

COVID-19 Morbidity and Mortality by Race, Ethnicity and Language in Washington State

Washington State Department of Health
July 2, 2020

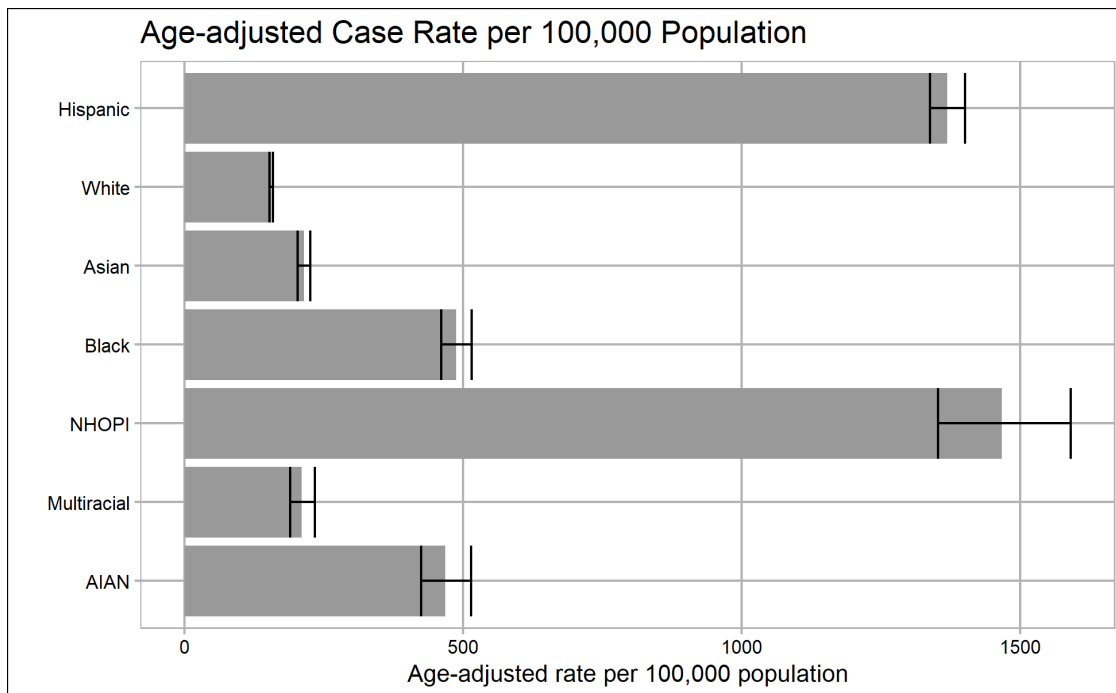
The impacts of COVID-19 morbidity and mortality have not been felt equally by all populations in Washington State. The pandemic has exacerbated the underlying and persistent inequities among historically marginalized communities and those disproportionately impacted due to structural racism and other forms of systemic oppression. This report provides an overview of confirmed COVID-19 case, hospitalization, and death rates by race and ethnicity at state and regional levels. It also provides counts and percentages of confirmed cases and hospitalizations by primary language spoken. All rates were age adjusted to the Washington State population distribution using the Office of Financial Management's (OFM) April 1, 2019 population estimates by age, sex, race, and Hispanic origin. There are a number of limitations with this analysis. Analyses are limited to population groups available by OFM for the Washington State population and following Department of Health guidelines. Hispanic ethnicity is assigned first, irrespective of race, and then racial groups are identified for those identifying as non-Hispanic. Based on this, our reporting includes the following groups: Hispanic, and non-Hispanic race categorizations for White, Black, Native Hawaiian and Pacific Islander, Asian, and American Indian/Alaska Native. While this allows one to assess information by race and ethnicity groups, this categorization is incomplete and does not reflect the diversity of people and experiences across the state. Additionally, there is a significant lack of race and ethnicity reporting for COVID-19 cases and hospitalizations (about 28% missing) and for deaths (about 4% missing). Primary language spoken is missing for about 45% of cases and hospitalizations. The lack of data limits our ability to draw firm conclusions; however, there are some very concerning patterns.

