

COVID-19 Race/Ethnicity Data Analysis January 19, 2020 – August 31, 2021

Snohomish County COVID-19 Data Analysis by Race/Ethnicity: January 19, 2020 through August 31, 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. Almost all 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 1,000 is seen in the Native Hawaiian/Pacific Islander population with a relative-risk 4 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 slightly lower relative risk (RR=0.8) compared to non-Hispanic Whites. This difference was statistically significant.

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=1.4) also had higher rates of hospitalizations compared to Whites. Asians had slightly lower rate of hospitalization than non-Hispanic Whites (RR=0.8). African Americans had similar hospitalization rates for COVID-19 illness when compared to non-Hispanic Whites. Except for African Americans, all differences seen (versus non-Hispanic Whites) were statistically significant.

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 higher rate of COVID-related death (RR=2) compared to non-Hispanic Whites. These differences were statistically significant. Asians and Hispanics have a statistically significant lower *rate* of death compared to non-Hispanic Whites. 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). 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.

COVID-19 vaccinations have been available since mid-December 2020. Currently all persons aged 12 years of age and older are eligible to receive COVID-19 vaccine. When comparing people initiating vaccination many races have a higher rate than non-Hispanic Whites. Native Hawaiian/Pacific Islanders had the highest rate of coverage with 98% of the Snohomish County population having received at least one vaccine. This is followed by Asians (79%), and African Americans (67%). These differences are statistically significant. All-race Hispanics (54%) and American Indian/Alaska Natives (58%) have similar vaccination rates compared to non-Hispanic Whites (56%).

Table 1: COVID-19 cases by race and ethnicity (January 19, 2020 – August 31, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 1,000	Relative Risk	95% CI Lower	CI Upper
African American	1,862	25,435	73.2	2.2	2.1	2.3
American Indian/Alaska Native	687	9,195	74.7	2.2	2.1	2.4
Asian	2,754	98,685	27.9	0.8	0.8	0.9
Native Hawaiian or Pacific Islander	685	4,722	145.1	4.3	4.0	4.7
White	18,950	564,701	33.6	1.0		
Other, not Hispanic	730	---	---	---	---	---
Ethnicity						
Hispanic	7,863	90,576	86.8	2.6	2.5	2.6
Total confirmed case with race/ethnicity data	33,531	---	---	---	---	---
Total confirmed cases in data set	51,103	---	---	---	---	---
% with race or ethnicity data	65.6%	---	---	---	---	---

