

## COVID-19 Race/Ethnicity Data Analysis January 19, 2020 – November 18, 2021

Snohomish County COVID-19 Data Analysis by Race/Ethnicity: January 19, 2020 through November 18, 2021

The race and ethnicity profile of Snohomish County shows that the county is predominantly white, non-Hispanic (69%) (table 1). Asians 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=2.3), followed by American Indians/Alaska Native (RR=2.2), and African American (RR=2.0). 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=2.8), 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 (RR=2.5) and American Indian/Alaska Natives (RR=2.0) had a higher rate of COVID-related death compared to non-Hispanic Whites. These differences were statistically significant. African Americans had a similar rate of death compared to Whites, while Asians and Hispanics have a statistically significant lower *rate* of death.

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 5 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 100% of the Snohomish County population having received at least one vaccine. This is followed by Asians (79%), African Americans (76%), American Indian/Alaska Native (67%). All differences are statistically significant and above non-Hispanic Whites at 59%. Hispanics (57%) had a similar vaccination rate compared to Whites. All rates dropped when children 5-11 years of age became eligible for vaccination on October 29, 2021 and 5–11-year-olds were added to the population denominators.

Table 1: COVID-19 cases by race and ethnicity (January 19, 2020 – November 18, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 1,000	Relative Risk	95% CI Lower	CI Upper
African American	2,199	25,435	86.5	2.0	1.9	2.1
American Indian/Alaska Native	879	9,195	95.6	2.2	2.0	2.3
Asian	3,401	98,685	34.5	0.8	0.8	0.8
Native Hawaiian or Pacific Islander	827	4,722	175.1	4.0	3.7	4.3
White	24,791	564,701	43.9	1.0		
Other, not Hispanic	954	---	---	---	---	---
Ethnicity						
Hispanic	8,950	90,576	98.8	2.3	2.2	2.3
Total confirmed case with race/ethnicity data	42,001	---	---	---	---	---
Total confirmed cases in data set	65,535	---	---	---	---	---
% with race or ethnicity data	64.1%	---	---	---	---	---

Data source: Washington Disease Reporting System (WDRS). Population data from Washington State Office of Financial Management (WA OFM).