Cumulative Age-adjusted COVID-19 Case, Hospitalization, and Death Rates by Race and Ethnicity per 100,000 Population (January to June 2020)

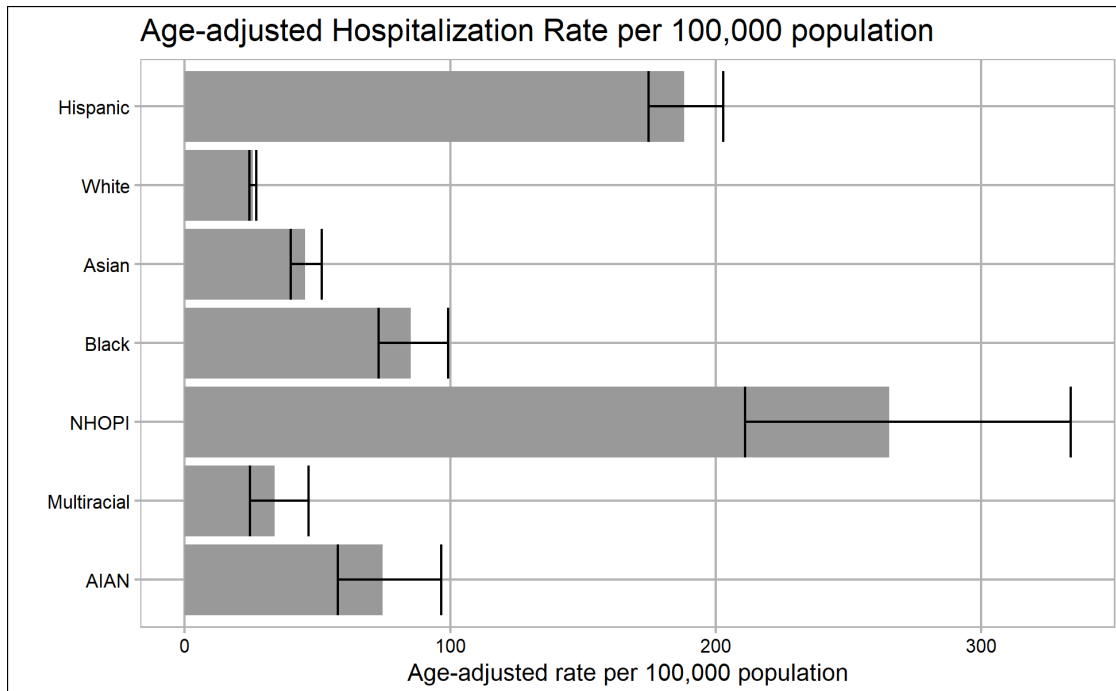
The table and figures below describe the counts and age-adjusted rates per 100,000 population in Washington by race and ethnicity for cases, hospitalizations, and deaths for the entire time period from the start of the pandemic through 2020-06-30. Dates are based on the specimen collection date. 95% confidence intervals are included in the charts. The data show that communities of color are disproportionately impacted by COVID-19 in significant ways. For cases, Native Hawaiian or Other Pacific Islander people (NHOPI) and Hispanic people have age-adjusted rates nine times higher relative to White peoples. Hospitalizations are seven times higher for Hispanics and ten times higher for Native Hawaiian or Other Pacific Islanders relative to Whites. Blacks and American Indian or Alaska Native (AIAN) case and hospitalization rates are three times higher than those of Whites. Among COVID-19 deaths, we see a similar trend although not as extreme, with

rates over three times higher among Hispanic and NHOPI compared to Whites, twice as high among AIAN, and over 50% higher among Black and Asian people.

