

COVID-19 Race/Ethnicity Data Analysis January 19, 2020 – February 12, 2021

Snohomish County COVID-19 Data Analysis by Race/Ethnicity: January 19, 2020 through February 12, 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 64% 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=4), followed by African American (RR=3), 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=3) 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).

Table 1: COVID-19 cases by race and ethnicity (January 19, 2020 – February 12, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	CI Upper
African American	1077	24195	4451.3	2.6	2.5	2.8
American Indian/Alaska Native	349	9083	3842.3	2.3	2.0	2.5
Asian	1629	92570	1759.7	1.0	1.0	1.1
Native Hawaiian or Pacific Islander	402	4562	8811.9	5.2	4.7	5.7
White	9623	563862	1706.6	1.0		
Other, not Hispanic	378	---	---	---	---	---
Ethnicity						
Hispanic	5295	88072	6012.1	3.5	3.4	3.6
Total confirmed case with race/ethnicity data	18753	---	---	---	---	---
Total confirmed cases in data set	28991	---	---	---	---	---
% with race or ethnicity data	64.7%	---	---	---	---	---

Data source: Washington Disease Reporting System (WDRS). Population data from Washington State Office of Financial Management. Race/ethnicity population estimates from 2019, total population 2020 estimate.

Figure 1: COVID-19 case rates per 100,000 by Race and Ethnicity, Snohomish County

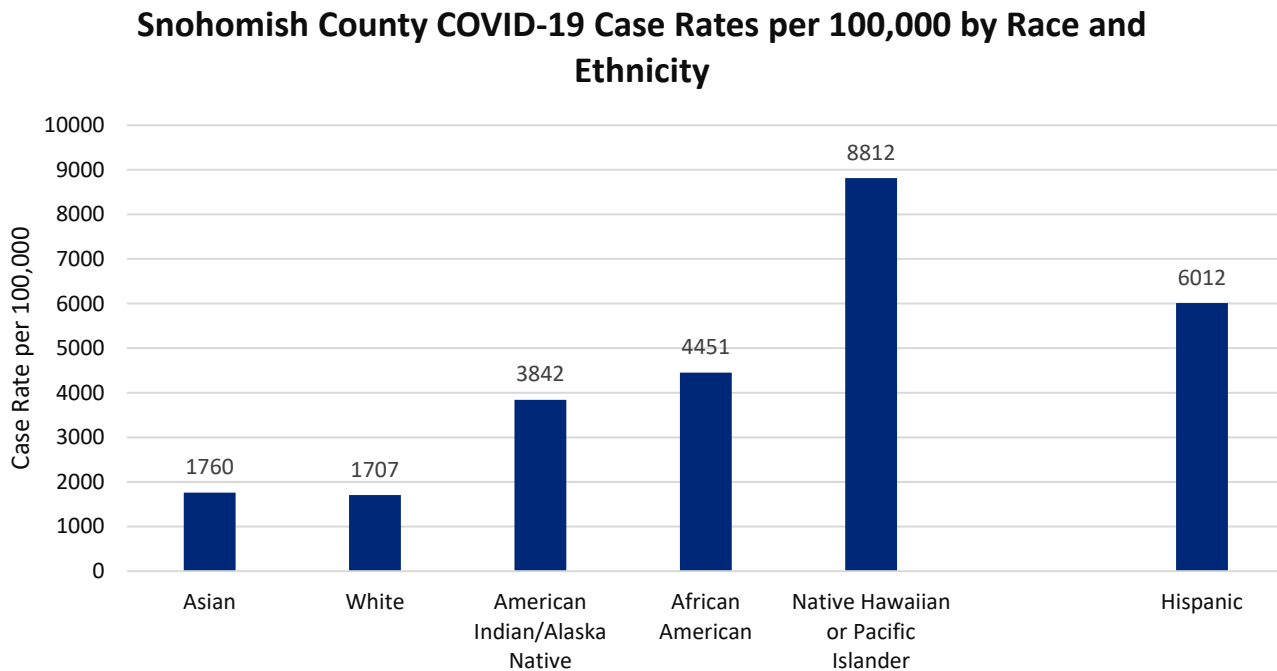


Table 2: COVID-19 hospitalizations by race and ethnicity (January 19, 2020 –February 12, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	CI Upper
African American	27	24195	111.6	1.0	0.7	1.5
American Indian/Alaska Native	22	9083	242.2	2.2	1.4	3.3
Asian	101	92570	109.1	1.0	0.8	1.2
Native Hawaiian or Pacific Islander	20	4562	438.4	4.0	2.6	6.1
White	625	563862	110.8	1		
Other, not Hispanic	24	---	---	---	---	---
Ethnicity						
Hispanic	184	88072	208.9	1.9	1.6	2.2

Table 3: COVID-19 related deaths by race and ethnicity (January 19, 2020 – February 12, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	95% CI Upper
African American	7	24195	28.9	0.4	0.2	0.9
American Indian/Alaska Native	10	9083	110.1	1.6	0.9	3.0
Asian	39	92570	42.1	0.6	0.5	0.9
Native Hawaiian or Pacific Islander	8	4562	175.4	2.6	1.3	5.2
White	377	563862	66.9	1.0		
Other	5					
Ethnicity						
Hispanic	35	88072	39.7	0.6	0.4	0.8
Total*	492	830500	59.2			

*Total includes all races plus other and unknown

Table 4. COVID-19 case-hospitalization and case-death proportions (January 19, 2020 – February 12, 2021), Snohomish County

Race non-Hispanic	Cases	Hospitalizations		Deaths		
		N	% (95%CI)	N	% (95%CI)	% of hospitalized
African American	1077	27	3 (1.6,3.4)	7	<1 (0.2,1.1)	25.9%
American Indian/Alaska Native	349	22	6 (3.8,8.9)	10	3 (1.1,4.6)	45.5%
Asian	1629	101	6 (5.0,7.4)	39	2 (1.7,3.1)	38.6%
Native Hawaiian or Pacific Islander	402	20	5 (2.8,7.1)	8	2 (0.6,3.4)	40.0%
White	9623	625	6 (6.0,7.0)	377	4 (3.5,4.3)	60.3%
Ethnicity						
Hispanic	5295	184	3 (3.0,4.0)	35	<1 (0.4,0.9)	19.0%