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Approach to Endemic Covid-19 in the Norton Sound/Bering Straits Region

Norton Sound Health Corporation



Demographics

- NSHC is responsible for the health care of 10,000 people across a region of 23,000 sq miles, roughly the size of West Virginia
- 3,500 residents reside in the City of Nome and 6,500 residents reside in 15 regional village communities
- 75% of the population are Inupiaq, Siberian Yupik and Central Yup'ik Native Alaskans.
- The regional village communities are accessible only by air and range in size from 75 residents to 1,000 residents
- Distance to regional villages ranges from 50 miles to 200 miles

Norton Sound Region



Regional Communities

Brevig Mission, Alaska



Teller, Alaska



Regional Communities Cont.

Gambell, Alaska

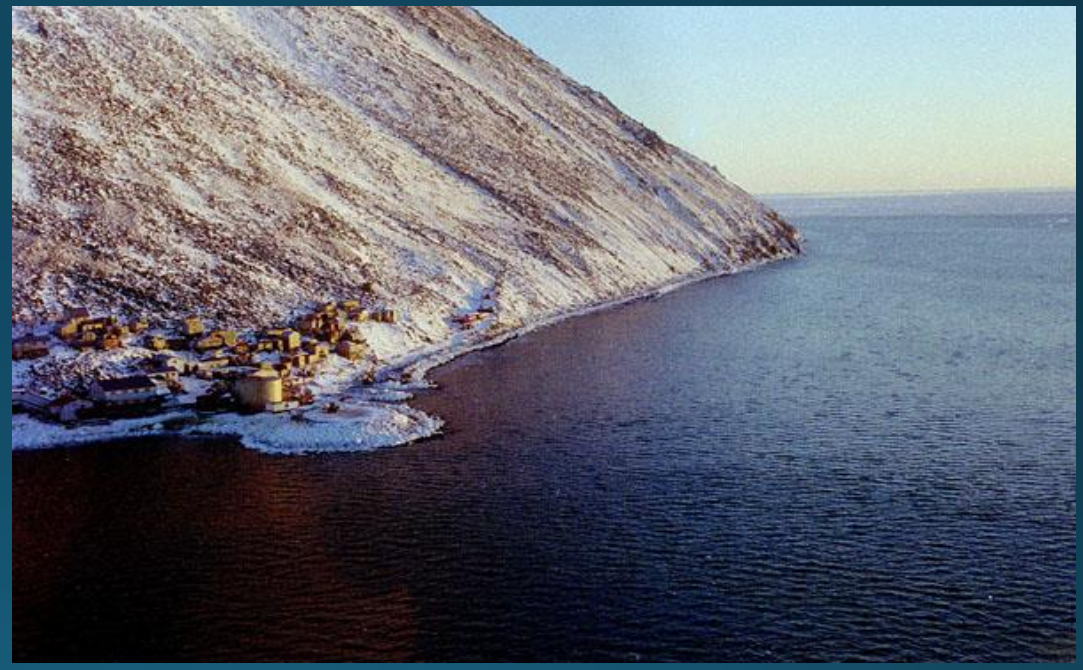


Savoonga, Alaska



Regional Community Cont.
Little Diomede, Alaska





Village Clinic

Brevig Mission Clinic



Golovin Clinic



Village Clinic Cont.

Koyuk Clinic



Savoonga Clinic



Village Clinic Cont.

Shishmaref Clinic



Shaktoolik Clinic



Village Clinic Cont.