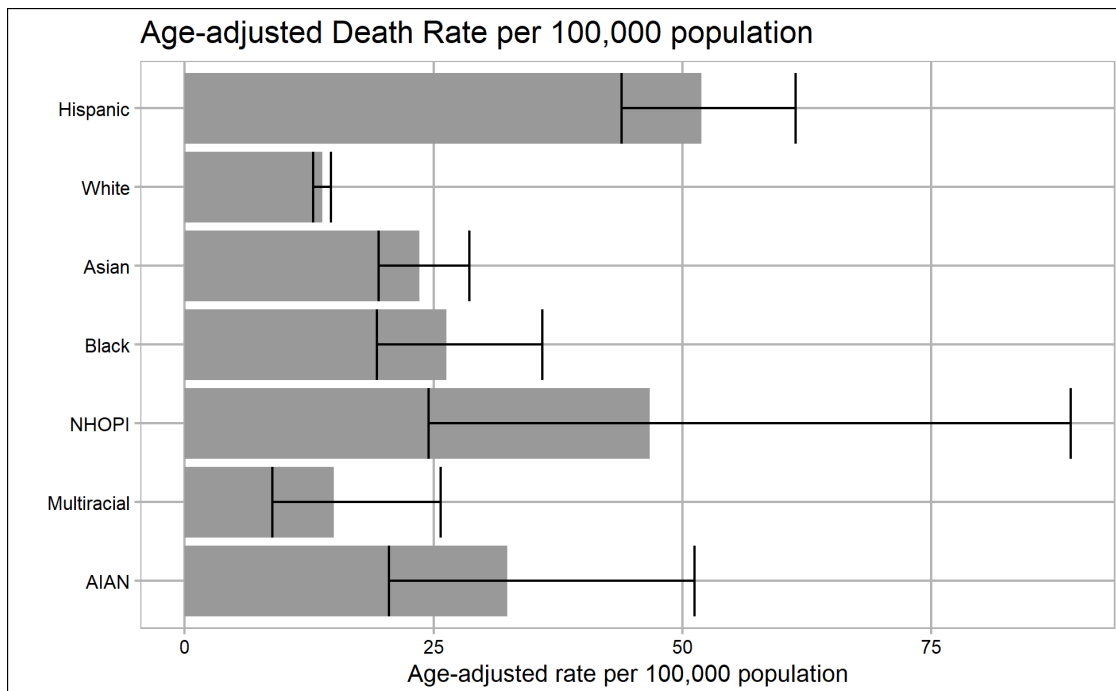
Race/Ethnicity	Case Count	Age-Adjusted Case Rate per 100,000	Hospitalization Count	Age-Adjusted Hospitalization Rate per 100,000	Death Count	Age-Adjusted Death Rate per 100,000
All Races	33435	442.8	4401	58.3	1339	17.8
Unknown	9239		1194		50	
Hispanic	10715	1369.1	918	188.2	162	51.9
White	8492	155.0	1588	25.6	896	13.8
Asian	1416	214.2	249	45.4	111	23.6
Black	1366	487.1	184	85.1	43	26.3
NHOPI	747	1466.8	96	265.4	12	46.7
Multiracial	479	210.0	46	33.9	16	15.0
AIAN	431	467.4	62	74.6	21	32.4
Other	550		64		28	



Source: Washington Disease Reporting System (WDRS)
Includes data from 2020-01-19 to 2020-06-30



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Includes data from 2020-01-19 to 2020-06-30

