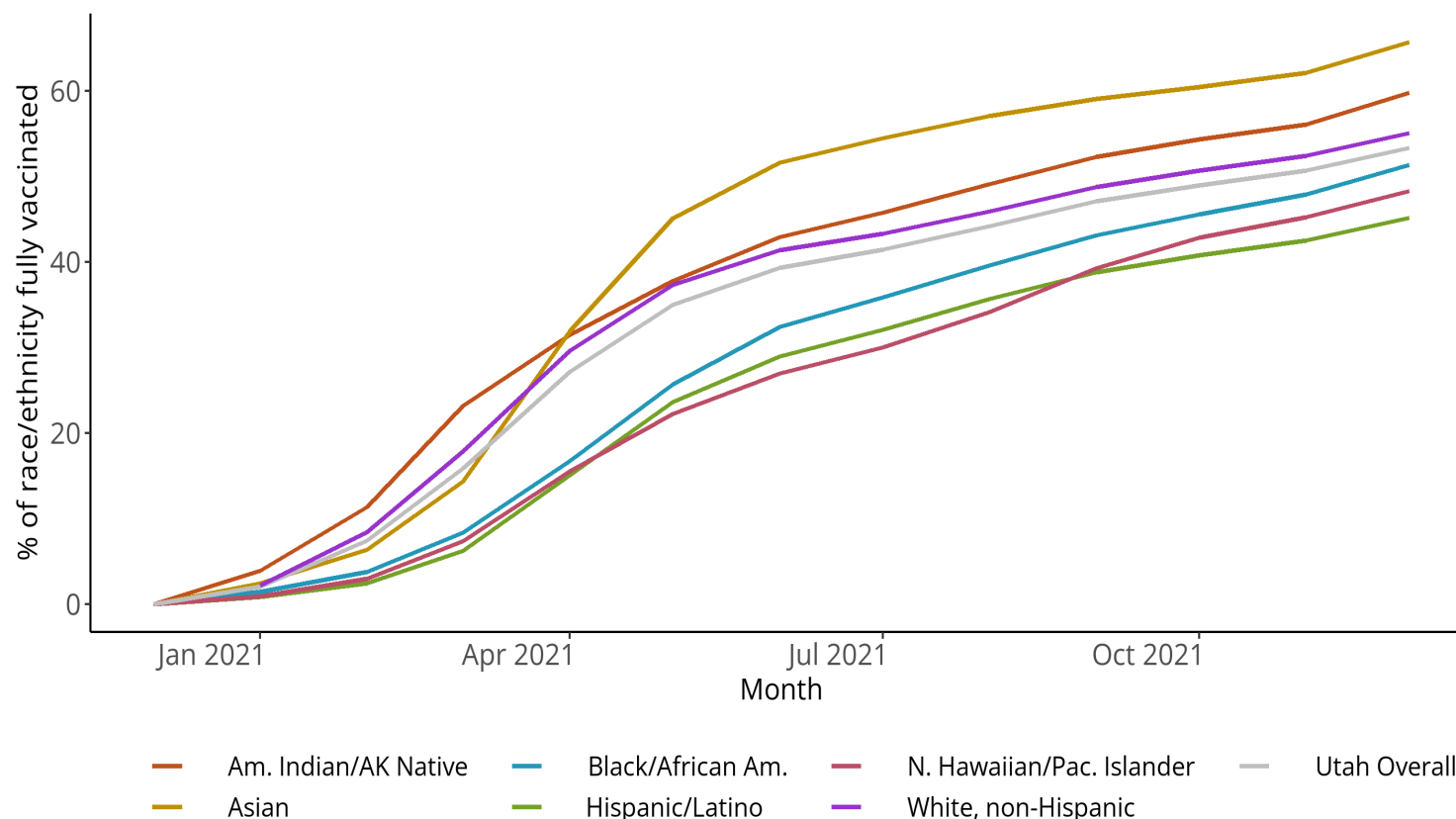


Figure 6 shows the percentage of people fully vaccinated for all the racial/ethnic communities in Utah. Black/African American, Native Hawaiian/Pacific Islander, and Hispanic/Latino populations experienced lower fully vaccination percentages when compared with Utah overall between January 2020–December 2021. Similar to the first dose vaccination percentages, the initial fully vaccinated percentages were lower among Asian populations when compared with Utah overall. However, by December 31, 2021 Asian populations had the highest fully vaccinated percentage when compared with other racial/ethnic populations. Similar to the first dose percentages, American Indian/Alaska Native and White, non-Hispanic populations had higher cumulative fully vaccinated percentages than Utah overall between January–December 2021. More detailed information for each racial/ethnic population can be found later on in this report.



# Delay in COVID-19 vaccination

The COVID-19 vaccine rollout involved different timelines of availability for different age groups. In Utah, COVID-19 vaccines became available for the 70+ age group around January 18, 2021, the 65+ age group around February 18, 2021, the 50+ age group around March 4, 2021, the 16+ age group around March 18, 2021, the 12+ age group around May 12, 2021, and the 5+ age group around November 11, 2021.<sup>1</sup> Besides age, factors such as comorbidities, work status (essential workers), and status of immunity (immunocompromised) were also taken into consideration for the COVID-19 vaccine rollout.

For people who received a vaccine dose, the average number of days until vaccination was calculated by subtracting the date the vaccine was received from the date the vaccine became available for that age group. Each age group was subsequently broken down by race/ethnicity to calculate the average days until vaccination for each racial/ethnic group. Please note, factors such as comorbidities, work status, and status of immunity were not taken into account for this analysis and the unvaccinated population was excluded from this analysis.

Tables 5 and 6 indicate the average number of days until COVID-19 vaccination or how quickly different populations were vaccinated based on the date the COVID-19 vaccine became available for each age group.

**Table 5: Average days until COVID-19 vaccination based on availability by age group, Utah (2020–2021)**

| Race/ethnicity*  | Average days until COVID-19 vaccination (95% CI) |
|--|--|
| Utah overall   | 53 (52.99–53.02)                                 |
| Am. Indian/AK Native   | 46 (45.86–46.14)                                 |
| Asian  | 51 (50.91–51.09)                                 |
| Black/African Am.  | 79 (78.87–79.13)                                 |
| Hispanic/Latino  | 67 (66.95–67.05)                                 |
| N. Hawaiian/Pac. Islander  | 71 (70.87–71.14)                                 |
| White, non-Hispanic  | 50 (49.98–50.02)                                 |
| Data source: DHHS COVID-19 Surveillance data<br>* Race is race alone, non-Hispanic and Hispanic/Latino is of any race. |  |

Table 5 indicates Black/African American (79 days), Hispanic/Latino (67 days), and Native Hawaiian/Pacific Islander (71 days) populations had higher average days until COVID-19 vaccination when compared with the overall Utah population (53 days).

**Table 6: Average days until COVID-19 vaccination based on vaccine availability by age group for each race/ethnicity, Utah (2020-2021)**

| Race/ethnicity*  | Age group           |                     |                     |                     |                      |                        |
|--|---------------------|---------------------|---------------------|---------------------|----------------------|------------------------|
|  | 5-11 (95% CI)       | 12-15 (95% CI)      | 16-49 (95% CI)      | 50-64 (95% CI)      | 65-69 (95% CI)       | 70+ (95% CI)           |
| Utah overall   | 20<br>(19.89-20.11) | 67<br>(66.68-67.32) | 65<br>(64.82-65.18) | 55<br>(54.70-55.30) | 51<br>(50.49-51.51)  | 58<br>(57.64-58.36)    |
| Am. Indian/AK Native   | 20<br>(19.06-20.95) | 63<br>(60.29-65.72) | 56<br>(54.34-57.90) | 43<br>(39.87-46.13) | 40<br>(33.57-46.43)  | 53<br>(47.99-58.00)    |
| Asian  | 21<br>(20.44-21.56) | 50<br>(48.25-51.75) | 59<br>(58.07-59.93) | 56<br>(54.30-57.70) | 51<br>(47.72-54.28)  | 66<br>(63.22-68.78)    |
| Black/African Am.  | 22<br>(20.96-23.04) | 72<br>(69.21-74.79) | 87<br>(85.50-88.50) | 83<br>(79.71-86.29) | 98<br>(90.26-105.74) | 113<br>(105.63-120.37) |
| Hispanic/Latino  | 24<br>(23.68-24.32) | 76<br>(75.22-76.78) | 82<br>(81.56-82.44) | 70<br>(69.15-70.85) | 68<br>(65.93-70.07)  | 84<br>(82.17-85.83)    |
| N. Hawaiian/Pac. Islander  | 23<br>(21.51-24.49) | 92<br>(89.14-94.86) | 94<br>(92.33-95.67) | 70<br>(66.78-73.23) | 64<br>(57.33-70.67)  | 82<br>(76.02-87.98)    |
| White, non-Hispanic  | 19<br>(18.87-19.13) | 64<br>(63.64-64.36) | 63<br>(62.79-63.21) | 52<br>(51.66-52.34) | 48<br>(47.46-48.54)  | 55<br>(54.63-55.37)    |
| Data source: DHHS COVID-19 Surveillance data<br>* Race is race alone, non-Hispanic and Hispanic/Latino is of any race. |                     |                     |                     |                     |                      |                        |

Table 6 reveals Black/African American, Hispanic/Latino, Native Hawaiian/Pacific Islander, and Asian populations (5-11, 50-64, and 70+ age groups) in Utah consistently experienced higher average days until vaccination across all the age groups while the American Indian/Alaska Native, White non-Hispanic, and Asian populations (12-49 age groups) were vaccinated more quickly than the Utah overall population.

