



COVID-19 Daily Statistics

Special Demographics Report Nevada's COVID-19 Hospitalization Experience

Background:

This special demographic report has been produced at the request of the Governor's office using a sample of individual hospital billing records with a date range of Feb. 20, 2020 to June 30, 2020. The data set includes 7,235 patient hospitalizations that were admitted and treated for COVID-19, within Clark and Washoe Counties.

The purpose of this report is to begin identifying sociodemographic information related to those individuals hospitalized in Nevada with COVID-19 infection and the relevance to race, sex and age. Additional reports will be forthcoming at regular intervals.

Patient names and unique identifiers protected by HIPAA were not provided within the data set. Hence, it is plausible that a single person could have multiple hospital admissions within the data set if the person was hospitalized more than once. Protected health information involved no more than a minimal risk to the privacy of individuals. This report includes a significant sample size (n=7,235) but does not include every hospitalized patient.

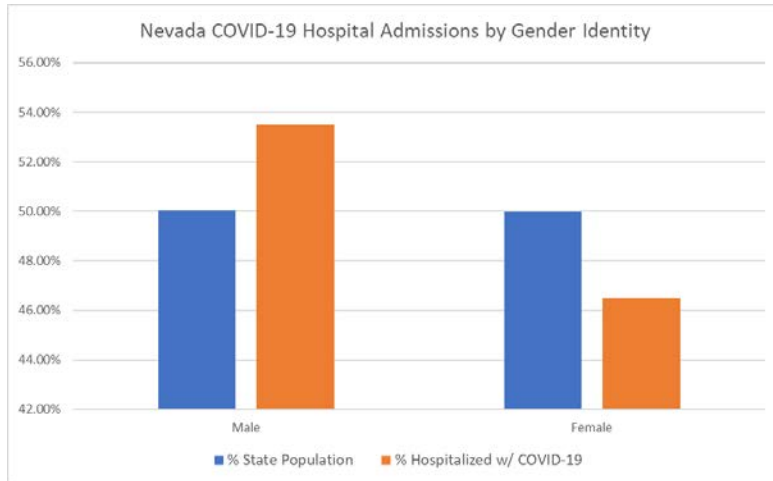
Data Sources:

The data used to produce this report is from records of the Nevada DHCFP and was released through the CHIA, of the University of Nevada, Las Vegas. Authorization to release this information does not imply endorsement of this report or its findings by either DHCFP or CHIA.

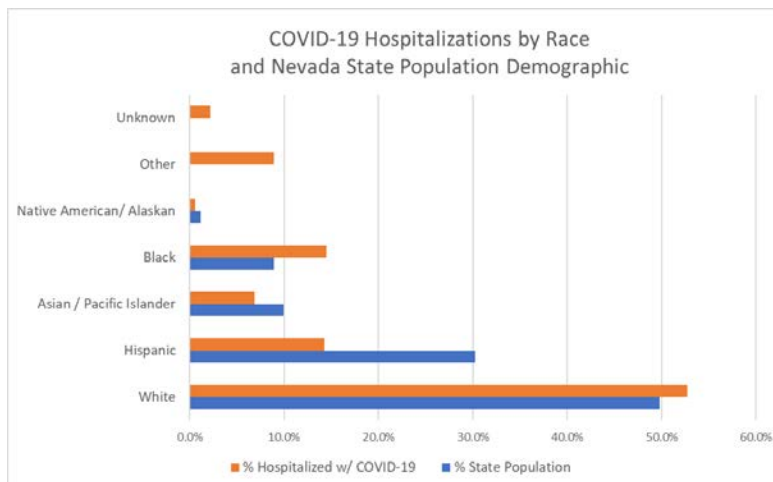
Nevada demographic information was obtained from the state demographer, "Nevada County Age, Sex, Race and Hispanic Origin Estimates and Projections 2000 to 2038" published Oct. 1, 2018.

