

COVID-19 Race/Ethnicity Data Analysis January 19, 2020 – January 13, 2021

Snohomish County COVID-19 Data Analysis by Race/Ethnicity: January 19, 2020 through January 13, 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 6 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.

COVID-19 related deaths are difficult to compare due to small numbers (table 3) and wide confidence intervals. Currently non-Hispanic Whites are the most impacted race in terms of the *number* of COVID-related deaths. Asians and Hispanics have a slightly lower *rate* of death compared to non-Hispanic Whites, and the difference is statistically significant. Native Hawaiian/Pacific Islanders, and 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. African Americans cannot be statistically compared due to low numbers.

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 –January 13, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	CI Upper
African American	911	24195	3765.2	2.6	2.4	2.7
American Indian/Alaska Native	290	9083	3192.8	2.2	1.9	2.4
Asian	1448	92570	1564.2	1.1	1.0	1.1
Native Hawaiian or Pacific Islander	373	4562	8176.2	5.5	5.0	6.1
White	8307	563862	1473.2	1.0		
Other, not Hispanic	345	---	---	---	---	---
Ethnicity						
Hispanic	4642	88072	5270.7	3.6	3.5	3.7
Total confirmed case with race/ethnicity data	16316	---	---	---	---	---
Total confirmed cases in data set	25491	---	---	---	---	---
% with race or ethnicity data	64.0%	---	---	---	---	---

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

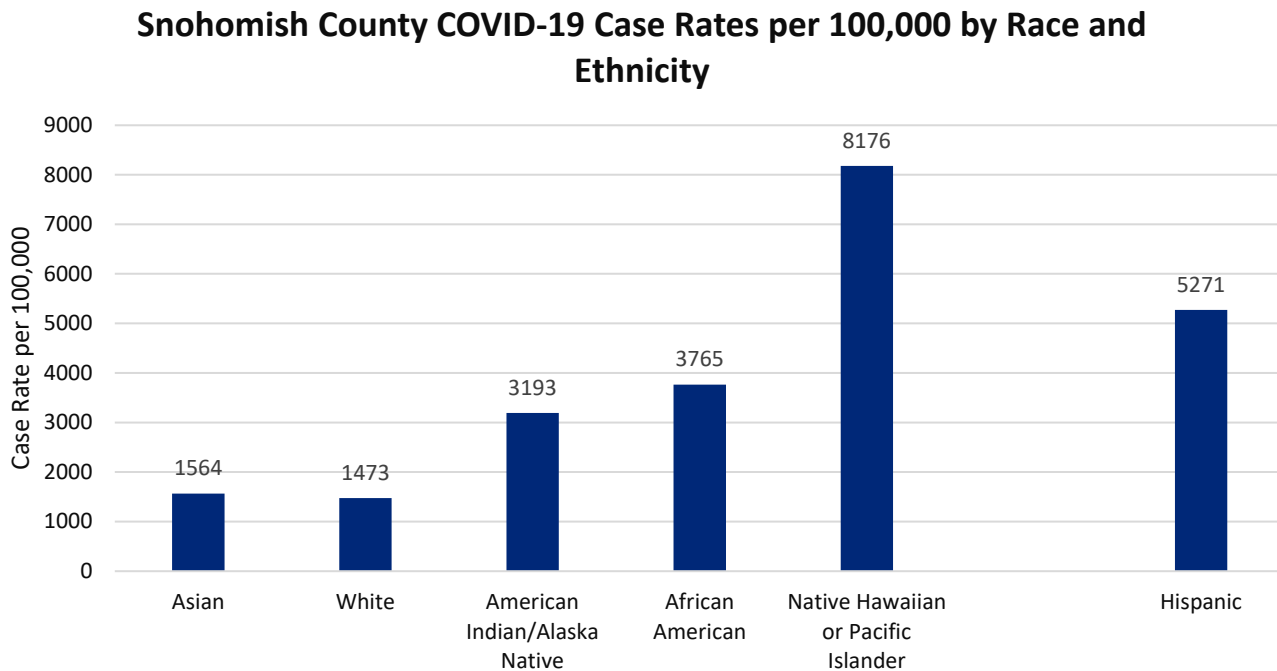


Table 2: COVID-19 hospitalizations by race and ethnicity (January 19, 2020 –January 13, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	CI Upper
African American	24	24195	99.2	1.0	0.7	1.5
American Indian/Alaska Native	18	9083	198.2	2.0	1.3	3.2
Asian	90	92570	97.2	1.0	0.8	1.2
Native Hawaiian or Pacific Islander	18	4562	394.6	4.0	2.5	6.4
White	552	563862	97.9	1		
Other, not Hispanic	21	---	---	---	---	---
Ethnicity						
Hispanic	167	88072	189.6	1.9	1.7	2.2

Table 3: COVID-19 related deaths by race and ethnicity (January 19, 2020 –January 13, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	95% CI Upper
African American	<5	24195	16.5			
American Indian/Alaska Native	9	9083	99.1	1.6	0.9	3.1
Asian	32	92570	34.6	0.6	0.4	0.8
Native Hawaiian or Pacific Islander	6	4562	131.5	2.2	1.0	4.8
White	342	563862	60.7	1.0		
Other	8					
Ethnicity						
Hispanic	33	88072	37.5	0.6	0.4	0.9
Total*	441	830500	53.1			

*Total includes all races plus other and unknown

Table 4. COVID-19 case-hospitalization and case-death proportions (January 19, 2020 –January 13, 2021), Snohomish County

Race non-Hispanic	Cases	Hospitalizations		Deaths		
		N	% (95%CI)	N	% (95%CI)	% of hospitalized
African American	911	24	3 (1.6,3.7)	<5	<1 (<5 not calculated)	N/A
American Indian/Alaska Native	290	18	6 (3.4,9)	9	3 (1.1,5.1)	50.0%
Asian	1448	90	6 (5.0,7.5)	32	2 (1.5,3.0)	35.6%
Native Hawaiian or Pacific Islander	373	18	5 (2.7,7.0)	6	2 (0.3,2.9)	33.3%
White	8307	552	7 (6.1,7.2)	342	4 (3.7,4.5)	62.0%
Ethnicity						
Hispanic	4642	167	4 (3.8,5.2)	33	1 (0.5,1.0)	19.8%