

COVID-19 Race/Ethnicity Data Analysis January 19, 2020 – May 20, 2021

Snohomish County COVID-19 Data Analysis by Race/Ethnicity: January 19, 2020 through May 20, 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 similar relative 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. American Indian/Alaska Natives (RR=3), and all race Hispanics (RR=2) 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 and American Indian/Alaska Natives had a significantly higher rate of COVID-related death (RR=2) compared to non-Hispanic Whites. Asians and Hispanics have a lower *rate* of death compared to non-Hispanic Whites which is statistically significant. African Americans also appear to have a lower rate of death compared to Whites, but the difference is not 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 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 – May 20, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	CI Upper
African American	1,422	25,435	5,590.7	2.3	2.2	2.4
American Indian/Alaska Native	514	9,195	5,590.0	2.3	2.1	2.5
Asian	2,265	98,685	2,295.2	0.9	0.9	1.0
Native Hawaiian or Pacific Islander	549	4,722	11,626.4	4.8	4.4	5.2
White	13,752	564,701	2,435.3	1.0		
Other, not Hispanic	518	---	---	---	---	---
Ethnicity						
Hispanic	6,697	90,576	7,393.8	3.0	3.0	3.1
Total confirmed case with race/ethnicity data	25,717	---	---	---	---	---
Total confirmed cases in data set	38,109	---	---	---	---	---
% with race or ethnicity data	67.5%	---	---	---	---	---

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

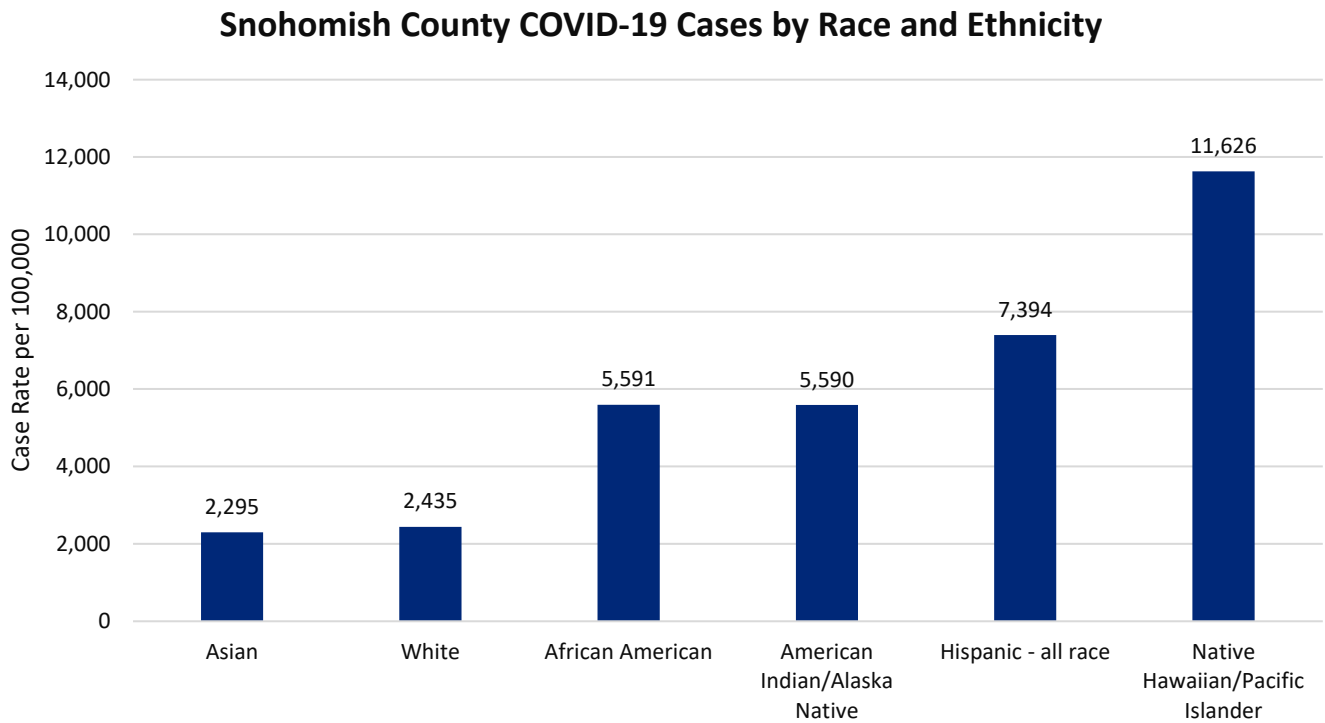


Table 2: COVID-19 hospitalizations by race and ethnicity (January 19, 2020 – May 20, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	CI Upper
African American	51	25,435	200.5	1.3	1.0	1.7
American Indian/Alaska Native	42	9,195	456.8	3.0	2.2	4.0
Asian	135	98,685	136.8	0.9	0.8	1.1
Native Hawaiian or Pacific Islander	31	4,722	656.5	4.3	3.0	6.1
White	863	564,701	152.8	1		
Other, not Hispanic	32	---	---	---	---	---
Ethnicity						
Hispanic	241	90,576	266.1	1.7	1.5	2.0

Table 3: COVID-19 related deaths by race and ethnicity (January 19, 2020 – May 20, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	95% CI Upper
African American	11	25,435	43.2	0.6	0.3	1.0
American Indian/Alaska Native	14	9,195	152.3	2.0	1.2	3.3
Asian	48	98,685	48.6	0.6	0.5	0.8
Native Hawaiian or Pacific Islander	8	4,722	169.4	2.2	1.1	4.4
White	437	564,701	77.4	1.0	---	---
Other	8	---	---	---	---	---
Ethnicity						
Hispanic	39	90,576	43.1	0.6	0.4	0.8
Total*	587	830,500	70.7	---	---	---

*Total includes all races plus other and unknown

Table 4. COVID-19 case-hospitalization and case-death proportions (January 19, 2020 – May 20, 2021), Snohomish County

Race non-Hispanic	Cases	Hospitalizations		Deaths		
		N	% of cases (95%CI)	N	% of cases (95%CI)	% of hospitalized
African American	1,422	51	4 (2.6,4.6)	11	<1 (0.3,1.2)	29.7%
American Indian/Alaska Native	514	42	8 (5.8,10.5)	14	3 (1.3,4.1)	41.4%
Asian	2,265	135	6 (5.0,6.9)	48	2 (1.5,2.7)	39.2%
Native Hawaiian or Pacific Islander	549	31	6 (3.7,7.6)	8	1 (0.5,2.5)	34.8%
White	13,752	863	6 (5.9,6.7)	437	3 (2.9,3.5)	57.7%
Ethnicity						
Hispanic	6,697	241	4 (3.2,4.0)	39	1 (0.4,0.8)	18.3%