Note: "Race" is not a required field on the universal hospital billing form (UB04) nor are patients required to disclose their race when presenting to a hospital for treatment. "Gender" is self-reported and may not in all cases be indicative of sex assignment at birth. "COVID-19 Hospitalization" includes confirmed and suspected cases who required hospital admission during the study period in either Clark or Washoe counties.

Nevada Statewide Data Set

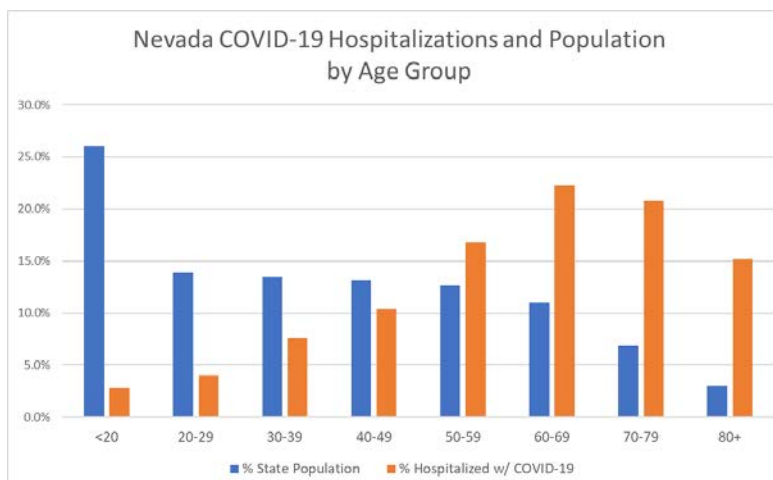


COVID-19 has caused significant numbers of individuals to require hospitalization. The NHA produces reports every day that present operational level data to public health officials, politicians, emergency managers and healthcare infrastructure operators. This is the first report that will discuss patient demographics and help identify those groups that are at a higher risk of requiring hospitalization in Nevada. It is beyond the scope of this report to determine causation within any identified demographic that may be disproportionately impacted.



Many risk factors for serious COVID-19 disease have been identified in multiple clinical studies including older age, male gender and race and ethnicity. These proved to be the experience in the Nevada hospital patient population as well.

Male gender is hospitalized disproportionately more than females, when compared to the ratios of men and women in the Nevada general population.



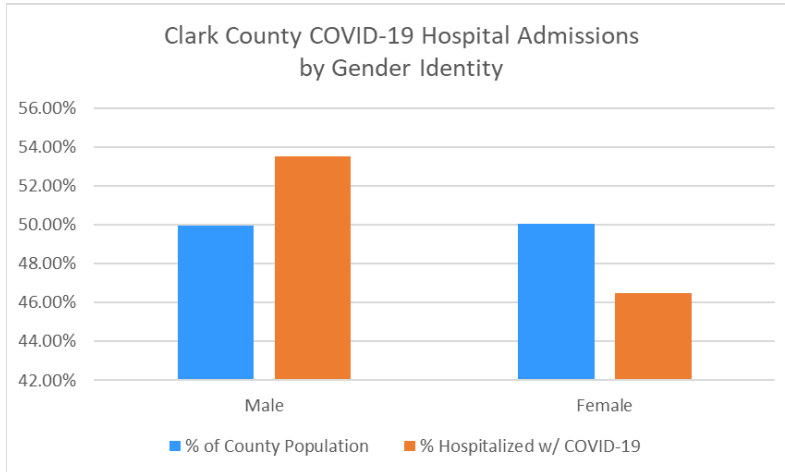
Race also appears to be a possible predictor of risk. Persons identifying as “Black” demonstrate a disproportionate rate of hospitalization. We did not appreciate the indication of “Hispanic” being disproportionately impacted, however, there is a hypothesis that a subset of the “Hispanic” population does not report race on hospital questionnaires based on a perceived risk of being identified to immigration officials and subjected to additional questioning.

