

COVID-19 Race/Ethnicity Data Analysis January 19, 2020 – September 30, 2021

Snohomish County COVID-19 Data Analysis by Race/Ethnicity: January 19, 2020 through September 30, 2021

The race and ethnicity profile of Snohomish County shows that the county is predominantly white, non-Hispanic (69%) (table 1). Asians are the second most prevalent race seen in the county (11%) followed closely by all-race Hispanics. Race/ethnicity data comparisons are limited as only 65% of COVID-19 cases have race/ethnicity data available. This results in underestimates of race- and/or ethnicity-specific rate calculations. Furthermore, if racial and ethnic minorities are disproportionately represented among cases for whom such data is missing, their relative risk estimate will be biased downward relative to non-Hispanic whites. Complex attribution methodology exists to adjust for such bias, but it is beyond the scope and capacity of this report.

Non-Whites and Hispanics are disproportionately affected by COVID-19. Almost all non-White races and Hispanics have a significantly higher risk of COVID-19 infection compared to non-Hispanic Whites (table 1). The highest case rate per 1,000 is seen in the Native Hawaiian/Pacific Islander population with a relative-risk 4 times higher than non-Hispanic Whites. All-race Hispanics were the second highest rate of infection in Snohomish County (RR=2.4), followed by American Indians/Alaska Native (RR=2), and African American (RR=2.0). These differences are statistically significant ($p < 0.05$). Asians had a slightly lower relative risk (RR=0.8) compared to non-Hispanic Whites. This difference was statistically significant.

Native Hawaiian/Pacific Islanders were at a much higher rate of needing hospitalization than other races/ethnicities (table 2). Native Hawaiian/Pacific Islanders were 4 times more likely to be hospitalized than non-Hispanic Whites. American Indian/Alaska Natives (RR=2.8), and all race Hispanics (RR=1.5) also had higher rates of hospitalizations compared to Whites. Asians had slightly lower rate of hospitalization than non-Hispanic Whites (RR=0.8). African Americans had similar hospitalization rates for COVID-19 illness when compared to non-Hispanic Whites. Except for African Americans, all differences seen (versus non-Hispanic Whites) were statistically significant.

Currently non-Hispanic Whites are the most impacted race in terms of the *number* of COVID-related deaths. Native Hawaiian/Pacific Islanders and American Indian/Alaska Natives had a higher rate of COVID-related death (RR=2.2) compared to non-Hispanic Whites. These differences were statistically significant. African Americans, Asians and Hispanics have a statistically significant lower *rate* of death compared to non-Hispanic Whites.

Differences between groups in hospitalization and death rates are likely due to risk of exposure and infection given that 95% confidence intervals for case-hospitalization and case-fatality rates show overlap (Table 4). Case-fatality rates for African Americans, Hispanics and Asians are significantly (but not substantially) lower than for non-Hispanic Whites. This finding is driven by the older age distribution of cases among non-Hispanic Whites.

COVID-19 vaccinations have been available since mid-December 2020. Currently all persons aged 12 years of age and older are eligible to receive COVID-19 vaccine. When comparing people initiating vaccination many races have a higher rate than non-Hispanic Whites. Native Hawaiian/Pacific Islanders had the highest rate of coverage with 100% of the Snohomish County population having received at least one vaccine. This is followed by Asians (83%), African Americans (80%), American Indian/Alaska Native (70%), and Hispanic (66%). These differences are statistically significant and above non-Hispanic Whites at 61%.

Table 1: COVID-19 cases by race and ethnicity (January 19, 2020 – September 30, 2021), Snohomish County

| Race non-Hispanic | Case count | Population | Rate per 1,000 | Relative Risk | 95% CI Lower | CI Upper |
|---|-------------------|-------------------|-----------------------|----------------------|---------------------|-----------------|
| African American | 2,066 | 25,435 | 81.2 | 2.0 | 2.0 | 2.1 |
| American Indian/Alaska Native | 802 | 9,195 | 87.2 | 2.2 | 2.0 | 2.4 |
| Asian | 3,097 | 98,685 | 31.4 | 0.8 | 0.8 | 0.8 |
| Native Hawaiian or Pacific Islander | 766 | 4,722 | 162.2 | 4.1 | 3.8 | 4.4 |
| White | 22,419 | 564,701 | 39.7 | 1.0 | | |
| Other, not Hispanic | 870 | --- | --- | --- | --- | --- |
| Ethnicity | | | | | | |
| Hispanic | 8,510 | 90,576 | 94.0 | 2.4 | 2.3 | 2.4 |
| Total confirmed case with race/ethnicity data | 38,530 | --- | --- | --- | --- | --- |
| Total confirmed cases in data set | 59,928 | --- | --- | --- | --- | --- |
| % with race or ethnicity data | 64.3% | --- | --- | --- | --- | --- |

Data source: Washington Disease Reporting System (WDRS). Population data from Washington State Office of Financial Management (WA OFM).