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

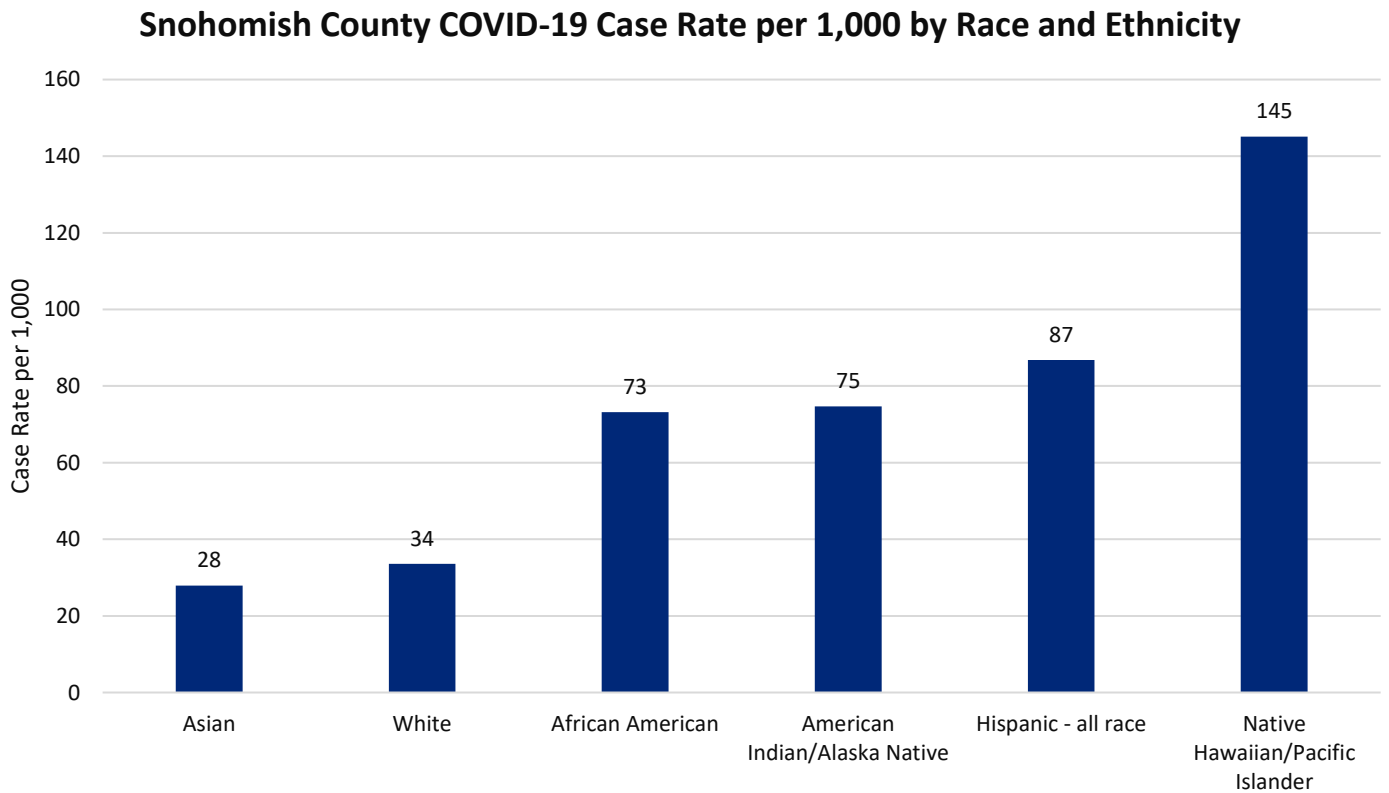


Table 2: COVID-19 hospitalizations by race and ethnicity (January 19, 2020 – August 31, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 1,000	Relative Risk	95% CI Lower	CI Upper
African American	67	25,435	2.6	1.3	1.0	1.7
American Indian/Alaska Native	54	9,195	5.9	2.9	2.3	3.8
Asian	159	98,685	1.6	0.8	0.7	0.9
Native Hawaiian or Pacific Islander	38	4,722	8.0	4.0	2.9	5.5
White	1127	564,701	2.0	1		
Other, not Hispanic	40	---	---	---	---	---
Ethnicity						
Hispanic	255	90,576	2.8	1.4	1.2	1.6

Table 3: COVID-19 related deaths by race and ethnicity (January 19, 2020 – August 31, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 1,000	Relative Risk	95% CI Lower	95% CI Upper
African American	13	25,435	0.5	0.6	0.3	1.0
American Indian/Alaska Native	17	9,195	1.8	2.1	1.3	3.4
Asian	56	98,685	0.6	0.6	0.5	0.8
Native Hawaiian or Pacific Islander	10	4,722	2.1	2.4	1.3	4.5
White	493	564,701	0.9	1.0	---	---
Other	16	---	---	---	---	---
Ethnicity						
Hispanic	42	90,576	0.5	0.5	0.4	0.7
Total*	672	844,400	0.8	---	---	---

*Total includes all races plus other and unknown

Table 4: COVID-19 case-hospitalization and case-death proportions (January 19, 2020 – August 31, 2021), Snohomish County

Race non-Hispanic	Cases	Hospitalizations		Deaths		
		N	% of cases (95%CI)	N	% of cases (95%CI)	% of hospitalized
African American	1,862	67	4 (2.8,4.4)	13	<1 (0.3,1.1)	19.4%
American Indian/Alaska Native	687	54	8 (5.8,9.9)	17	3 (1.3,3.6)	31.5%
Asian	2,754	159	6 (4.9,6.6)	56	2 (1.5,2.6)	35.2%
Native Hawaiian or Pacific Islander	685	38	6 (3.8,7.3)	10	1 (0.6,2.4)	26.3%
White	18,950	1127	6 (5.6,6.3)	493	3 (2.4,2.8)	43.7%
Ethnicity						
Hispanic	7,863	255	3 (2.9,3.6)	42	1 (0.4,0.7)	16.5%

Table 5: People initiating COVID vaccination by race and ethnicity (December 15, 2020 – September 7, 2021) Snohomish County

Race non-Hispanic	People initiating vaccination	Eligible population (≥12 years)	Percent of people initiating vaccination	Relative Risk	95% CI Lower	CI Upper
African American	14,118	21,087	67%	1.2	1.2	1.2
American Indian/Alaska Native	4,533	7,774	58%	1.0	1.0	1.1
Asian	66,998	85,065	79%	1.4	1.4	1.4
Multiracial	579	24,104	2%	0.04	0.04	0.05
Native Hawaiian or Pacific Islander	3,831	3,904	98%	1.8	1.7	1.8
White	278,986	499,180	56%	1.0		
Other, non-Hispanic	50,955	---	---	---	---	---
Hispanic	35,759	65,836	54%	1.0	1.0	1.0
Unknown	23,979	---	---	---	---	---
Total persons initiating vaccination	479,738	706,950	68%	---	---	---