**Table 7: Percentage of people with one COVID-19 vaccine dose who did not receive a second dose, Utah (2020-2021)**

| <b>Race/ethnicity</b>  | <b>Missing second doses</b> | <b>Population received first dose of Moderna or Pfizer</b> | <b>% of people who did not receive second dose (95% CI)</b> |
|--|-----------------------------|--|---|
| Utah overall   | 198,290                     | 2,103,759  | 9.43% (9.38 – 9.47)   |
| Am. Indian/AK Native   | 2,137                       | 20,373   | 10.49% (10.04 – 10.93)                                      |
| Asian  | 5,309                       | 61,136   | 8.68% (8.45 – 8.92)   |
| Black/African Am.  | 3,244                       | 22,521   | 14.40% (13.91 – 14.90)                                      |
| Hispanic/Latino  | 26,705                      | 236,012  | 11.32% (11.18 – 11.45)                                      |
| N. Hawaiian/Pac. Islander  | 2,259                       | 17,907   | 12.62% (12.09 – 13.14)                                      |
| White, non-Hispanic  | 121,819                     | 1,520,562  | 8.01% (7.97 – 8.06)   |
| Data source: DHHS COVID-19 Surveillance data<br>* Race is race alone, non-Hispanic and Hispanic/Latino is of any race. |                             |  |   |

Table 7 shows American Indian/Alaska Native, Black/African American, Hispanic/Latino, and Native Hawaiian/Pacific Islander populations had a higher COVID-19 percentage of people who did not receive a second dose for a two-dose series when compared with the overall Utah population. Black/African American population in Utah reported the highest (14.40%) percentage of people who did not receive their second dose.

# American Indian/Alaska Native populations

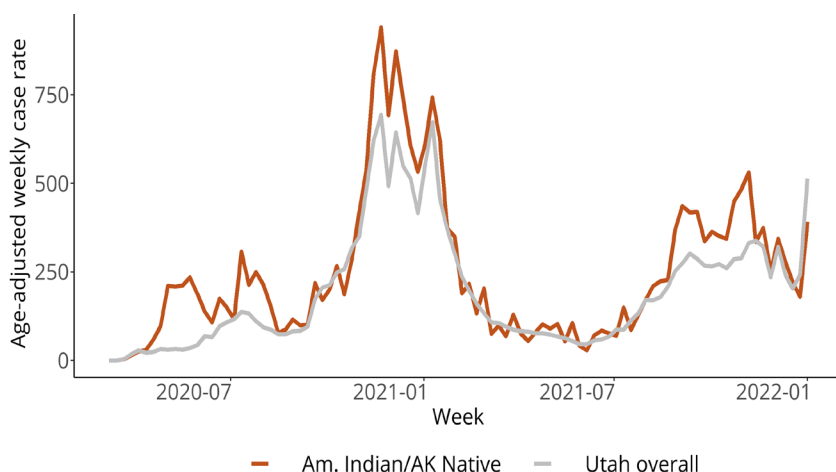
The following graphs visualize COVID-19 cases, case-hospitalization, case-death, and vaccination rates over time for American Indian/Alaska Native populations.

Since American Indian and Alaska Native (AI/AN) imply both a race and a political status, it is important to differentiate between those who racially identify as AI/AN and those who are enrolled in a federally-recognized tribe. A forthcoming tribal affiliation profile explores tribe-related COVID-19 indicators.

Note 1: The inability to disaggregate data by racial/ethnic subgroups (Canadian Inuit, Metis, or First Nation/Indigenous Mexican, Central American, or South American, etc.) can mask significant health disparities within these sub-groups.

Note 2 : The very high hospitalization and death rates among COVID-19 cases in the first month of the pandemic for the AmericanIndian/Alaska Native population might have been influenced by a small hospitalization and death count during that month.

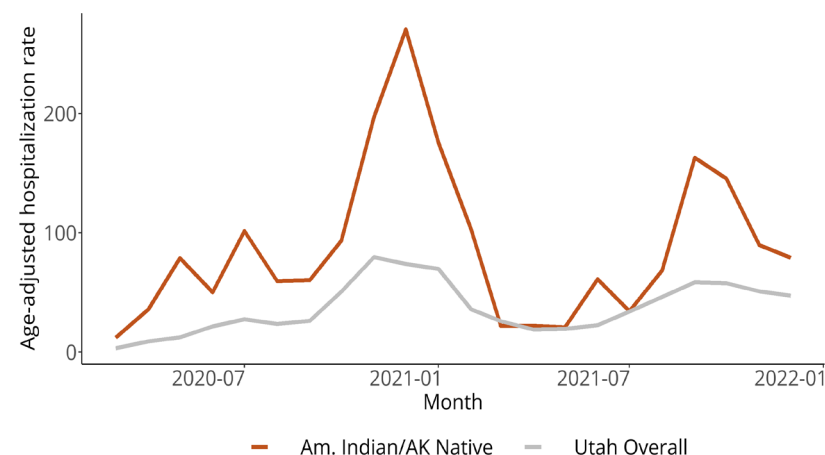
**Figure 7a: COVID-19 weekly case rates American Indian/Alaska Native compared with Utah overall (2020–2021)**



Data source: DHHS COVID-19 surveillance data

**Cases:** American Indian/Alaska Native populations experienced higher COVID-19 age-adjusted case rates when compared with Utah overall particularly during the summer of 2020 and winters of 2020 and 2021.

**Figure 7b: Monthly age-adjusted hospitalization rates American Indian/Alaska Native compared with Utah overall (2020–2021)**

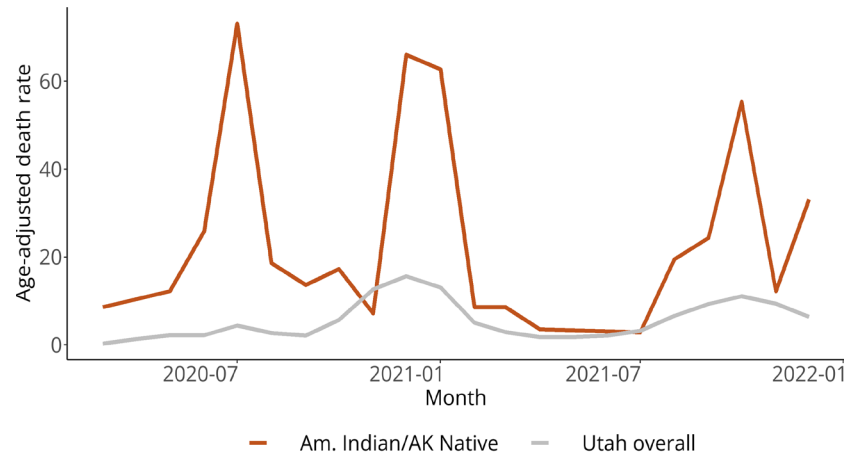


Data source: DHHS COVID-19 surveillance data

**Hospitalizations:** American Indian/Alaska Native populations consistently experienced higher COVID-19 age-adjusted hospitalization rates for most of the months between March 1, 2020 to December 31, 2021 when compared with Utah overall. The age-adjusted hospitalizations peaked in the winter of 2020 and fall of 2021.