Saint Michael Clinic

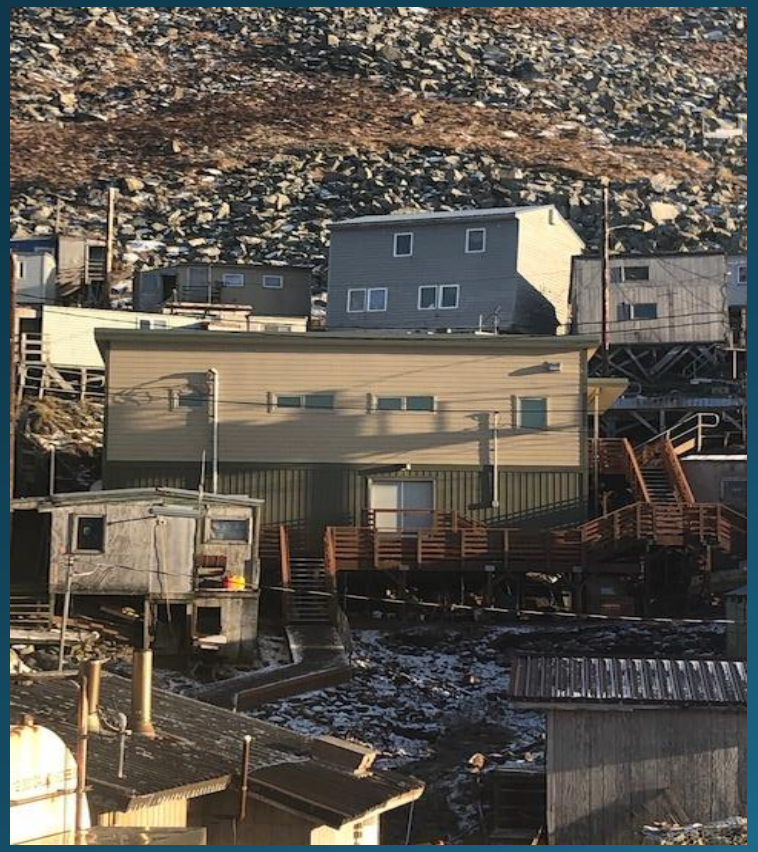


Stebbins Clinic



Village Clinic Cont.

Diomede Clinic



Elim Clinic



Initial Pandemic Approach Delay, Test, Contain

- **Delay, Test, Contain** in order to minimize disease spread as much as possible, until a vaccine can be given

1. Delay the virus from reaching our region, until we can get testing in place for all of our regional communities.

a. We closed off most air travel to Nome and regional villages. Alaska Airline flights were cut back dramatically and only emergency travel in and out of areas villages was allowed.

b. Working with the City of Nome, we put mandatory testing in place at the Airport in Nome. Anyone coming into Nome was required to test.

c. Mandatory quarantine of everyone coming into Nome or regional villages from outside of the region- both resident and employees.

Initial Pandemic Approach Cont.

2. **Testing-** We worked hard and rapidly, with the assistance of the Alaska Native Tribal Health Consortium (ANTHC) to acquire and place Abbott ID NOW analyzers in our Nome hospital and all 15 regional communities. We initially were running 12-16 analyzers at the hospital in Nome, followed by placement of 1 analyzer in every village clinic. All of our health aides were trained on the use of the Abbott ID NOW analyzers.

- In Nome, we set up designated off-site testing centers in town and at the airport.

Testing Site

Testing site built outside of Norton Sound Regional Hospital in Nome, AK



Waiting to be tested



Initial Pandemic Approach Cont.

3. **Contain-** We worked with every regional community to identify appropriate isolation/quarantine housing in Nome and all 15 village communities.

a. All initial positive patients were placed into isolation housing

b. All initial close contacts were placed into quarantine housing

c. Eventually, as numbers grew, placing all positives and close contacts into separate housing was not possible. Many residents ended up isolating or quarantining in their own homes.

Teams Developed

- We developed our own **Covid Response Team** of physicians and NP's/PA's who cover a specific Call Line 24/7 and responded to every positive result, did contact tracing, outpatient treatment and coordinated with our "Housing Team" to get patients into isolation/quarantine housing and get them groceries/water supply. Positive results off of any testing unit in the region was automatically texted to a secure line monitored by the Response Team.
- We developed a **Housing Team** of staff who coordinated all the isolation/quarantine housing in Nome and the region, along with the distribution of groceries and water to these households. We found that people were much more willing to isolate and quarantine if we provided groceries and water.

Employee Testing

- Mandatory testing of corporation staff on a regular basis. We strongly encouraged all residents of the region to test frequently- every 2 weeks.
- By the time the virus reached our region, we had a fairly robust system of **Test and Contain** in place.