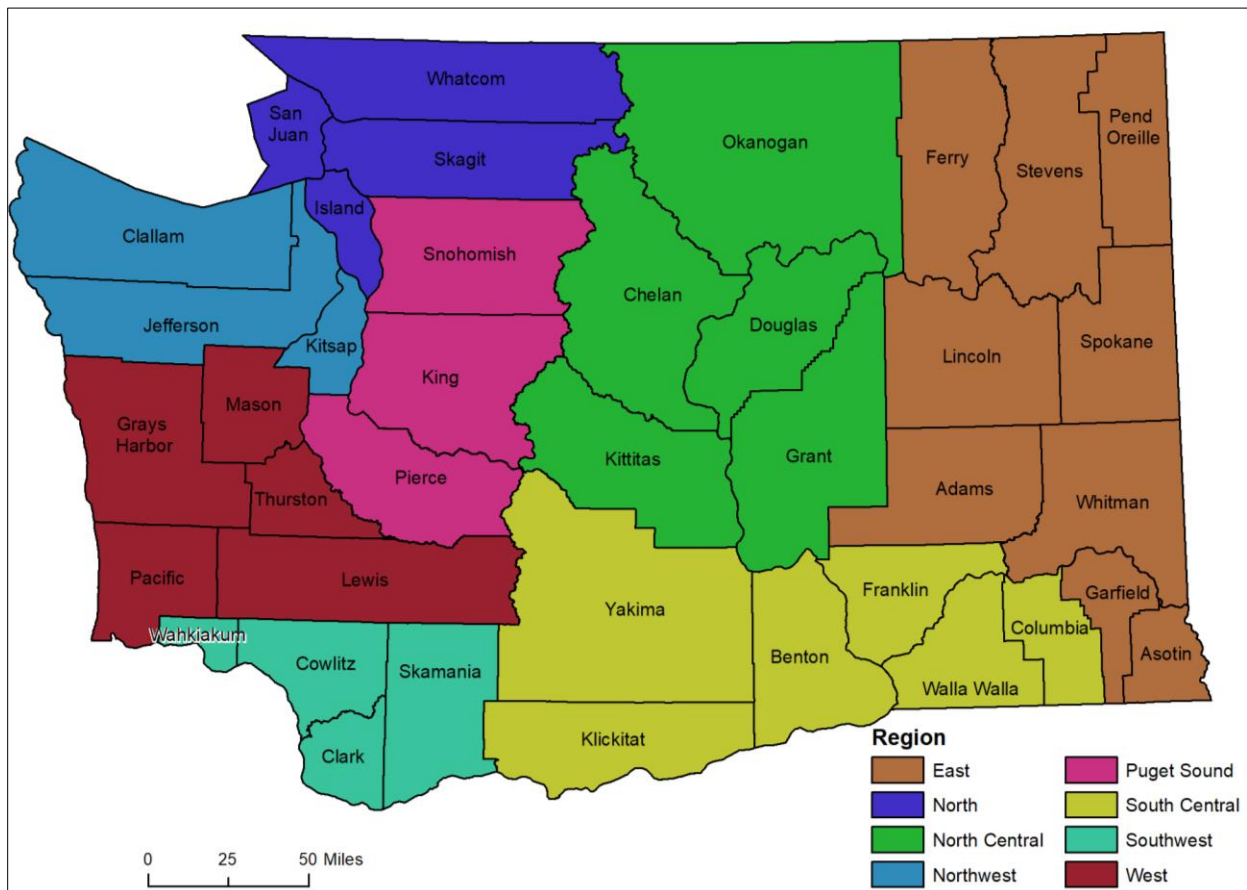


Source: Electronic Death Registration System (EDRS) and Washington Health and Life Events System (WHALES)
Includes data from 2020-01-19 to 2020-06-30