# American Indian/Alaska Native populations

**Figure 7c: Monthly age-adjusted death rates American Indian/Alaska Native compared with Utah overall (2020–2021)**

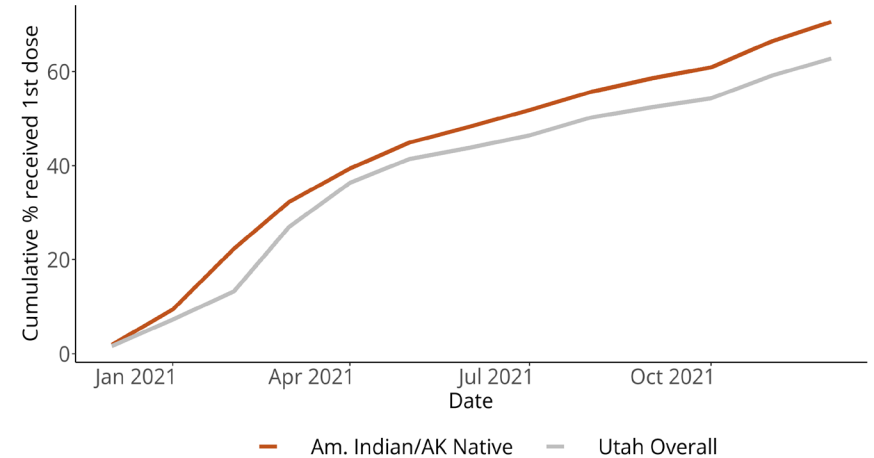


Data source: DHHS COVID-19 surveillance data

**Deaths:** American Indian/Alaska native populations experienced higher COVID-19 age-adjusted death rates consistently for the majority of time when compared with Utah overall between March 1, 2020–December 31, 2021 with high peaks of age-adjusted death rates observed in the summer and winter of 2020, and fall of 2021.

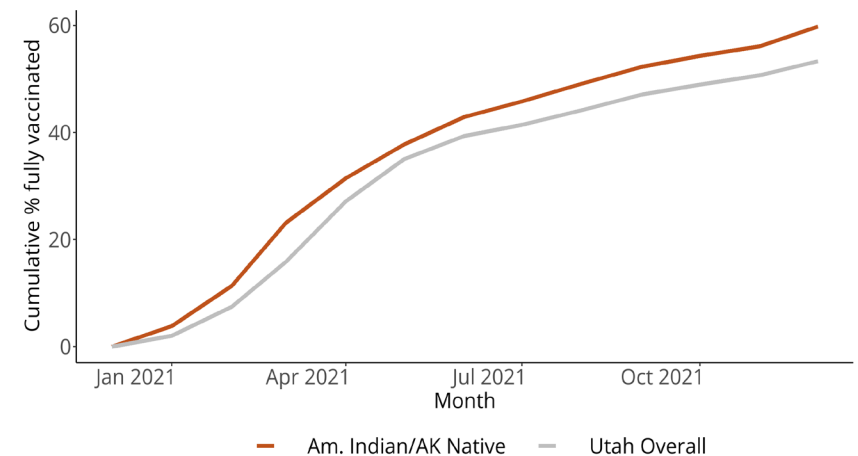
**Vaccinations:** The percentage of American Indian/Alaska Native populations who received at least one dose of COVID-19 vaccination was consistently higher than Utah's overall percentage between March 1, 2020–December 31, 2021. The fully vaccinated percentages followed a trend similar to first dose vaccination percentages.

**Figure 7d: Cumulative % of American Indian/Alaska Native who received at least one dose compared with Utah overall (2020–2021)**



Data source: DHHS COVID-19 surveillance data

**Figure 7e: Cumulative % of American Indian/Alaska Native who are fully vaccinated compared with Utah overall (2020–2021)**



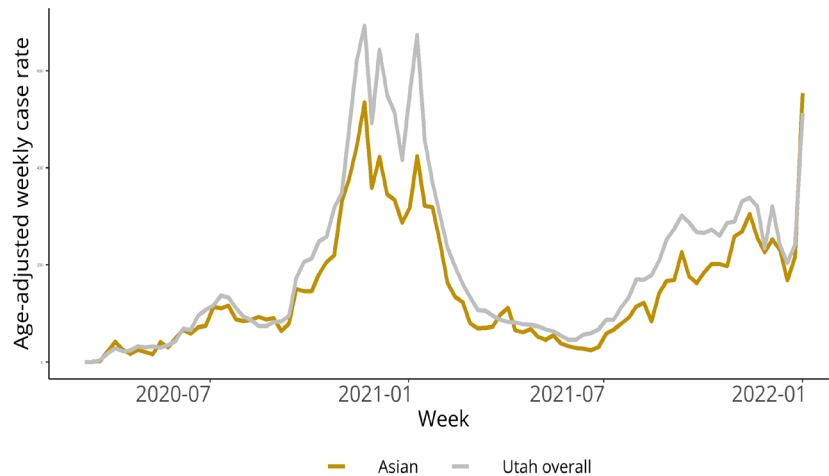
Data source: DHHS COVID-19 surveillance data

# Asian populations

The following graphs visualize COVID-19 cases, hospitalization, death, and vaccination rates over time for Asian populations.

Note: The inability to disaggregate data by racial/ethnic subgroups (Asian Indian, Chinese, Filipino/a, Japanese, Korean, Vietnamese, etc.) can mask significant health disparities within these sub-groups.

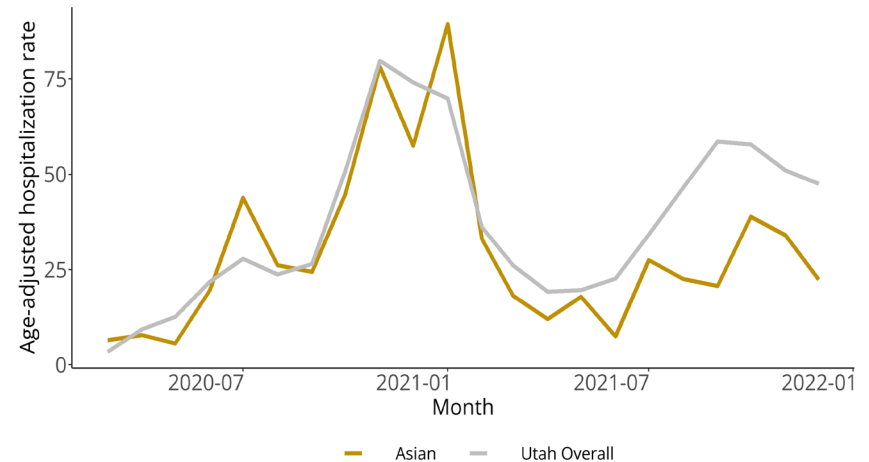
**Figure 8a: COVID-19 weekly case rates for Asian populations compared with Utah overall (2020–2021)**



Data source: DHHS COVID-19 surveillance data

**Cases:** Asian populations experienced lower COVID-19 age-adjusted case rates when compared with Utah overall for the majority of the time period between March 2020 and December 2021.

**Figure 8b: Monthly age-adjusted hospitalization rates for Asian populations compared with Utah overall (2020–2021)**

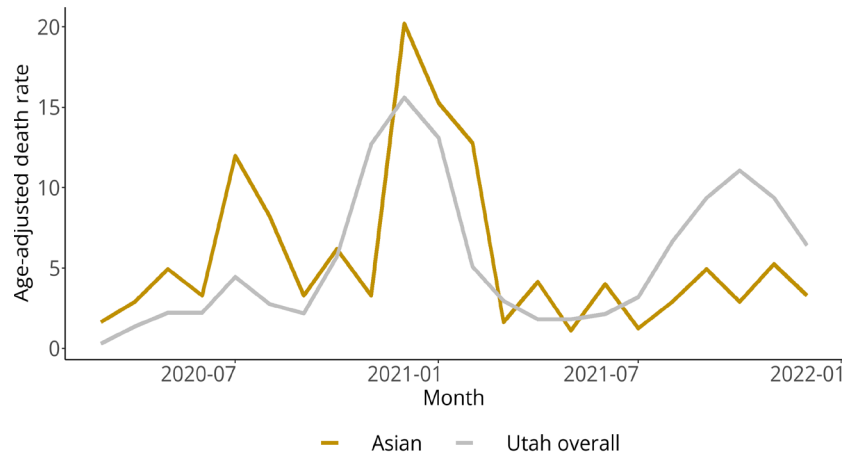


Data source: DHHS COVID-19 surveillance data

**Hospitalizations:** Asian populations consistently experienced lower COVID-19 age-adjusted hospitalization rates for most of the months between March 1, 2020 to December 31, 2021 when compared with Utah overall. The age-adjusted hospitalization rates were higher among this population than Utah overall in the months of March, July, and August in 2020 and January 2021.