Figure 1: Number of COVID-19 cases by Race and Ethnicity, Snohomish County

Table 2: COVID-19 hospitalizations by race and ethnicity (January 19, 2020 – September 30, 2021), Snohomish County

| Race non-Hispanic | Case count | Population | Rate per 1,000 | Relative Risk | 95% CI Lower | CI Upper |
|-------------------------------------|------------|------------|----------------|---------------|--------------|----------|
| African American | 72 | 25,435 | 2.8 | 1.3 | 1.0 | 1.6 |
| American Indian/Alaska Native | 58 | 9,195 | 6.3 | 2.8 | 2.2 | 3.7 |
| Asian | 166 | 98,685 | 1.7 | 0.8 | 0.7 | 0.9 |
| Native Hawaiian or Pacific Islander | 42 | 4,722 | 8.9 | 4.0 | 3.0 | 5.4 |
| White | 1256 | 564,701 | 2.2 | 1 | | |
| Other, not Hispanic | 46 | --- | --- | --- | --- | --- |
| Ethnicity | | | | | | |
| Hispanic | 294 | 90,576 | 3.2 | 1.5 | 1.3 | 1.6 |

Table 3: COVID-19 related deaths by race and ethnicity (January 19, 2020 – September 30, 2021), Snohomish County

| Race non-Hispanic | Case count | Population | Rate per 1,000 | Relative Risk | 95% CI Lower | 95% CI Upper |
|-------------------------------------|------------|------------|----------------|---------------|--------------|--------------|
| African American | 12 | 25,435 | 0.5 | 0.5 | 0.3 | 0.9 |
| American Indian/Alaska Native | 19 | 9,195 | 2.1 | 2.2 | 1.4 | 3.4 |
| Asian | 58 | 98,685 | 0.6 | 0.6 | 0.5 | 0.8 |
| Native Hawaiian or Pacific Islander | 10 | 4,722 | 2.1 | 2.2 | 1.2 | 4.2 |
| White | 533 | 564,701 | 0.9 | 1.0 | --- | --- |
| Other | 17 | --- | --- | --- | --- | --- |
| Ethnicity | | | | | | |
| Hispanic | 45 | 90,576 | 0.5 | 0.5 | 0.4 | 0.7 |
| Total* | 724 | 844,400 | 0.9 | --- | --- | --- |

*Total includes all races plus other and unknown

Table 4: COVID-19 case-hospitalization and case-death proportions (January 19, 2020 – September 30, 2021), Snohomish County

| Race non-Hispanic | Cases | Hospitalizations | | Deaths | | |
|-------------------------------------|--------|------------------|--------------------|--------|--------------------|-------------------|
| | | N | % of cases (95%CI) | N | % of cases (95%CI) | % of hospitalized |
| African American | 2,066 | 72 | 3 (2.7,4.3) | 12 | <1 (0.3,0.9) | 16.7% |
| American Indian/Alaska Native | 802 | 58 | 7 (5.4,9.0) | 19 | 2 (1.3,3.4) | 32.8% |
| Asian | 3,097 | 166 | 5 (4.6,6.2) | 58 | 2 (1.4,2.4) | 34.9% |
| Native Hawaiian or Pacific Islander | 766 | 42 | 5 (3.9,7.1) | 10 | 1 (0.5,2.1) | 23.8% |
| White | 22,419 | 1256 | 6 (5.3,5.9) | 533 | 2 (2.2,2.6) | 42.4% |
| Ethnicity | | | | | | |
| Hispanic | 8,510 | 294 | 3 (3.1,3.8) | 45 | 1 (0.4,0.7) | 15.3% |

Table 5: People initiating COVID vaccination by race and ethnicity (December 15, 2020 – October 17, 2021) Snohomish County

| Race non-Hispanic | People initiating vaccination | Eligible population (≥12 years) | Percent of people initiating vaccination | Relative Risk | 95% CI Lower | CI Upper |
|---|-------------------------------|---------------------------------|--|---------------|--------------|------------|
| African American | 16,935 | 21,087 | 80% | 1.3 | 1.3 | 1.3 |
| American Indian/Alaska Native | 5,410 | 7,774 | 70% | 1.1 | 1.1 | 1.2 |
| Asian | 70,752 | 85,065 | 83% | 1.4 | 1.3 | 1.4 |
| Multiracial | 676 | 24,104 | 3% | 0.05 | 0.04 | 0.05 |
| Native Hawaiian or Pacific Islander* | 4,449 | 3,904 | 100% | 1.9 | 1.8 | 1.9 |
| White | 306,557 | 499,180 | 61% | 1.0 | | |
| Other, non-Hispanic | 59,072 | --- | --- | --- | --- | --- |
| | | | | | | |
| Hispanic | 43,699 | 65,836 | 66% | 1.1 | 1.1 | 1.1 |
| Unknown | 28,501 | --- | --- | --- | --- | --- |
| Total persons initiating vaccination | 536,051 | 706,950 | 76% | --- | --- | --- |

*WA OFM population estimates are lower than actual population that identifies as Native Hawaiian or Pacific Islander.