

Abstract

Indigenous populations around the world are among the most vulnerable to the COVID-19 pandemic, and many Native communities have experienced disproportionately high morbidity and mortality rates from the disease. These disparities have occurred, in part, due to language barriers, limited political power, insufficient sovereign rights, restricted control over resources, lack of culturally specific programming, higher levels of predisposing conditions such as respiratory conditions and diabetes, geographic isolation, dense housing, communal practices, and other factors. However, some Indigenous communities have been models of resiliency and tribal teamwork in fighting COVID-19, so that the disease would not have the same deadly impact that tuberculosis, smallpox, and influenza had in their midst in earlier generations. Due to their extreme remoteness and often limited resources, Arctic indigenous populations have been particularly active in implementing creative strategies to mitigate COVID-19. The analysis of COVID-19 related strategies shows that within the Arctic region of Alaska, US, many Indigenous communities have adopted a variety of programs and policies and engaged Indigenous knowledge to control and respond to the spread of the COVID-19 in their villages, making some communities more resilient to the pandemic than others. This experience could be useful for other regions and future pandemics.

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Study Goals and Objectives

- Examine strategies utilized by Alaska communities to address the COVID-19 pandemic.
- Identify lessons learned in Alaska communities applicable to other remote locations and Indigenous communities.

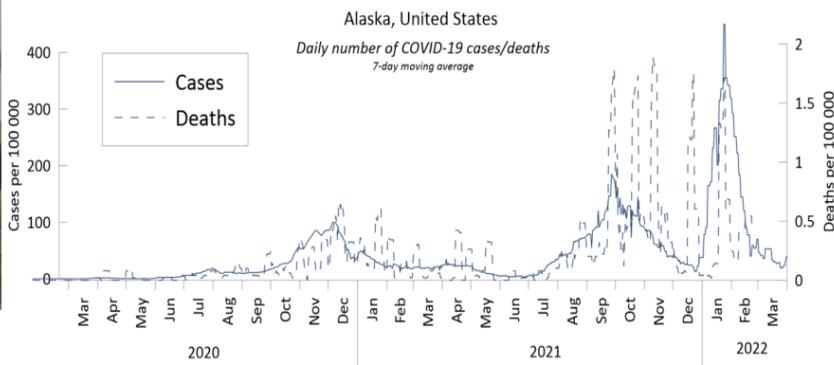
Methods

We conducted a review of secondary data from Alaska health department websites, newspapers, tribal policy statements, and other public sources. We also collected data on COVID-19 infections, deaths, vaccination, and health-related socioeconomic variables for Alaska regions.

OVERALL RESPONSE FRAMEWORK

DELAY → PREPARE → RESPOND/ENGAGE INDIGENOUS KNOWLEDGE

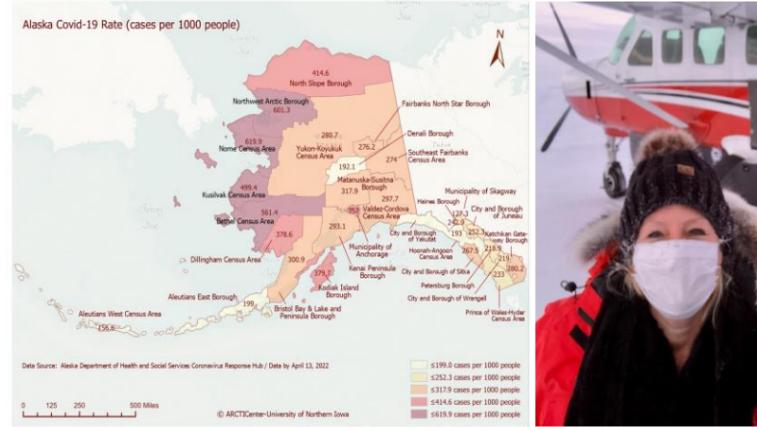
A successful response framework in the Alaska indigenous communities has been to (1) **delay** the onset of the pandemic by strict isolation and prevention measures (2) **prepare** for the arrival of the disease by relying on the Alaska Native Health System and (3) **respond** to the pandemic by coupling a self-governed health system and Indigenous knowledge including holistically addressing health through community, spiritual and traditional culture lenses.



Findings

Key strategies that have been implemented are as follows:

- Coupled healthcare sovereignty and Indigenous knowledge;
- Provided culturally appropriate prevention information that emphasized protecting tribal elders from COVID-19;
- Encouraged the historic importance of the role of individuals in protecting the broader community through preventing disease transmission;
- Utilized community radio stations to reach remote areas with multilingual Indigenous language COVID-19 messaging;
- Posted tribal-specific posters with COVID-19 public health information in areas of high village traffic including markets, schools, churches, community centers, and airports;
- Brought COVID-19 vaccination teams directly to native villages and homes by multiple methods including cars, snow machines, dogsleds, fishing boats, and bush planes;
- Developed systemic partnerships with Alaska Tribal Health Organizations, tribal councils, key hospitals, borough public health departments, and the state Community Health Aide program to provide village medical care, stabilization, vaccinations, and/or medevac services for COVID-19 patients in remote areas;
- Mandated COVID-19 testing before flying and instituted travel bans for COVID-19 positive individuals between villages;
- Required quarantines for COVID-19 positive patients;
- Implemented curfews, required masking, eliminated public gatherings in many villages;
- Conducted school, church, tribal business, and other village operations through virtual methods such as zoom meetings and live streaming; and
- Utilized traditional forms of information sharing such as storytelling, dance, song, art, and other methods to encourage community resilience during times of hardship;
- Continued prioritizing health and well-being of the Elders/knowledge keepers;
- Continued safeguarding the environment/biodiversity;
- Continued and emphasized practicing traditional activities;
- Continued relying on living off the land, including time spent on the land for self-isolation and spiritual rehabilitation.



Conclusions

Arctic Indigenous communities in Alaska frequently adopted diverse strategies to manage the pandemic in their communities that likely mitigated the impact that COVID-19 could have had on their communities. With the growing reality that climate change, human migration, urbanization, and globalization will likely increase the frequency and severity of novel pandemics around the world, the strategies used by Arctic Indigenous populations to mitigate COVID-19 can provide important lessons for other populations faced with extreme vulnerability to infectious diseases.