# Asian populations

**Figure 8c: Monthly age-adjusted death rates for Asian populations compared with Utah overall (2020–2021)**

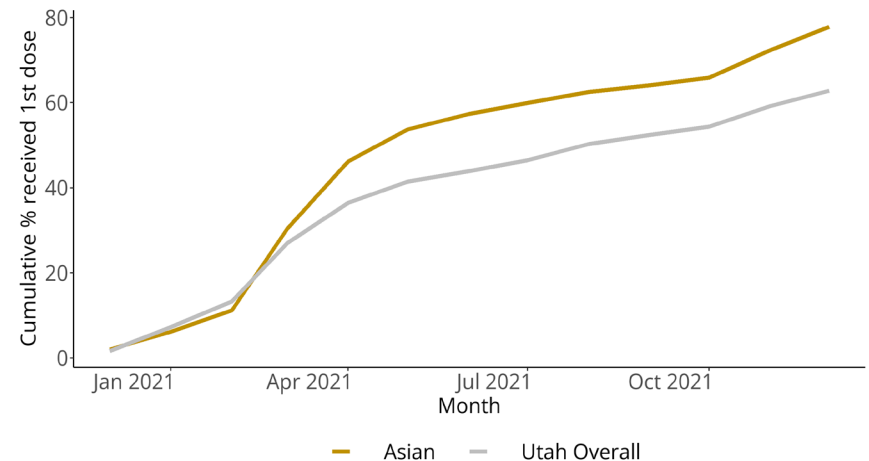


Data source: DHHS COVID-19 surveillance data

**Deaths:** Asian populations experienced higher COVID-19 age-adjusted death rates than Utah's overall rate consistently for the majority of time between March 2020 and December 2021 with peaks of age-adjusted death rates observed in the fall and winter of 2020. The age-adjusted death rates in this population were lower for most of 2021 except in the months of April and June. This can be attributed to higher first dose/fully vaccinated percentages in this population.

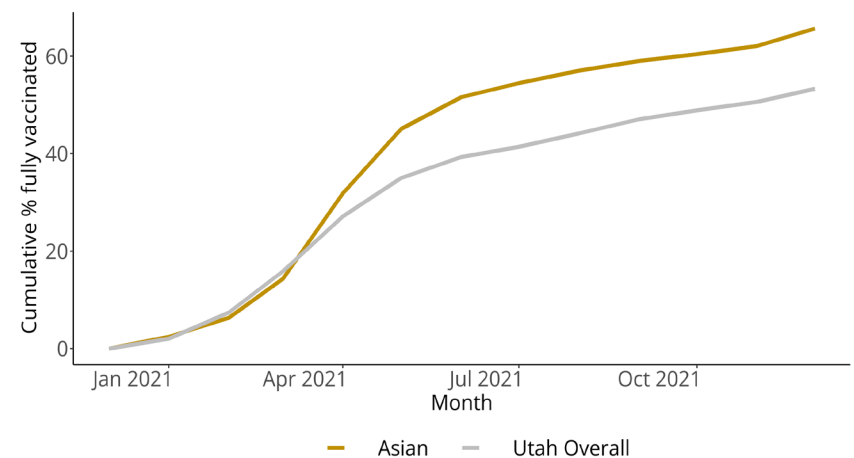
**Vaccinations:** The cumulative first dose and fully vaccinated percentages of Asian populations were consistently higher than the overall Utah cumulative percentages for all the months beginning March 2021.

**Figure 8d: Cumulative % of Asian populations who received at least one dose compared with Utah overall (2020–2021)**



Data source: DHHS COVID-19 surveillance data

**Figure 8e: Cumulative % of Asian populations who are fully vaccinated compared with Utah overall (2020–2021)**



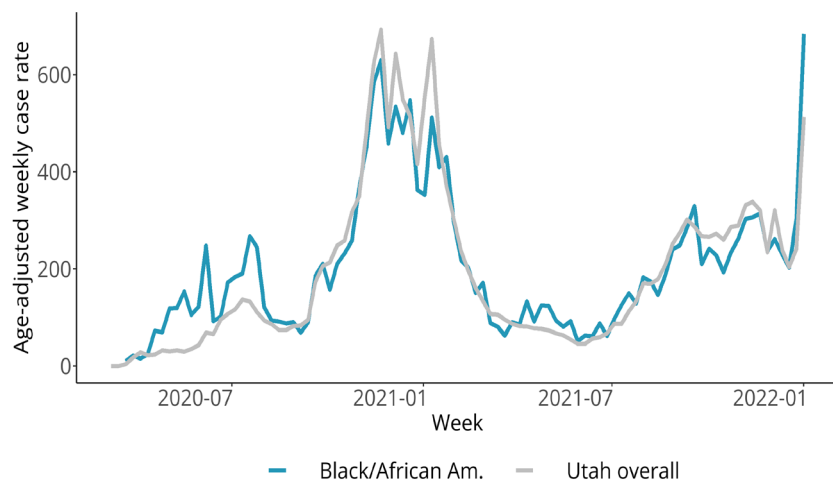
Data source: DHHS COVID-19 surveillance data

# Black/African American populations

The following graphs visualize COVID-19 cases, hospitalization, death, and vaccination rates over time for Black/African American populations.

Note: The inability to disaggregate data by racial/ethnic subgroups (African American, Black African, Black Caribbean, etc.) can mask significant health disparities within these sub-groups.

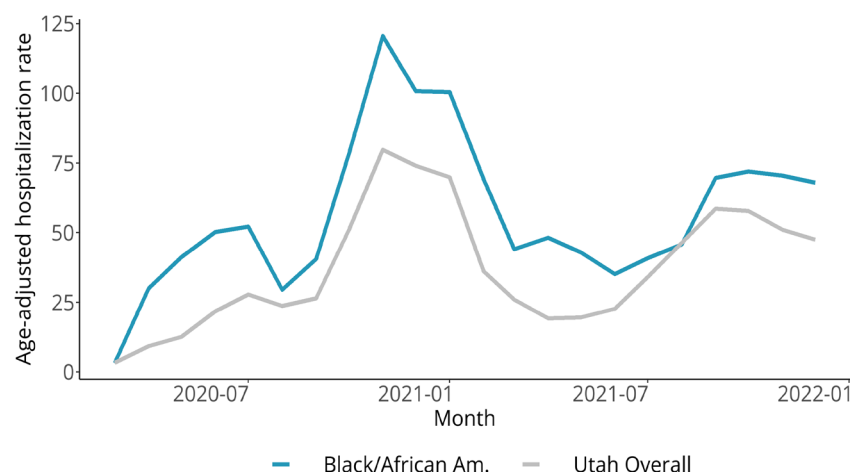
**Figure 9a: COVID-19 weekly case rates for Black/African American populations compared with Utah overall (2020–2021)**



Data source: DHHS COVID-19 surveillance data

**Cases:** Black/African American populations experienced higher age-adjusted COVID-19 case rates, especially during the summers of 2020 and 2021, and fall of 2020 when compared with Utah overall. There was also a spike observed in the weekly case rates in December 2021.

**Figure 9b: Monthly age-adjusted hospitalization rates for Black/African American populations compared with Utah overall (2020–2021)**



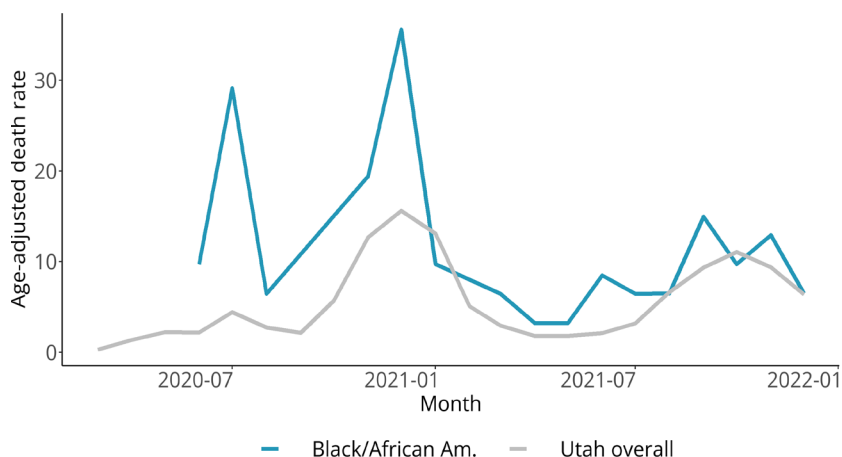
Data source: DHHS COVID-19 surveillance data

**Hospitalizations:** Black/African American populations experienced higher COVID-19 age-adjusted hospitalization rates consistently than Utah's overall rates between March 2020 to December 2021. The peak in the age-adjusted hospitalization rates was observed in the winters of 2020 and 2021, and fall of 2021.