Figure 1: Number of COVID-19 cases by Race and Ethnicity, Snohomish County

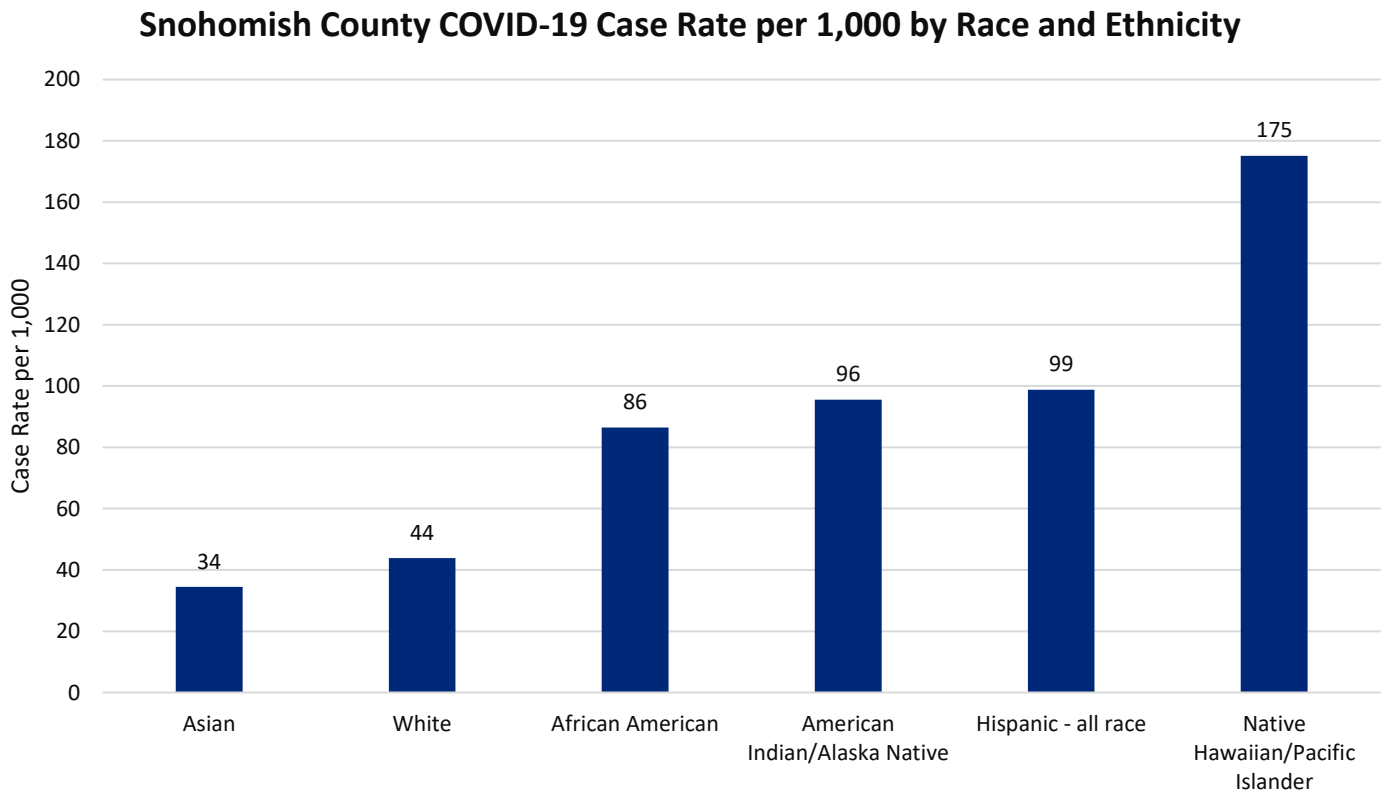


Table 2: COVID-19 hospitalizations by race and ethnicity (January 19, 2020 – November 18, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 1,000	Relative Risk	95% CI Lower	CI Upper
African American	75	25,435	2.9	1.2	1.0	1.6
American Indian/Alaska Native	62	9,195	6.7	2.8	2.2	3.6
Asian	172	98,685	1.7	0.7	0.6	0.8
Native Hawaiian or Pacific Islander	44	4,722	9.3	3.9	2.9	5.3
White	1343	564,701	2.4	1		
Other, not Hispanic	48	---	---	---	---	---
Ethnicity						
Hispanic	300	90,576	3.3	1.4	1.2	1.6

Table 3: COVID-19 related deaths by race and ethnicity (January 19, 2020 – November 18, 2021), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 1,000	Relative Risk	95% CI Lower	95% CI Upper
African American	15	25,435	0.6	0.6	0.4	1.0
American Indian/Alaska Native	19	9,195	2.1	2.0	1.3	3.2
Asian	61	98,685	0.6	0.6	0.5	0.8
Native Hawaiian or Pacific Islander	12	4,722	2.5	2.5	1.4	4.4
White	572	564,701	1.0	1.0	---	---
Other	19	---	---	---	---	---
Ethnicity						
Hispanic	49	90,576	0.5	0.5	0.4	0.7
Total*	784	844,400	0.9	---	---	---

\*Total includes all races plus other and unknown

Table 4: COVID-19 case-hospitalization and case-death proportions (January 19, 2020 – November 18, 2021), Snohomish County

Race non-Hispanic	Cases	Hospitalizations		Deaths		
		N	% of cases (95%CI)	N	% of cases (95%CI)	% of hospitalized
African American	2,199	75	3 (2.7,4.2)	15	<1 (0.3,1.0)	20.0%
American Indian/Alaska Native	879	62	7 (5.4,8.7)	19	2 (1.2,3.1)	30.6%
Asian	3,401	172	5 (4.3,5.8)	61	2 (1.3,2.2)	35.5%
Native Hawaiian or Pacific Islander	827	44	5 (3.8,6.9)	12	1 (0.6,2.3)	27.3%
White	24,791	1343	5 (5.1,5.7)	572	2 (2.1,2.5)	42.6%
Ethnicity						
Hispanic	8,950	300	3 (3.0,3.7)	49	1 (0.4,0.7)	16.3%

Table 5: People initiating COVID vaccination by race and ethnicity (December 15, 2020 – November 16, 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	5,788	8,654	67%	1.1	1.1	1.2
American Indian/Alaska Native	74,067	93,332	79%	1.3	1.3	1.3
Asian	17,812	23,580	76%	1.3	1.3	1.3
Multiracial	598	31,429	2%	0.03	0.03	0.03
Native Hawaiian or Pacific Islander*	4,717	4,404	100%	1.8	1.8	1.9
White	320,460	539,681	59%	1.0		
Other, non-Hispanic	61,245	---	---	---	---	---
Hispanic	46,096	80,167	57%	1.0	1.0	1.0
Unknown	28,091	---	---	---	---	---
<b>Total persons initiating vaccination</b>	<b>558,874</b>	<b>781,248</b>	<b>72%</b>	<b>---</b>	<b>---</b>	<b>---</b>

\*WA OFM population estimates are lower than actual population that identifies as Native Hawaiian or Pacific Islander.