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Summary of COVID-19 Hospitalizations – Alaska, January 1 through October 15, 2020

Background

This *Bulletin* summarizes data for Alaska residents hospitalized with COVID-19 through October 15, 2020. Additional data are available in the [Alaska Coronavirus Response Hub](#).

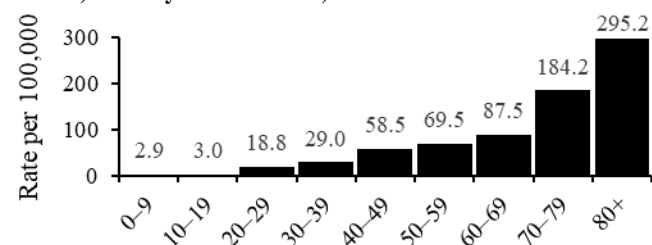
Methods

COVID-19 hospitalizations were identified from interview and medical records. Only cases where COVID-19 contributed to or caused the hospitalization are included; individuals with no or mild COVID symptoms and an alternative reason for admission (such as motor vehicle accident) were excluded. All cases had a recent positive SARS-CoV-2 molecular test. For patients who were admitted multiple times or transferred, only data from the hospitalization with the highest acuity or longest duration were included. Same-day admissions and discharges were counted as one day. Region was assigned based on the patient’s home address. Underlying conditions were determined by contact tracers and data analysts during interviews and records reviews. Some cases lack data because the patient was too ill or refused interview. Rates were calculated using Alaska Department of Labor population estimates. All data are preliminary.

Results

During January 1 through October 15, 2020, 10,564 cases of SARS-CoV-2 infection were reported in Alaska residents, and 362 hospitalizations were determined to be caused by or related to COVID-19 at the time of data analysis. Of these, 191 (53%) were male. The average age of hospitalized patients was 59 years (range: 4 months–96 years; Figure). Fifty-seven (16%) of these patients died. Rates by region were highest for the Anchorage, Northern, and Interior regions (Table 1). Hospitalization rates were highest for Native Hawaiian/Other Pacific Islanders (NHOPI) and American Indian/Alaska Native people (AI/AN; Table 2).

Figure. COVID-19 Hospitalization Rates, by Age Group — Alaska, January 1–October 15, 2020



Admission and discharge dates were available for 281 (78%) patients; the mean length of stay for hospitalized patients was higher for patients who required care in an intensive care unit (ICU; Table 3). Of the 35 patients who were placed on mechanical ventilation, the duration of ventilation was available for 23 (66%) individuals; the average duration of ventilation was 9 days (range: 1–28 days).

Of the 268 (74%) patients for whom underlying conditions data were available, 249 (93%) had at least one underlying condition listed by the Centers for Disease Control and Prevention (CDC) as a known risk factor for severe illness.¹ Severity indicator data were available for 281 (78%) hospitalized patients. The most

frequent severity indicators were abnormal chest X-ray and pneumonia (Table 4).

Table 2. Race and Ethnicity among 362 Patients Hospitalized for COVID-19 — Alaska, January 1–October 15, 2020

Race	Hospitalizations # (%)	Rate per 100,000 population
AI/AN	117 (32%)	102.9
Asian	29 (8%)	60.5
Black	15 (4%)	55.8
NHOPI	55 (15%)	518.7
White	93 (26%)	19.5
Hispanic (of any race)	19 (5%)	36.0
Other/multiple	21 (6%)	38.3
Race unknown	32 (9%)	--
Ethnicity unknown	64 (18%)	--

Table 3. Length of Stay among 281 Patients Hospitalized for COVID-19 — Alaska, January 1–October 15, 2020

	#	Mean (days)	Range (days)
All	281	9	1–78
Non-ICU	143	7.1	1–78
ICU*	81	13.1	1–75

*This includes patients who spent any time in an ICU

Table 4. Severity Indicators among 281 Patients Hospitalized for COVID-19 — Alaska, January 1–October 15, 2020

Indicator	Yes	No	Unknown
Pneumonia	171	80	30
Abnormal Chest X-ray	196	52	27
Abnormal EKG	99	93	70
ARDS	72	153	56
ICU stay	93	143	45
Ventilator use	35	209	37

Discussion

During the study period, Alaska’s COVID-19 hospitalization rate was much lower than the national rate (49.5 vs. 188.2 per 100,000 population, respectively).² This may be due to several factors, including aggressive community mitigation early in the pandemic leading to low case counts and better protection of high-risk persons. Hospitalization rates were highest for older adults and certain racial/ethnic minority groups – particularly NHOPI and AI/AN patients. These groups comprised a higher proportion of hospitalizations than cases (see [Data Hub](#)). Most (93%) hospitalized persons for whom a past medical history was known had a high-risk underlying medical condition (e.g., cancer, chronic kidney disease, chronic obstructive pulmonary disease, heart disease, obesity, and type 2 diabetes).¹ Hospitalization rates varied considerably by region.

References

1. CDC. Certain Medical Conditions and Risk for Severe COVID-19 Illness. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>
2. CDC. COVIDView Week 41. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>

Table 1. Region of Residence among 362 Patients Hospitalized for COVID-19 — Alaska, January 1–October 15, 2020

	Anchorage	Gulf Coast	Interior	Mat-Su	Northern	Southeast	Southwest	State
Number of Cases	220	20	47	23	19	30	3	362
Rate per 100,000 pop	74.5	18.9	58.0	20.7	68.6	41.2	7.1	49.5