

COVID-19 Race/Ethnicity Data Analysis January – December 2, 2020

Snohomish County COVID-19 Data Analysis by Race/Ethnicity: January 19, 2020 through December 2, 2020

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=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 5 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 had the lowest rate per 100,000 (65) of hospitalization for COVID-19 illness, but the difference (versus non-Hispanic whites, RR 0.9) is not statistically significant.

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 have a slightly lower *rate* of death compared to non-Hispanic Whites, and the difference is statistically significant. Native Hawaiian/Pacific Islanders' death rate shows a statistically significant elevation compared to non-Hispanic Whites (RR=3). American Indian/Alaska Natives have a *non-significant* increase in death rate compared to non-Hispanic whites, whereas African Americans and Hispanics have a *non-significant* decrease in death rate compared to whites. These non-significant findings may be due to chance.

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 –December 2, 2020), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	CI Upper
African American	472	24195	1950.8	2.2	2.0	2.4
American Indian/Alaska Native	176	9083	1937.7	2.2	1.9	2.5
Asian	785	92570	848.0	0.9	0.9	1.0
Native Hawaiian or Pacific Islander	247	4562	5414.3	6.1	5.4	6.9
White	5034	563862	892.8	1.0		
Other, not Hispanic	190	---	---	---	---	---
Ethnicity						
Hispanic	3077	88072	3493.7	3.9	3.8	4.1
Total confirmed case with race/ethnicity data	9981	---	---	---	---	---
Total confirmed cases in data set	15461	---	---	---	---	---
% with race or ethnicity data	64.6%	---	---	---	---	---

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

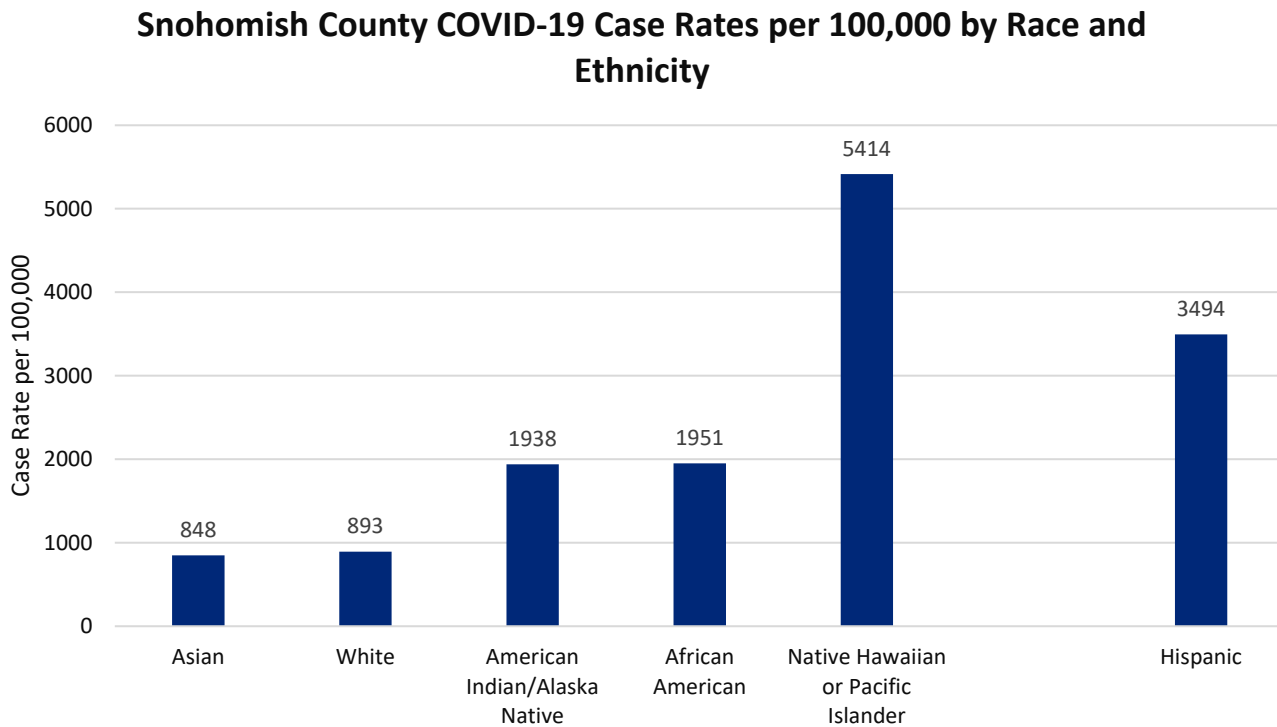


Table 2: COVID-19 hospitalizations by race and ethnicity (January – December 2, 2020), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	CI Upper
African American	22	24195	90.9	1.2	0.8	1.8
American Indian/Alaska Native	13	9083	143.1	1.9	1.1	3.3
Asian	60	92570	64.8	0.9	0.7	1.1
Native Hawaiian or Pacific Islander	18	4562	394.6	5.3	3.3	8.4
White	421	563862	74.7	1		
Other, not Hispanic	17	---	---	---	---	---
Ethnicity						
Hispanic	138	88072	156.7	2.1	1.8	2.5

Table 3: COVID-19 related deaths by race and ethnicity (January – December 2, 2020), 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	6	9083	66.1	1.7	0.8	3.7
Asian	16	92570	17.3	0.4	0.3	0.7
Native Hawaiian or Pacific Islander	6	4562	131.5	3.4	1.5	7.4
White	220	563862	39.0	1.0		
Other	6	---	---	---	---	---
Ethnicity						
Hispanic	24	88072	27.3	0.7	0.5	1.0
Total*	289	830500	34.8			

*Total includes all races plus other and unknown

Table 4. COVID-19 case-hospitalization and case-death proportions (January – December 2, 2020), Snohomish County

Race non-Hispanic	Cases	Hospitalizations		Deaths		
		N	% (95%CI)	N	% (95%CI)	% of hospitalized
African American	472	22	5 (2.8,6.6)	<5	1 (<5 not calculated)	18.2
American Indian/Alaska Native	176	13	7 (3.5,11.3)	6	3 (0.7,6.1)	46.2
Asian	785	60	8 (5.8,9.5)	16	2 (1,3)	26.7
Native Hawaiian or Pacific Islander	247	18	7 (4,10.5)	6	2 (0.5,4.3)	33.3
White	5034	421	8 (7.6,9.1)	220	4 (3.8,4.9)	52.3
Ethnicity						
Hispanic	3077	138	4 (3.8,5.2)	24	1 (0.5,1.1)	17.4