Washington Regions for Analysis

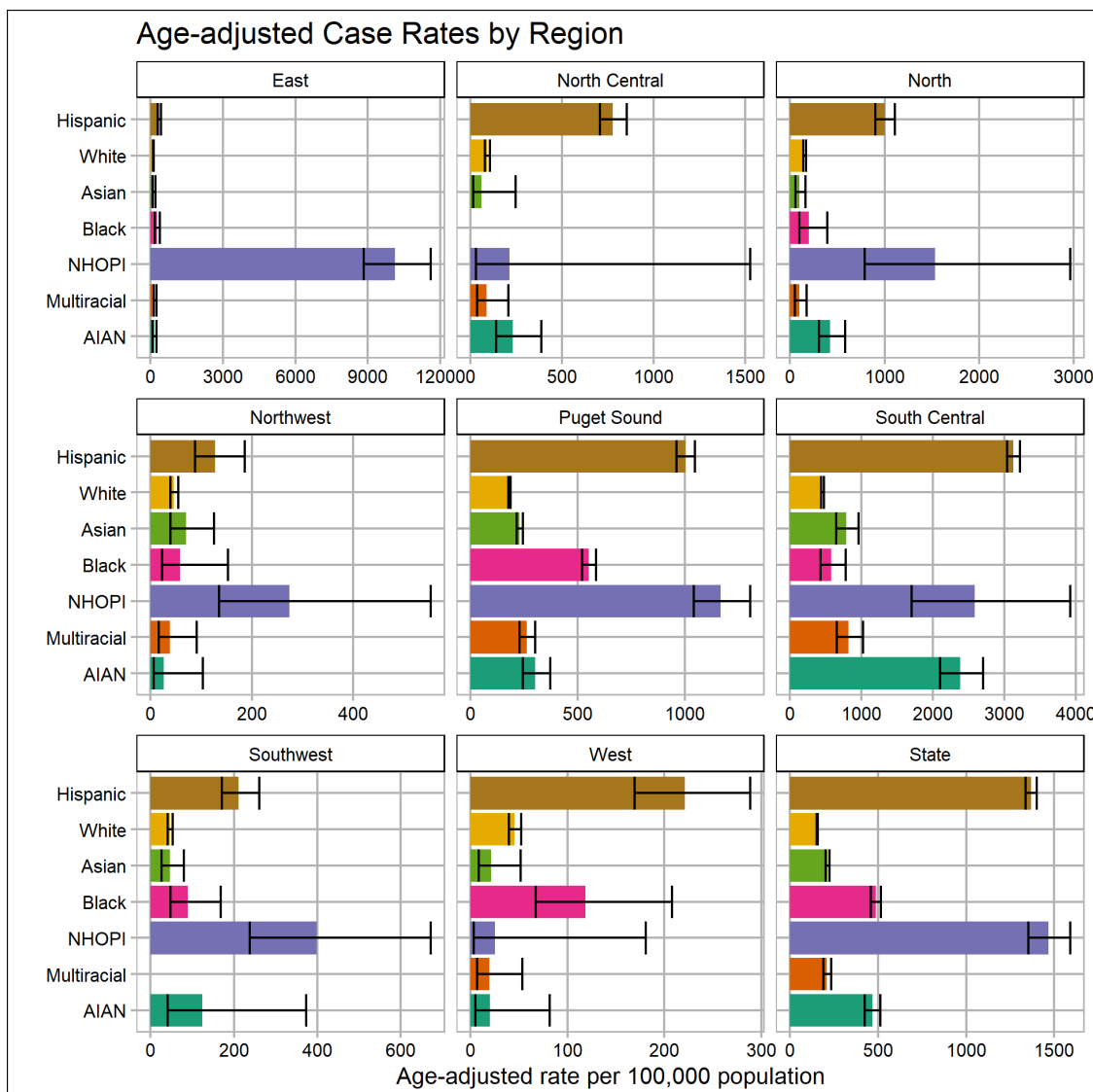
Some counties may not have sufficient case counts to analyze trends by race and ethnicity. In order to incorporate data from counties of all sizes, counties were assigned into one of 8 regions (see Map of Washington Counties and Analysis Regions below). The regions presented were developed by the Washington State Department of Health in order to better understand geographic differences in disease spread and how disease spread may be changing over time. While infection rates may not be the same within any given region, this regional grouping allows for more specific geographic analyses without excluding any counties or communities due to concerns about smaller numbers.

Map of Washington Counties and Analysis Regions



Cumulative Age-adjusted Case Rates per 100,000 Population by Race, Ethnicity, and Analytic Region

The figures below describe the age-adjusted case rates by race/ethnicity and region. They were calculated using the cases with known race/ethnicity (about 72% of all reported cases). It is important to note that the numeric scale differs across regions, so use caution when comparing two or more regions, as their scale will differ. The last figure presents the results for the whole state. These data show that COVID-19 is found in significant numbers across racial and ethnic groups throughout the state, and it is not confined to certain areas, such as rural, urban, or suburban regions. Population centers in Puget Sound contribute substantially to the counts. However less populated regions, like South Central Washington, have similar differences by race/ethnicity, yet even higher rates. Further, while extreme disparities exist, people of all races and ethnicities are impacted.