# Black/African American populations

**Figure 9c: Monthly age-adjusted death rates for Black/African American populations compared with Utah overall (2020–2021)**

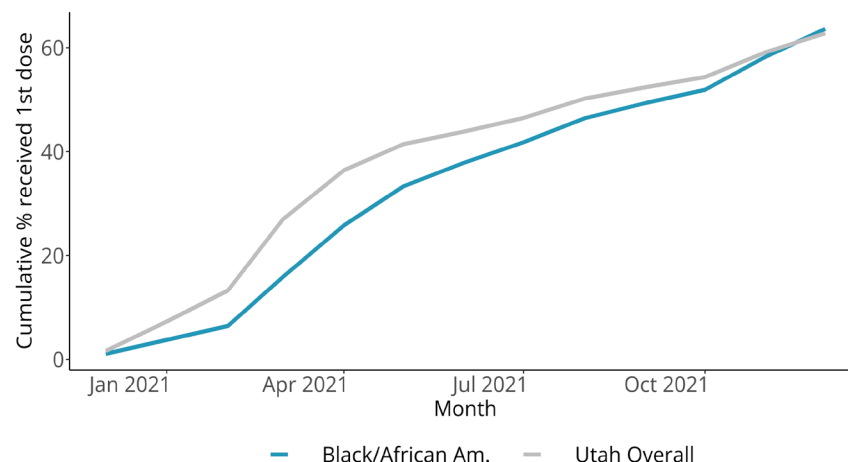


Data source: DHHS COVID-19 surveillance data

**Deaths:** The first death among Black/African American populations was reported in June 2020. The age-adjusted death rates among this population were consistently higher than Utah's overall rates for most of the time period between March 2020 to December 2021. The peak in the age-adjusted death rates was observed in the summer and winter of 2020.

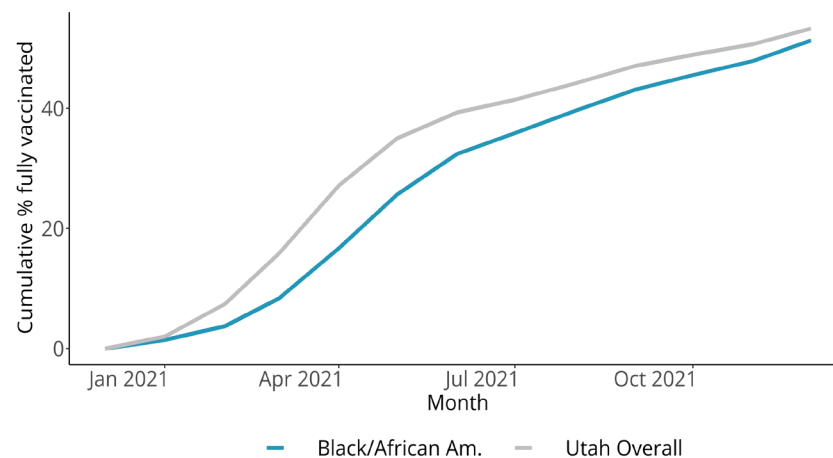
**Vaccinations:** The cumulative first dose vaccination percentages of Black/African American populations was consistently lower than Utah's overall cumulative percentage until November 2021. However, by the end of December 2021, the cumulative first dose percentage was higher among this population when compared with Utah's overall vaccination percentage. The fully vaccinated cumulative percentages among this population were consistently lower than Utah's overall rate between January 2021 to December 2021.

**Figure 9d: Cumulative % of Black/African American populations who received at least one dose compared with Utah overall (2020–2021)**



Data source: DHHS COVID-19 surveillance data

**Figure 9e: Cumulative % of Black/African American populations who are fully vaccinated compared with Utah overall (2020–2021)**



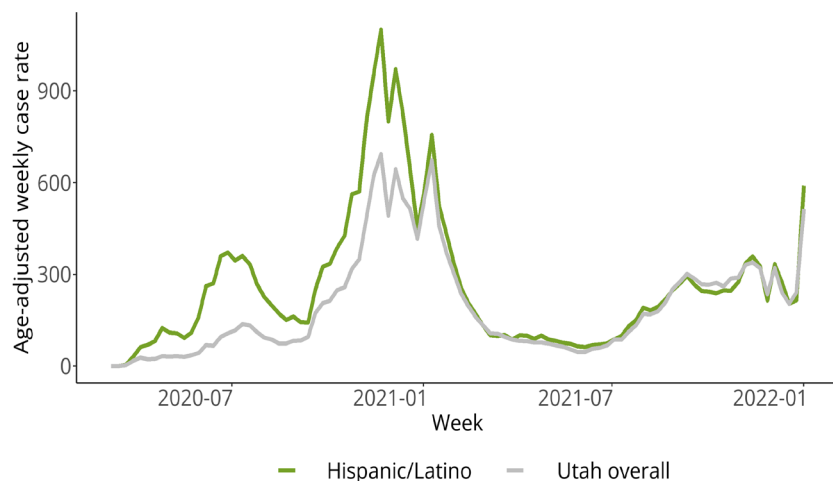
Data source: DHHS COVID-19 surveillance data

# Hispanic/Latino populations

The following graphs visualize COVID-19 cases, hospitalization, death, and vaccination rates over time for Hispanic/Latino populations.

Note: The inability to disaggregate data by racial/ethnic subgroups (Mexican American, Central American, South American, Spanish/Spaniard, etc.) can mask significant health disparities within these sub-groups.

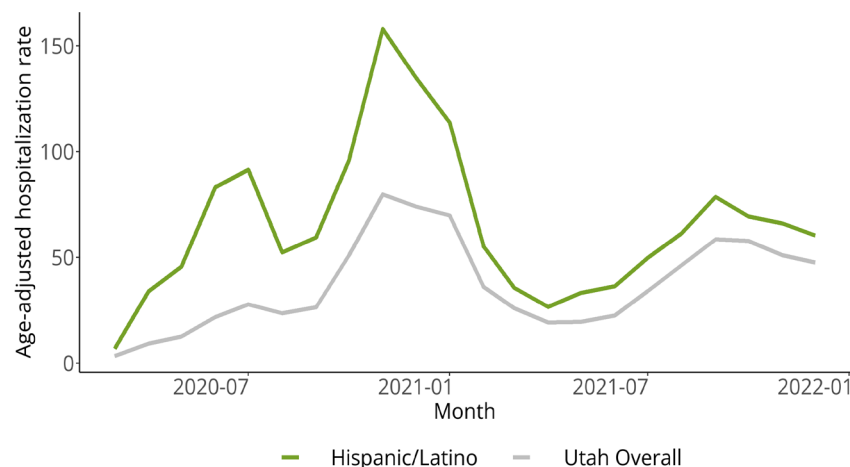
**Figure 10a: COVID-19 weekly case rates for Hispanic/Latino populations compared with Utah overall (2020–2021)**



Data source: DHHS COVID-19 surveillance data

**Cases:** Hispanic/Latino populations experienced higher age-adjusted COVID-19 case rates when compared with Utah overall consistently since the beginning of the pandemic until February 2021 and during the summer of 2021. Peaks in the weekly case rates were observed in the fall and winter of 2020.

**Figure 10b: Monthly age-adjusted hospitalization rates for Hispanic/Latino populations compared with Utah overall (2020–2021)**

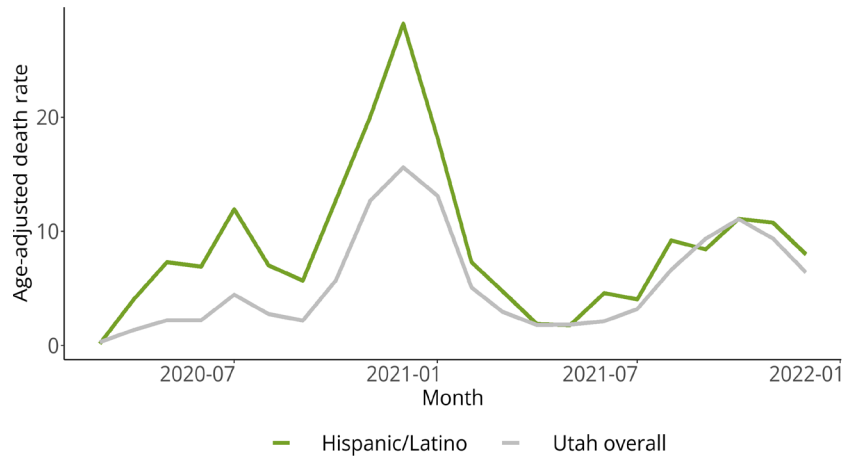


Data source: DHHS COVID-19 surveillance data

**Hospitalizations:** Hispanic/Latino populations experienced higher age-adjusted COVID-19 hospitalization rates for all the months from March 1, 2020 to December 31, 2021 when compared with Utah overall. The age-adjusted hospitalization rates among Hispanic/Latino populations were double Utah's overall hospitalization rates between March 2020 to September 2020. Peaks in the age-adjusted hospitalization rates were observed in the summer and winter of 2020, and fall of 2021.