Older individuals, starting in the 50-59 age group are all disproportionately hospitalized.

Nevada Statewide Data Set – Average Length of Stay Table

		# of Cases	% of Cases	Length of Stay		
				Mean	Median	Mode
Race	Asian/Pacific Islander	496	6.9%	8.9	5	1
	Black	1052	14.5%	7.8	5	1
	Hispanic	1032	14.3%	8.3	5	2
	Native American/Alaskan	42	0.6%	8.6	5	1
	Other	642	8.9%	7.9	5	2
	Unknown	156	2.2%	5.8	3	1
	White	3815	52.7%	8.0	5	3
Sex	Female	3363	46.5%	7.3	5	2
	Male	3872	53.5%	8.7	5	2
Age	0-17	181	2.5%	7.2	4	1
	18-19	23	0.3%	3.9	3	2
	20-29	290	4.0%	5.9	4	1
	30-39	552	7.6%	6.6	4	1
	40-49	751	10.4%	7.4	4	2
	50-59	1219	16.8%	8.1	5	2
	60-69	1617	22.3%	9.0	6	3
	70-79	1503	20.8%	8.0	5	3
	80+	1099	15.2%	8.7	6	3
Total Cases		7235				

Clark County Data Set

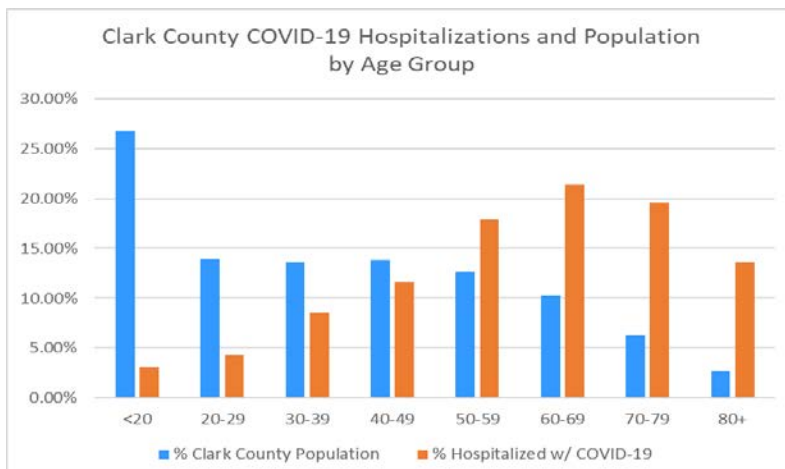
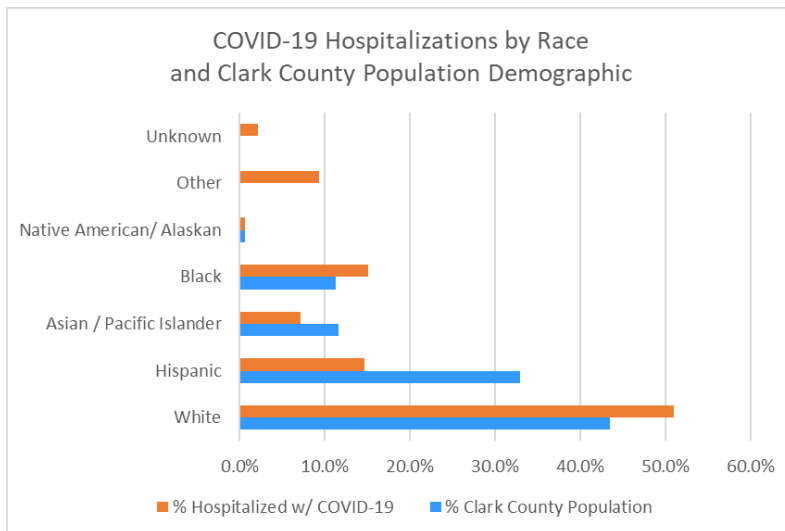


Clark County demographics of COVID-19 hospitalizations nearly mirrors that of the state.

