Coordinated COVID-19 Response Portland Area
Tribal Public Health and Emergency Preparedness Conference

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MAY 3, 2023
Removed the kryptonite shackles, unchained supergirl.
CDC meeting, intended to mark covid progress, sees virus cases of its own

The conference for disease detectives hadn’t been held in person for several years because of the pandemic

By Dan Diamond

April 28, 2023 at 5:40 p.m. EDT
America has a loneliness epidemic

- Strengthening social infrastructure, which includes things like parks and libraries as well as public programs.
- Enacting pro-connection public policies at every level of government, including things like accessible public transportation or paid family leave.
- Mobilizing the health sector to address the medical needs that stem from loneliness.
- Reforming digital environments to "critically evaluate our relationship with technology."
- Deepening our knowledge through more robust research into the issue.
- Cultivating a culture of connection.

“You can feel lonely even if you have a lot of people around you, because loneliness is about the quality of your connections.”

-- VADM Vivek Murthy, US Surgeon General

Social Connection — Current Priorities of the U.S. Surgeon General (hhs.gov)
Portland Area IHS
Initial COVID-19 Response

Established Area Incident Command System (ICS)
Portland Area IHS
Initial COVID-19 Response

Throughout the response, the Portland Area ICS collaborated closely with the Northwest Portland Area Indian Health Board ICS team to share information across the area about the availability of supplies.

NPAIHB helped collect testing data from Tribal clinics and Urban Indian Health Organizations which was used to inform IHS-HQ about which regions were being affected.
## COVID-19 Cases by IHS Area

Data are reported from IHS, tribal, and urban Indian organization facilities, though reporting by tribal and urban programs is voluntary. Data reflect cases reported to the IHS through 11:59 pm on Feb 22, 2023.

<table>
<thead>
<tr>
<th>IHS Area</th>
<th>Tested</th>
<th>Positive</th>
<th>Negative</th>
<th>Cumulative percent positive</th>
<th>7-day rolling average positivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>1,137,961</td>
<td>57,466</td>
<td>929,841</td>
<td>5.8%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>185,513</td>
<td>17,433</td>
<td>142,746</td>
<td>10.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Bemidji</td>
<td>332,294</td>
<td>34,773</td>
<td>299,959</td>
<td>10.5%</td>
<td>16.1%</td>
</tr>
<tr>
<td>Billings</td>
<td>163,446</td>
<td>14,485</td>
<td>144,054</td>
<td>9.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>California</td>
<td>209,501</td>
<td>23,780</td>
<td>175,223</td>
<td>11.9%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Great Plains</td>
<td>317,526</td>
<td>34,108</td>
<td>278,423</td>
<td>10.9%</td>
<td>15.1%</td>
</tr>
<tr>
<td>Nashville</td>
<td>209,075</td>
<td>23,142</td>
<td>176,181</td>
<td>11.6%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Navajo</td>
<td>620,478</td>
<td>91,349</td>
<td>451,478</td>
<td>18.8%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>1,297,168</td>
<td>164,248</td>
<td>1,092,908</td>
<td>15.1%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Phoenix</td>
<td>350,330</td>
<td>53,095</td>
<td>293,235</td>
<td>15.3%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Portland</td>
<td>203,368</td>
<td>23,520</td>
<td>230,236</td>
<td>0.0%</td>
<td>17.9%</td>
</tr>
<tr>
<td>Tucson</td>
<td>87,538</td>
<td>9,969</td>
<td>77,315</td>
<td>11.4%</td>
<td>8.2%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>5,175,158</td>
<td>577,375</td>
<td>4,597,783</td>
<td><strong>11.8%</strong></td>
<td><strong>12.1%</strong></td>
</tr>
</tbody>
</table>

*COVID-19 testing data is updated on Mondays and Thursdays.*
Data Issues

- Data flow was limited to number tested and number/percent positive
- Some tribes/clinics developed systems for tracking more than just test results
- Challenges included:
  - Balancing between collecting data to increase situational awareness from people who were already overburdened with patient care, case investigation, contact tracing, etc.
  - Data systems lacking interoperability
  - Lack of technical expertise to retrieve more useful information
Case Investigation and Contact Tracing

- IHS Public Health Nursing staff at three Service Units led case investigation and contact tracing for their communities initially.
- The Warm Springs Health and Wellness Center, operated by IHS, collaborated closely with the Tribal Community Health program Public Health Nurses. The Oregon Health Authority granted access to its communicable disease registry for direct case reporting.
- Many Tribes in the region that had not performed public health communicable disease investigation, reporting or contact tracing opted to stand up these services in response to COVID.
- Tribes were supported in this work by our ICS Public Health and Operations leads, NPAIHB, CDC and CDC Foundation and State health departments.
Collaboration

- The collaboration between Portland Area IHS and the Northwest Portland Area Indian Health Board was critical to our success.
- As Tribes determined that they would take on the work of investigating cases, doing contact tracing, providing guidance to people infected and reporting cases to state and local health departments, NPAIHB stepped in to provide necessary training to build tribal capacity to carry out these fundamental public health activities.
- Other partners included our state health departments and the American Indian Health Commission of WA.
- One unexpected partner was the Columbia River Inter-Tribal Fishing Commission (CRITFC).
Collaboration