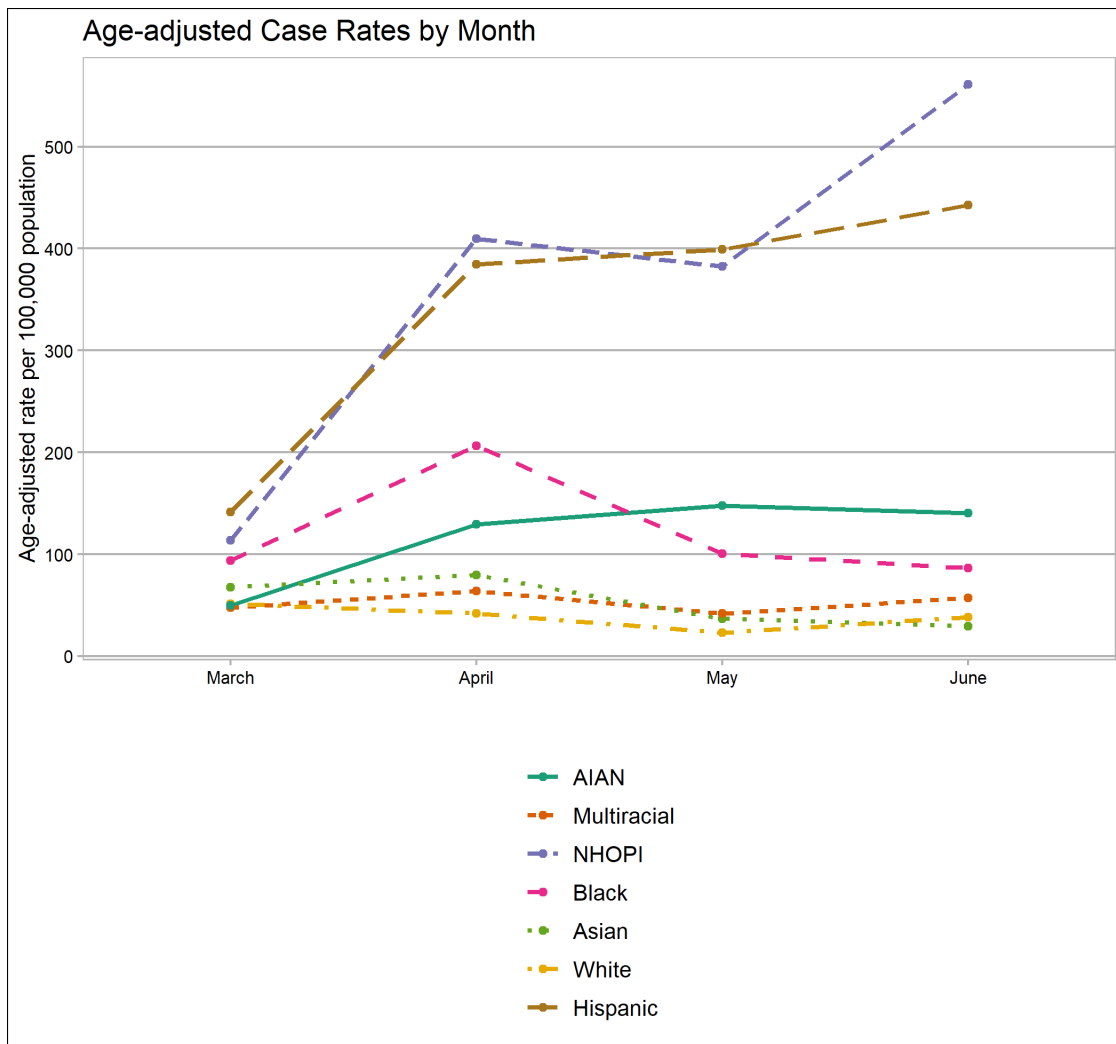


Source: Washington Disease Reporting System (WDRS)
Includes data from 2020-01-19 to 2020-06-30

Age-adjusted Case Rates per 100,000 population by Race and Ethnicity by Month (March-June* 2020)

*June 2020 data includes all reported cases as of 2020-06-30.