Male gender, black race and older age are the three most identifiable sociodemographic risk factors in Clark County.

The average length of stay in a hospital (ALOS) for a person with COVID-19 in Clark County is 7.9 days during this time period. In a future report we will analyze these ALOS' by month and by International Classification of Disease, Tenth Revision, Clinical Modification Codes (ICD-10-CM).

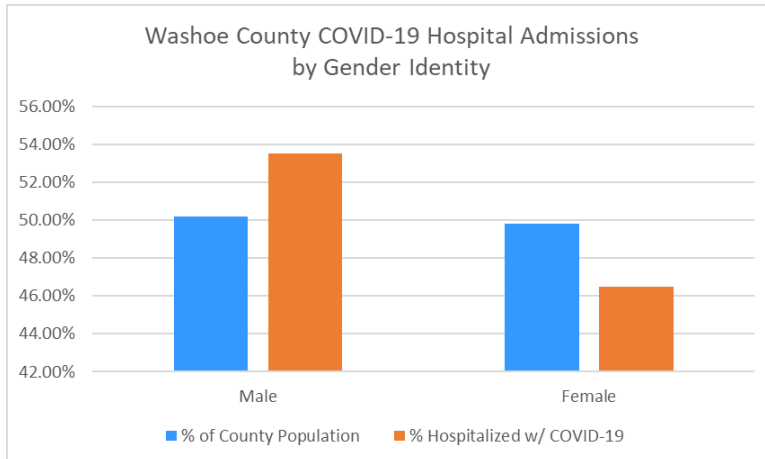
When evaluating ALOS data it is important to realize that ALOS is predominately determined by a patient's disease progression, complications, comorbidities, and general health prior to becoming infected with COVID-19. It therefore is perhaps more appropriate to look ALOS as a range or based on the patient's age group.



Clark County Data Set – Average Length of Stay Table

		# of Cases	% of Cases	Length of Stay		
				Mean	Median	Mode
Race	Asian/Pacific Islander	440	7.2%	9.3	5	1
	Black	928	15.1%	7.8	5	1
	Hispanic	904	14.7%	8.1	5	2
	Native American/Alaskan	36	0.6%	10.6	5	1
	Other	567	9.3%	8.4	5	2
	Unknown	132	2.2%	9.7	3	1
	White	3123	51.0%	7.5	5	3
Sex	Female	2850	46.5%	7.3	5	2
	Male	3693	53.5%	7.5	5	2
Age	0-17	167	2.7%	7.5	4	1
	18-19	22	0.4%	3.5	3	2
	20-29	264	4.3%	5.7	4	1
	30-39	523	8.5%	6.3	4	1
	40-49	710	11.6%	7.1	4	2
	50-59	1096	17.9%	8.0	5	1
	60-69	1310	21.4%	8.8	6	3
	70-79	1202	19.6%	8.7	6	2
	80+	835	13.6%	8.1	5	3
Total Cases		6129				