# Hispanic/Latino populations

**Figure 10c: Monthly age-adjusted death rates for Hispanic/Latino populations compared with Utah overall (2020–2021)**

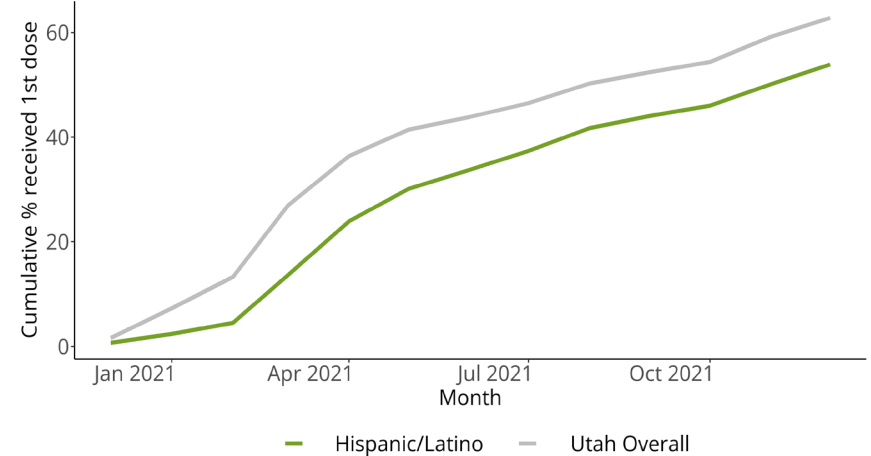


Data source: DHHS COVID-19 surveillance data

**Deaths:** Hispanic/Latino populations experienced higher age-adjusted COVID-19 death rates for the majority of the time between March 1, 2020 and December 31, 2021 when compared with Utah overall. The age-adjusted death rates among Hispanic/Latino populations were more than 10 times higher than Utah's overall death rates until July 2021. Peaks in the age-adjusted death rates were observed in the summer and winter of 2020.

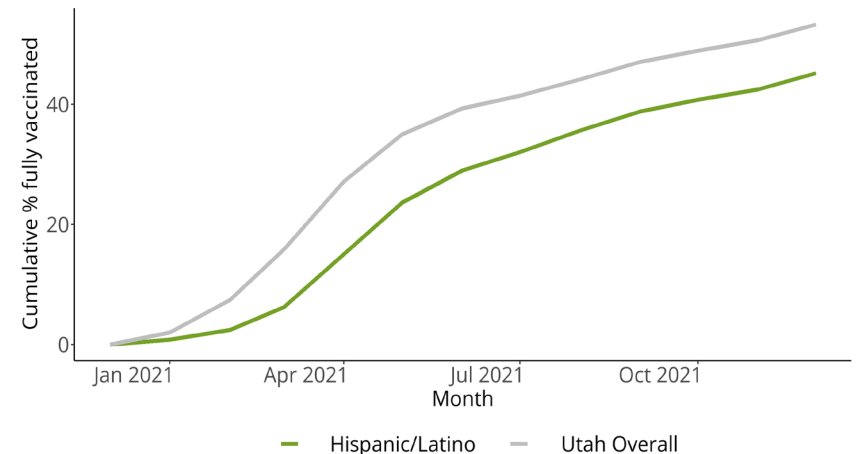
**Vaccinations:** The cumulative first dose and fully vaccinated percentages of Hispanic/Latino populations were consistently lower than Utah's overall cumulative percentages for all the months between December 2020 to December 2021.

**Figure 10d: Cumulative % of Hispanic/Latino populations who received at least one dose compared with Utah overall (2020–2021)**



Data source: DHHS COVID-19 surveillance data

**Figure 10e: Cumulative % of Hispanic/Latino populations who are fully vaccinated compared with Utah overall (2020–2021)**



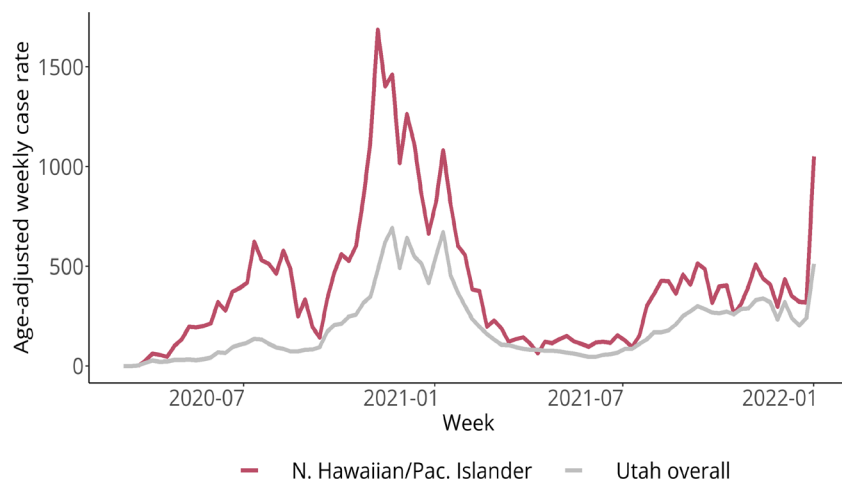
Data source: DHHS COVID-19 surveillance data

# Native Hawaiian/Pacific Islander populations

The following graphs visualize COVID-19 cases, hospitalization, death, and vaccination rates over time for Native Hawaiian/Pacific Islander populations.

Note: The inability to disaggregate data by racial/ethnic subgroups (Native Hawaiian, Chamarro, Samoan, Tongan, etc.) can mask significant health disparities within these sub-groups.

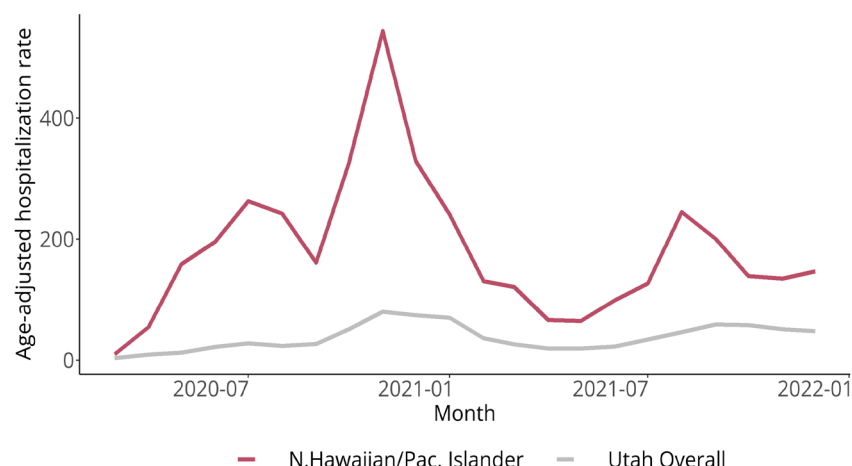
**Figure 11a: COVID-19 weekly case rates for Native Hawaiian/Pacific Islander populations compared with Utah overall (2020–2021)**



Data source: DHHS COVID-19 surveillance data

**Cases:** Native Hawaiian/Pacific Islander populations experienced higher age-adjusted COVID-19 case rates consistently for most of the time between March 2020–December 2021 when compared with Utah overall. Peaks in the weekly case rates were observed during the fall and winter of 2020, and continued until February 2021. There was also a spike observed in the weekly case rates in December 2021.

**Figure 11b: Monthly age-adjusted hospitalization rates for Native Hawaiian/Pacific Islander populations compared with Utah overall (2020–2021)**

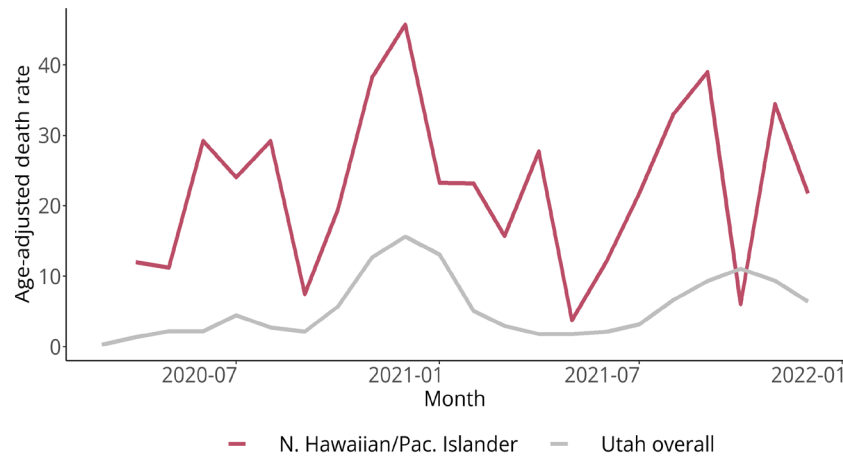


Data source: DHHS COVID-19 surveillance data

**Hospitalizations:** Native Hawaiian/Pacific Islander populations experienced higher age-adjusted COVID-19 hospitalization rates for all of the months between March 1, 2020 and December 31, 2021 when compared with Utah overall. The age-adjusted hospitalization rates were five times higher than Utah's overall rates for nine of 22 months (41%) between March 2020 and December 2021.