Monthly confirmed case rates, adjusted for age by race and ethnicity, were calculated to better understand how race- and ethnicity-specific patterns may be changing over time. Monthly race-specific counts and age-adjusted rates have increased for Hispanics, Native Hawaiians or Other Pacific Islanders, and American Indian and Alaska Natives, while they have decreased for Whites. Note that June reporting is not yet complete.



Race/Ethnicity	Month	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Hispanic	March	924	141.5	131.1	152.7
	April	2777	384.6	367.8	402.2
	May	3249	399.3	383.2	416.2
	June	3761	442.8	426.1	460.1
White	March	2915	51.5	49.7	53.4
	April	2346	41.8	40.1	43.6
	May	1271	23.2	21.9	24.5
	June	1934	38.1	36.4	39.9
Asian	March	436	67.5	61.3	74.5
	April	520	79.7	73.0	87.0
	May	250	36.8	32.4	41.8
	June	205	29.4	25.6	33.8
Black	March	239	93.5	81.7	107.0
	April	571	206.2	189.3	224.6
	May	296	100.3	89.1	113.0
	June	258	86.2	75.9	97.9
NHOPI	March	44	113.8	80.8	160.3
	April	192	409.8	348.3	482.2
	May	205	382.4	329.3	444.0
	June	306	560.9	495.3	635.1
Multiracial	March	90	47.4	37.4	60.1
	April	129	63.9	52.2	78.1
	May	102	41.9	33.8	52.0
	June	158	56.8	47.2	68.4
AIAN	March	43	49.9	36.6	68.1
	April	120	129.5	108.0	155.2
	May	136	147.5	124.3	175.1
	June	132	140.5	118.2	167.0

*Source: Washington Disease Reporting System (WDRS)
Data from 2020-03-01 to 2020-06-30*

Cumulative Crude Case Counts and Percentages by Language Spoken

Analysis of language spoken provides another important method to understand health disparities and communities impacted by COVID-19. Use of one method alone may mask health disparities and community-specific impacts. Almost half of reported cases are missing information on primary language. Despite missing data, there are some important observations. The following table presents counts and percentages of confirmed cases, by primary language spoken. The percentage of the Washington State population 5 years and over with limited English proficiency that speak each language are also included to provide context. The Washington State data are from the Office of Financial Management 2016 estimate of population with limited English proficiency. Findings should be interpreted with caution due to the high proportion of missing data (45%).

Language	Case Count	% of Cases (with known language)	% of WA Population with Limited English Proficiency
All Cases	33435	100.0%	NA
Unknown Language	15094	45.1%	NA
Known Language	18341	54.9%	NA
English	12587	68.6%*	NA
Spanish	4769	26.0%*	6.4
Marshallese	225	1.2%*	0.1
Vietnamese	114	0.6%*	0.5
Russian	104	0.6%*	0.3
Chinese (all)	55	0.3%*	0.3
Ukrainian	48	0.3%*	0.2
Somali	45	0.2%*	0.2
Tagalog	38	0.2%*	0.2
Amharic	36	0.2%*	0.1
Other	320	1.7%*	NA

* These percentages are out of the population with a known language

Cumulative Hospitalization Percentages by Language Spoken

The following graph presents percentages of confirmed cases with each primary language who were hospitalized. The high rates of hospitalizations among cases whose primary language was other than English or Spanish, suggests that increased exposures and/or barriers to care may contribute to more severe disease in these populations. Findings should be interpreted with caution due to the high proportion of missing data (45%).

Hospitalization by Primary Language Spoken