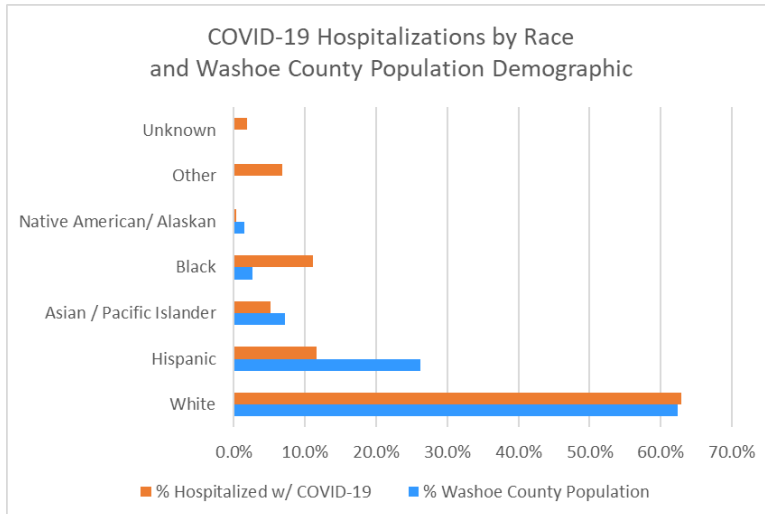
Washoe County Data Set



Washoe County exhibits the same (Male gender, black race and older age) sociodemographic risk factors for COVID-19 hospitalizations.

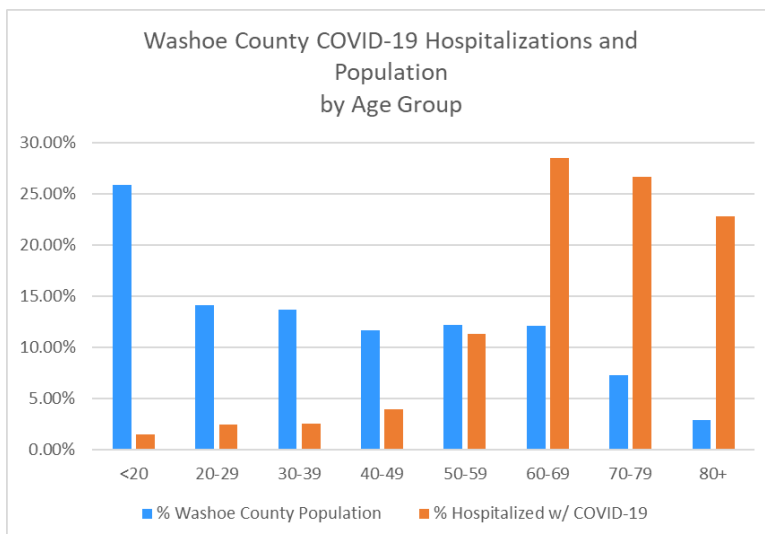
People in the black race are disproportionately affected at a significantly higher rate than in Clark County or the entire state data set.

Hispanics are also disproportionately underrepresented in the demographic. This would seem to indicate under reporting on the universal billing form. The data representing the population of Hispanics that required hospitalization is highly suspect based on anecdotal reports from clinicians.



Advanced age, while a consistent sociodemographic risk factor, seems to be disproportionate in a older age group than the state as a whole. Impacts are appreciated starting with the 60-69-year-old age grouping and older. This grouping is upwards of 10 years older than the age group of Clark County.

The average length of stay in a hospital (ALOS) for a person with COVID-19 in Washoe County is 8.8 days during this time period.



Washoe County Data Set – Average Length of Stay Table

		# of Cases	% of Cases	Length of Stay		
				Mean	Median	Mode
Race	Asian/Pacific Islander	53	5.2%	9.3	6	1
	Black	114	11.1%	8.8	5	1
	Hispanic	120	11.7%	10.7	6	4
	Native American/Alaskan	4	0.4%	5.8	5	N/A
	Other	70	6.8%	9.2	6	6
	Unknown	19	1.9%	11.4	7	2
	White	643	62.9%	8.4	5	3
Sex	Female	476	46.5%	7.9	5	3
	Male	547	53.5%	9.7	6	4
Age	0-17	14	1.4%	11.4	3	1
	18-19	1	0.1%	7.0	7	N/A
	20-29	26	2.5%	4.3	4	5
	30-39	27	2.6%	4.4	3	2
	40-49	41	4.0%	5.1	4	1
	50-59	116	11.3%	8.7	6	1
	60-69	292	28.5%	9.2	6	3
	70-79	273	26.7%	10.7	7	2
	80+	233	22.8%	7.8	5	4
Total Cases		1023				