# Native Hawaiian/Pacific Islander populations

**Figure 11c: Monthly age-adjusted death rates for Native Hawaiian/Pacific Islander populations compared with Utah overall (2020–2021)**

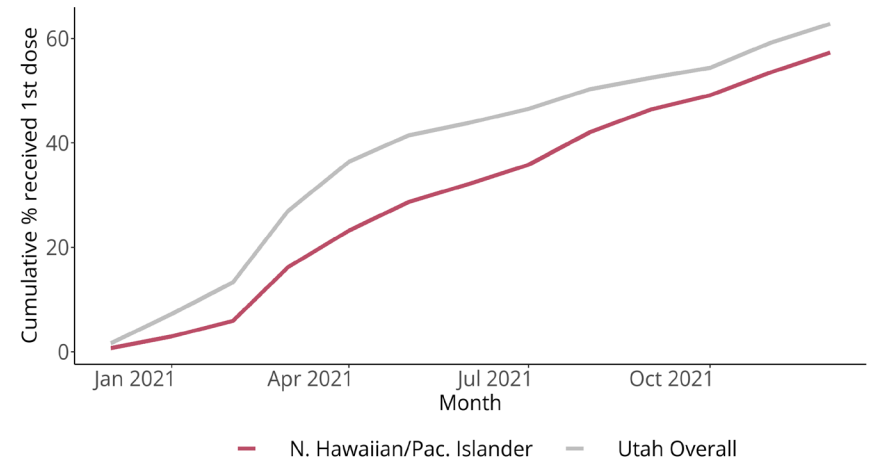


Data source: DHHS COVID-19 surveillance data

**Deaths:** Native Hawaiian/Pacific Islander populations experienced higher age-adjusted COVID-19 death rates compared with Utah overall for all the months except October 2021 between March 1, 2020 to December 31, 2021. The age-adjusted death rates among Native Hawaiian/Pacific Islander populations were more than five times higher than Utah's overall death rates for 10 of 22 months (45%) between March 2020 and December 2021.

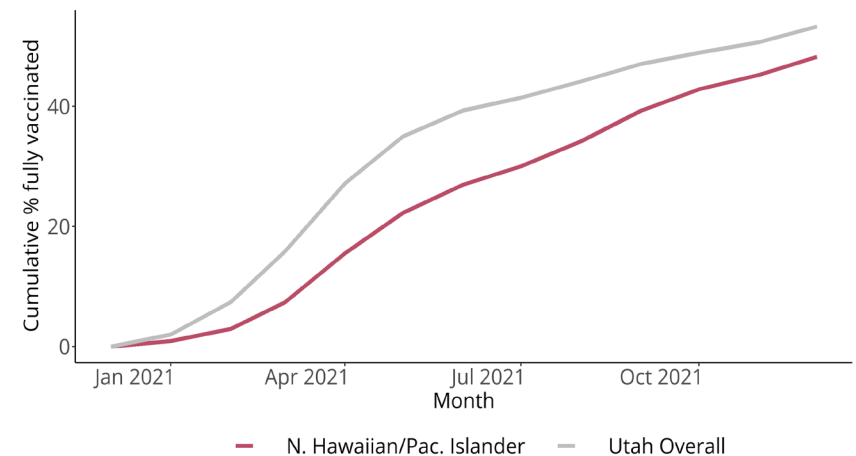
**Vaccinations:** The cumulative first dose and fully vaccinated percentages of Native Hawaiian/Pacific Islander populations were consistently lower than Utah's overall cumulative percentages for all months between December 2020 to December 2021.

**Figure 11d: Cumulative % of Native Hawaiian/Pacific Islander populations who received at least one dose compared with Utah overall (2020–2021)**



Data source: DHHS COVID-19 surveillance data

**Figure 11e: Cumulative % of Native Hawaiian/Pacific Islander populations who are fully vaccinated compared with Utah overall (2020–2021)**



Data source: DHHS COVID-19 surveillance data

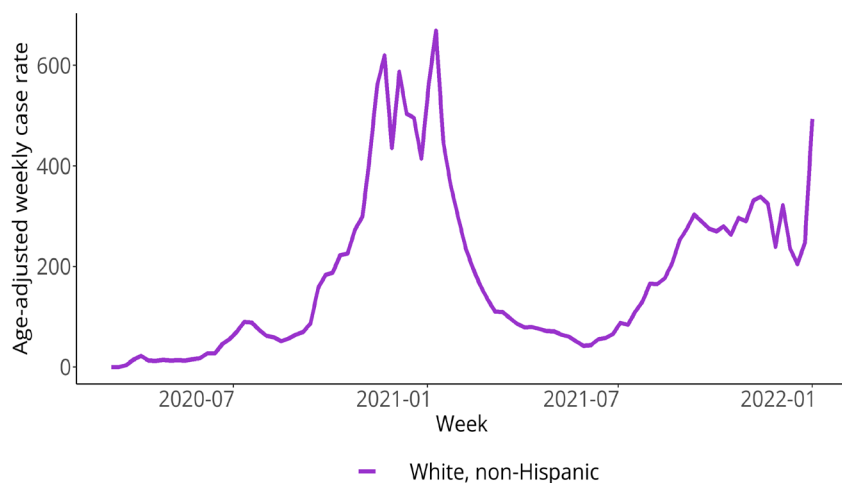
# White, non-Hispanic populations

The following graphs visualize COVID-19 cases, hospitalization, death, and vaccination rates over time for White, non-Hispanic populations.

Note 1: Utah's overall rate was not used as a comparison group when reporting the data for White, non-Hispanic populations since White, non-Hispanic populations constitute approximately 80% of Utah's overall population.

Note 2: The inability to disaggregate data by racial/ethnic subgroups (White European, Middle Eastern/North African, etc.) can mask significant health disparities within these sub-groups.

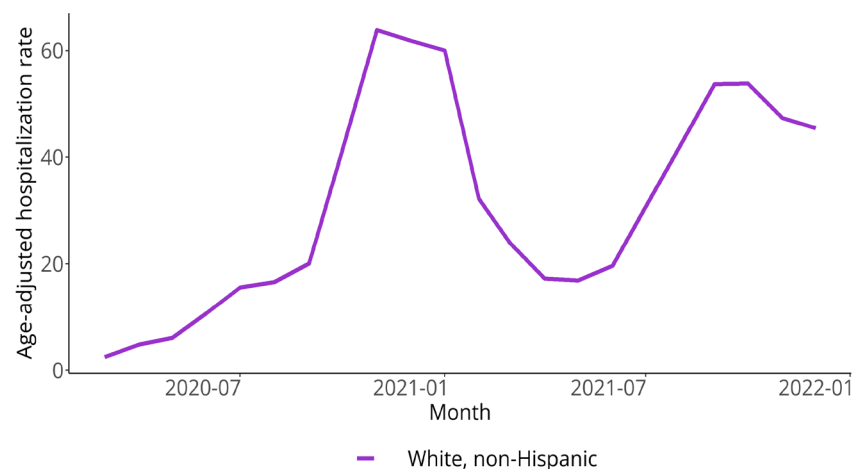
**Figure 12a: COVID-19 weekly case rates for White, non-Hispanic populations (2020–2021)**



Data source: DHHS COVID-19 surveillance data

**Cases:** White, non-Hispanic populations experienced peaks in the weekly case rates during the winter of 2020 and fall of 2021. A spike in the weekly case rates was also observed in December 2021.