Strategy of Heavy Testing

- Over the course of the pandemic through 10-1-21 we did roughly 125,000 tests on our region of 10,000 residents. **We had a positivity rate of just 1%.** This low positivity rate indicates we were doing enough testing to identify essentially every case in our region, to get it appropriately isolated, to minimize disease spread. It worked well for us. **To date, we've had fewer than 50 hospitalizations and only 6 total deaths.**
- **We feel that our heavy testing program helped us identify the vast majority of cases early, to get them appropriately isolated and treated and close contacts quarantined.**

Vaccination

- Vaccination- When the Covid-19 vaccine rolled out in December of 2020, we made the same huge efforts to vaccinate, as we did with testing.

1. Mandatory employee vaccinations
2. We sent vaccination teams to all area village clinics
3. Our regional health aides provided Moderna vaccine
4. In Nome we set up off-site vaccination centers in town and at the airport

We had good, early success with getting our region vaccinated, especially the over 50 age group. **By the time Omicron hit our region, we had 85% of our eligible population (Age 12 and up) fully vaccinated. This definitely contributed to the low morbidity and mortality in our region.**



Additional Efforts Communication

- Throughout the pandemic we did a daily conference call to the region at 11am, where any resident could call in and ask questions. We used this time for education and to encourage vaccination. We continue this now once per week.
- Weekly managers meetings to discuss updates and strategy.
- Regular village tribal calls to discuss new village cases.

Additional Efforts Cont.
Hospital and Clinic Re-Designs



- Cough and Cold Clinic developed in Nome, where all outpatients with Covid symptoms were seen.
- Re-design of our inpatient hospital unit to accommodate Covid patients.
- Telemedicine- a huge factor in continuing effective, safe and consistent care, especially in our village clinics.

Additional Efforts Cont. Working Together With Regional Tribes/Villages

- We had contests and prizes/raffles to encourage vaccination.
- We worked with the local tribal leaders in each community to set up local incentives for vaccination.

Approach to Endemic Covid-19 in the NSHC Region What Has Disappeared

- We no longer have restrictions on travel.
- We no longer have mandatory testing of health corporation staff- we now test only if symptomatic or if a close contact.
- Testing of regional residents- we request testing only if symptomatic or if a close contact; However, we don't deny anyone a test who desires one.
- We've reduced our testing locations in Nome- no off-site or airport testing locations.
- We've reduced our vaccination locations in Nome- no off-site or airport vaccination locations.

Approach to Endemic Covid-19 in the NSHC Region Cont. What Remains

- **Covid Response Team-** a smaller team of 2 physicians continue to monitor all positive cases in the region, assisting our medical staff with treatment recommendations and answer questions on isolation/quarantine.
- **Housing Team-** Coordinates any housing and grocery/supply needs
- **Testing**- available in every community
- **Anti-viral treatment-** all of our medical staff have been educated about Paxlovid, Molnupiravir, Remdesivir, Bebtelovimab, and Evusheld usage. The medical staff can run questions by our Response Team and our pharmacy.
- We current average fewer than 4-6 active cases for our region. We continue to test from 30-70 patients daily, with a positivity rate consistently less than 3%, which suggests that we are doing enough testing to identify the majority of cases and keep the region safe.

Questions and Answers



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Biography

Dr. Mark Peterson graduated from the University of North Dakota School of Medicine in 1989, followed by a residency in Family Medicine at the University of Wisconsin, Eau Claire. From 1992 to 2005 he worked as a Family Physician at the Yukon-Kuskokwim Health Corporation in Bethel, AK and Norton Sound Health Corporation in Nome, AK. From 2005-2017 he practiced rural Family Medicine in North Dakota. In 2017 he returned to Norton Sound Health Corporation in Nome as the Medical Director, developing a new model of care for Norton Sound and expanding services, including the addition of comprehensive rural inpatient and outpatient Psychiatry Services. He led Norton Sound's unique and effective campaign against the Covid-19 Epidemic.