

## COVID-19 Race/Ethnicity Data Analysis January 19, 2020 – March 15, 2021

Snohomish County COVID-19 Data Analysis by Race/Ethnicity: January 19, 2020 through March 15, 2021

The race and ethnicity profile of Snohomish County shows that the county is predominantly white, non-Hispanic (69%) (table 1). Asian's 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. Most 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 100,000 is seen in the Native Hawaiian/Pacific Islander population with a relative-risk 5 times higher than non-Hispanic Whites. All-race Hispanics were the second highest rate of infection in Snohomish County (RR=3), followed by African American (RR=2), and American Indians/Alaska Native (RR=2). These differences are statistically significant ( $p<0.05$ ). Asians had a lower relative risk than other non-White races and had the same risk as non-Hispanic Whites.

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. All race Hispanics, and American Indian/Alaska Natives also had higher rates of hospitalizations compared to Whites. These differences (versus non-Hispanic whites) are all statistically significant. Asians and African Americans had similar hospitalization rates for COVID-19 illness when compared to non-Hispanic Whites.

Currently non-Hispanic Whites are the most impacted race in terms of the *number* of COVID-related deaths. Native Hawaiian/Pacific Islanders had a significant increase in COVID-related death (RR=2) compared to non-Hispanic Whites. American Indian/Alaska Natives have a *non-significant* increase in death rate compared to non-Hispanic Whites. Non-significant findings may be due to chance. Asians, African Americans, and Hispanics have a slightly lower *rate* of death compared to non-Hispanic Whites. These differences are statistically significant.

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). In fact, case-fatality rates for Hispanics, African Americans, 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.

Table 1: COVID-19 cases by race and ethnicity (January 19, 2020 – March 15, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	CI Upper
African American	1,130	25,435	4,442.7	2.4	2.2	2.5
American Indian/Alaska Native	376	9,195	4,089.2	2.2	2.0	2.4
Asian	1,752	98,685	1,775.3	0.9	0.9	1.0
Native Hawaiian or Pacific Islander	422	4,722	8,936.9	4.8	4.3	5.2
White	10,604	564,701	1,877.8	1.0		
Other, not Hispanic	401	---	---	---	---	---
Ethnicity						
Hispanic	5,532	90,576	6,107.6	3.3	3.2	3.3
Total confirmed case with race/ethnicity data	20,217	---	---	---	---	---
Total confirmed cases in data set	30,977	---	---	---	---	---
% with race or ethnicity data	65.3%	---	---	---	---	---

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

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

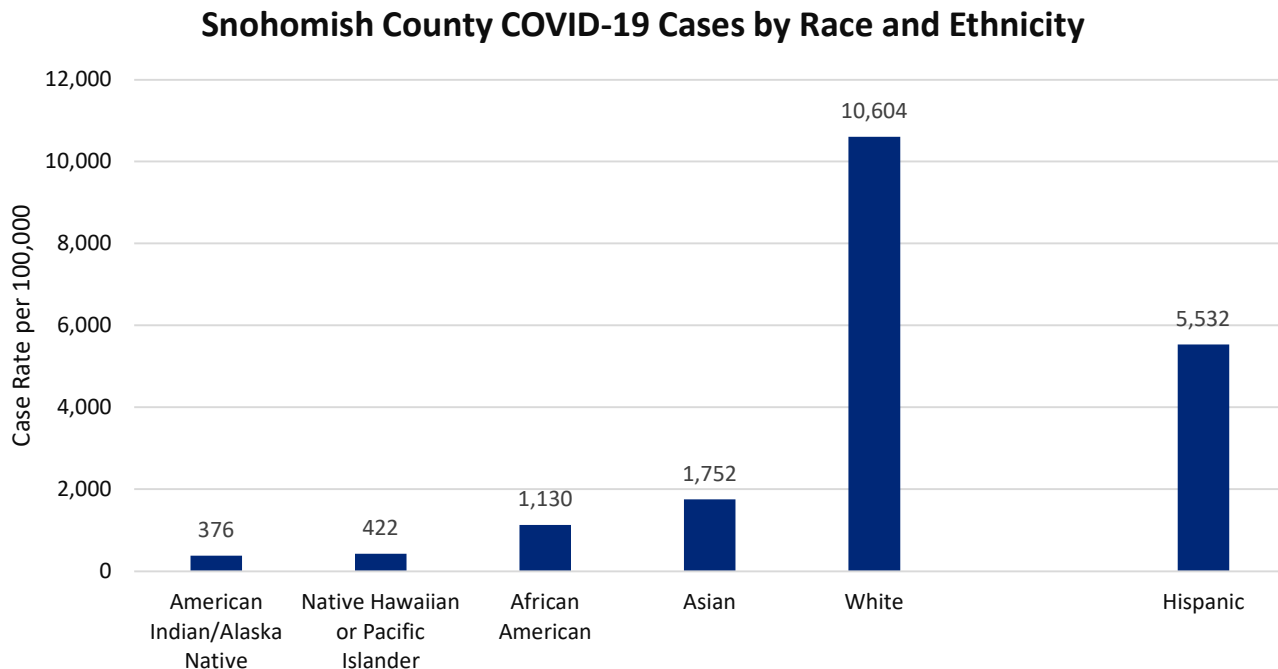


Table 2: COVID-19 hospitalizations by race and ethnicity (January 19, 2020 – March 15, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	CI Upper
African American	31	25,435	121.9	1.0	0.7	1.4
American Indian/Alaska Native	26	9,195	282.8	2.3	1.6	3.4
Asian	110	98,685	111.5	0.9	0.8	1.1
Native Hawaiian or Pacific Islander	22	4,722	465.9	3.9	2.5	5.8
White	683	564,701	120.9	1		
Other, not Hispanic	24	---	---	---	---	---
<b>Ethnicity</b>						
Hispanic	189	90,576	208.7	1.7	1.5	2.0

Table 3: COVID-19 related deaths by race and ethnicity (January 19, 2020 – March 15, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	95% CI Upper
African American	9	25,435	35.4	0.5	0.2	0.9
American Indian/Alaska Native	11	9,195	119.6	1.6	0.9	2.9
Asian	45	98,685	45.6	0.6	0.5	0.8
Native Hawaiian or Pacific Islander	8	4,722	169.4	2.3	1.1	4.5
White	419	564,701	74.2	1.0	---	---
Other	9	---	---	---	---	---
<b>Ethnicity</b>						
Hispanic	36	90,576	39.7	0.5	0.4	0.7
Total*	551	830,500	66.3	---	---	---

\*Total includes all races plus other and unknown

Table 4. COVID-19 case-hospitalization and case-death proportions (January 19, 2020 – March 15, 2021), Snohomish County

Race non-Hispanic	Cases	Hospitalizations		Deaths		
		N	% of cases (95%CI)	N	% of cases (95%CI)	% of hospitalized
African American	1,130	31	3 (1.8,3.7)	9	<1 (0.3,1.3)	29.0%
American Indian/Alaska Native	376	26	7 (4.4,5.1)	11	3 (1.2,4.6)	42.3%
Asian	1,752	110	6 (5.1,7.4)	45	3 (1.8,3.3)	40.9%
Native Hawaiian or Pacific Islander	422	22	5 (3.1,7.3)	8	2 (0.6,3.2)	36.4%
White	10,604	683	6 (6.0,6.9)	419	4 (3.6,4.3)	61.3%
<b>Ethnicity</b>						
Hispanic	5,532	189	3 (2.9,3.9)	36	<1 (0.4,0.9)	19.0%