**Figure 12b: Monthly age-adjusted hospitalization rates for White, non-Hispanic populations (2020–2021)**

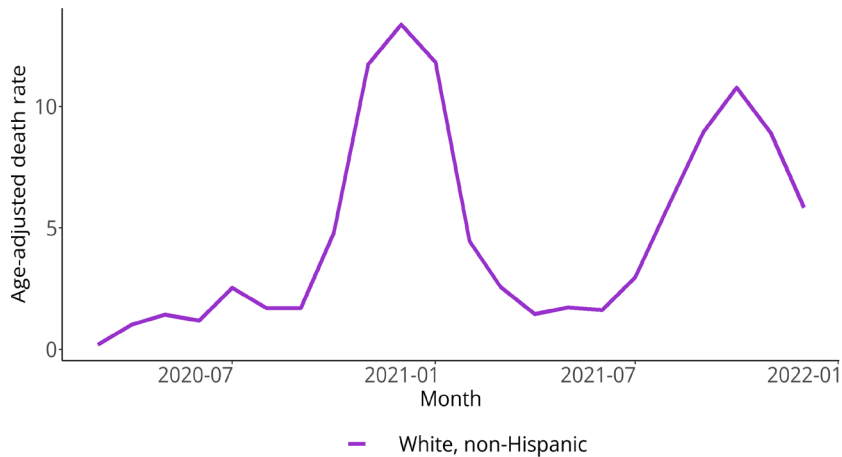


Data source: DHHS COVID-19 surveillance data

**Hospitalizations:** Similar to the weekly case rates, White, non-Hispanic populations experienced peaks in the monthly age-adjusted hospitalization rates during the winter of 2020 and fall of 2021.

# White, non-Hispanic populations

**Figure 12c: Monthly age-adjusted death rates for white, non-Hispanic populations (2020–2021)**

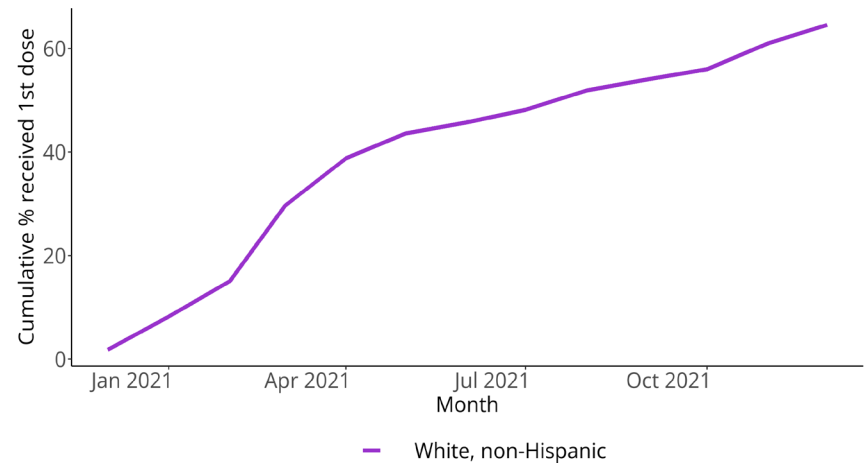


Data source: DHHS COVID-19 surveillance data

**Deaths:** Similar to the hospitalization rates, White, non-Hispanic populations experienced peaks in the age-adjusted death rates during the winter of 2020 and fall of 2021.

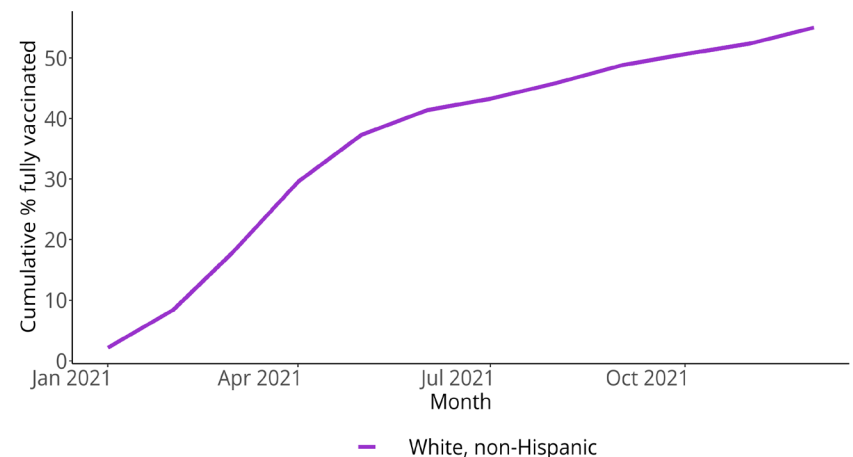
**Vaccinations:** White, non-Hispanic populations had a cumulative first dose percentage of 64.62% and fully vaccinated percentage of 55.31% respectively by the end of December 2021.

**Figure 12d: Cumulative % of White, non-Hispanic populations who received at least one dose (2020–2021)**



Data source: DHHS COVID-19 surveillance data

**Figure 12e: Cumulative % of White, non-Hispanic populations who are fully vaccinated (2020–2021)**



Data source: DHHS COVID-19 surveillance data

# Data notes and limitations

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- Case counts are a leading indicator of COVID-19 transmission. Case counts are reported to DHHS by testing sites and health care providers. It is important to note the actual case numbers in Utah are expected to be higher than what is reported. This is due to mild cases who do not feel ill enough to get tested and seek care, more people receiving at-home tests which are not reported to DHHS, and limited testing availability particularly during surges. Because of these limitations, it is important to consider other measures along with the case counts for COVID-19 transmission and severity.<sup>1</sup>
- Hospitalizations and death counts show the most severe outcomes due to COVID-19. Both outcomes often occur after a person is first diagnosed with COVID-19, so the counts for these indicators lag by days to weeks after case counts.<sup>1</sup>
- Race/ethnicity data in this report was calculated as race-alone and not in combination. People reported with Hispanic ethnicity with any race, are grouped as Hispanic/Latino. Racial groupings included people who are reported with a single race alone and have not indicated Hispanic ethnicity. People who identify as two or more races of non-Hispanic or unknown ethnicity are grouped as two or more races.
- Grouping people who identify as two or more races of non-Hispanic or unknown ethnicity as two or more races results in race/ethnicity-specific numerators and denominators being mutually exclusive. Though this allows for more accurate population counts, a limitation of this method is those who chose two or more races are not captured in the race categories they chose, but rather in the two or more races category. This could create a less accurate view of race in the data.
- Within each of the race and ethnicity categories, it is acknowledged that significant diversity exists and the use of broad categories might obscure health disparities among smaller subgroups and among multiracial and multiethnic communities. Five race categories were used in the report whenever possible (along with Hispanic origin or ethnicity), in accordance with the federal Office of Management and Budget categories utilized by the U.S. Census Bureau.
- Although the report highlights the burden of COVID-19 across racial/ethnic minority populations, due to missing race/ethnicity information in the COVID-19 surveillance data some uncertainty is present. In this report, the race/ethnicity variable was missing (unknown) for nearly 5.7% (36,657) of COVID-19 cases.



# Recommendations

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- Standardize the collection of race/ethnicity data. The DHHS Office of Health Equity (OHE) has created [guidelines](#) to aid organizations in creating these standards.<sup>2</sup> These guidelines establish a uniform method of race/ethnicity data collection and increase the quality of the data. Accurate and disaggregated race/ethnicity data improves organizations' ability to make decisions and creates targeted interventions to address racial and ethnic health disparities.
- Provide culturally and linguistically appropriate services and materials to communities being served. Culturally responsive services are more accessible to Utah's diverse communities, and providing materials in Utah's most common languages allows information to be available to those who do not speak or read English. The OHE [language data report](#) can be referenced to guide state, county, and local professionals to plan and provide language access services for limited English proficiency patients and clients.
- Build capacity of the community health worker (CHW) workforce to be integrated into systems such as public health, community--based organizations, healthcare, social services, education, and other related sectors. CHWs have trust within their communities and can provide culturally and linguistically responsive outreach to address social determinants of health (SDOH).
- Collaborate with community-based organizations that serve racial/ethnic minority groups and representatives of these groups to better understand the needs of each population, gain feedback on current practices, and build trusting relationships with communities.

These recommendations are not comprehensive, but are starting points to continue to strive toward health equity. Organizations can use these recommendations as a jumping-off point to further build the capacity and relationships necessary to achieve health equity.

# References

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1. Utah Department of Health (2022, January 10). Retrieved from <https://coronavirus.utah.gov/>
2. Office of Health Equity (2022). *Guidelines for Collecting Data on Race and Ethnicity*. Utah Department of Health and Human Services Office of Health Equity. Retrieved 6 June 2022, from [https://healthequity.utah.gov/wp-content/uploads/RE\\_Data-Collection-Guidelines-1.pdf](https://healthequity.utah.gov/wp-content/uploads/RE_Data-Collection-Guidelines-1.pdf)