- Training was conducted by the recently created Tribal Environmental Health Program, led by Celeste Davis, the NPAIHB Incident Commander and assisted by our CDC-assigned Epidemic Intelligence Service Officer, Alex Wu.
- Additional assistance in multiple areas of the response was provided by contracted workers hired through the CDC Foundation. These experienced Public Health personnel provided a surge in workforce capacity for NPAIHB and for some Tribes in the region.
Clinic Assessments

- In April, 2020, the Portland Area ICS collaborated with our IHS Environmental Health Staff to conduct on-site assessments of each of the 6 IHS-operated facilities to review outdoor operations, infection prevention plans, HVAC capabilities and discuss issues being faced.
COVID Vaccines

- Prior to COVID Vaccine arrival, an abbreviated Tribal consultation process informed the HHS Administration for Strategic Preparedness and Response (ASPR) of the need for Tribes to have a choice whether to receive vaccines directly through IHS or through their State.
  - Tribes were able to change their selection
- About ½ of Tribes in the Portland Area (including all 6 Direct service clinics) received vaccines from IHS directly.
- Tribes were also given latitude in prioritizing vaccines, for example using Tribal definitions of elders and essential workers. But initial allocations were based solely on the population of each jurisdiction and not on severity of need
COVID Vaccine Planning

- IHS HQ and played a strategic role in planning and advocating for COVID vaccines for AI/AN people:
  - IHS staff were embedded in Operation Warp Speed
  - IHS formed the COVID-19 Vaccine Task Force
  - *Ex-Officio* representation on the CDC Advisory Committee on Immunization Practices (ACIP)
  - Participated in the ACIP COVID-19 workgroup and the ACIP COVID-19 Vaccine Safety sub-workgroup
COVID Vaccine Planning - Safety

- IHS worked with CDC to develop a specific reporting capability for IHS and Tribal clinics to report adverse vaccine events through VAERS, the FDA/CDC operated Vaccine Adverse Events Reporting System.

- IHS received data directly from the VAERS team for any reports that indicated “IHS” as the reporting source.

- IHS monitors COVID vaccine safety data from three sources: VAERS, I-STAR (IHS Safety Reporting System) and a bi-weekly voluntary survey sent to sites that were already participating in medication safety reporting to the national Pharmacy and Therapeutics Committee (NPTC).
Initial Vaccine Activities

On 12/14/2020, the first vaccine doses arrived at Lummi, one of the few facilities with ultra cold storage capability. Some doses were redistributed the same day, transported by NPAIHB Chairman, Nick Lewis to Yakama IHS, Yellowhawk Tribal Health Center and Warm Springs Health and Wellness Center (IHS).

The first 3 Yakama Service Unit employees to receive the COVID-19 vaccine.
COVID Vaccines

- Uptake of vaccine in our region was brisk initially, especially among elders and those with underlying conditions that put them at high risk for severe disease.
- As in other jurisdictions, many chose not to receive COVID vaccination.
- As of December 31, 2022, uptake of COVID vaccine in the 6 Federal Service Units was 51% of the user population. Vaccine coverage is highest among those who are older and those with underlying conditions.
1<sup>st</sup> and 3<sup>rd</sup> Vaccine Doses by Elder Status
1\textsuperscript{st} and 3\textsuperscript{rd} Vaccine Doses by High Risk Status
Picking up the pieces: Addressing decreased routine vaccination
Key Points:

- Decreased access to healthcare meant fewer visits for routine chronic disease management, recommended health screenings and recommended immunizations.
- Pneumonia and influenza are vaccine preventable disease and are among the top ten causes of mortality for AI/AN.
- Rates of childhood immunizations and seasonal influenza immunization were declining before the pandemic and have worsened since.

Adult pneumococcal immunization coverage was stable but below the Healthy People 2020 goal of 90% and since the pandemic has continued to decline.
Percent of two year olds fully vaccinated*

*4:3:1:3:3:1:4 Series: 4 DTaP, 3 HepB, 1 MMR, 3 Polio, 3 HIB, 1 Varicella, 4 PCV
First Dose HPV Coverage, 13 year-olds

- 74% in 2022 for Portland
- 44% in 2022 for the National average

<table>
<thead>
<tr>
<th>Year</th>
<th>National Coverage</th>
<th>Portland Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>80%</td>
<td>44%</td>
</tr>
<tr>
<td>2019</td>
<td>80%</td>
<td>44%</td>
</tr>
<tr>
<td>2020</td>
<td>64%</td>
<td>44%</td>
</tr>
<tr>
<td>2021</td>
<td>44%</td>
<td>44%</td>
</tr>
<tr>
<td>2022</td>
<td>74%</td>
<td>74%</td>
</tr>
</tbody>
</table>
One Dose TDaP Coverage, 13 year-olds
Adults aged ≥65 years with at least 1 dose pneumococcal vaccine ever

Healthy People Goal: 90%
Influenza Vaccination Coverage, By Age Group
Portland Area, 2014--2022
IHS Efforts to increase routine immunization coverage

- 2021-2022 – Pediatric Immunization Improvement Project
  - A pilot quality improvement collaborative to improve outreach for catch up on missed immunizations, data reporting and clinical operations
  - Eight sites enrolled
  - Multiple resources developed and accessible on the IHS website

- IHS E-3 Campaign
  - National campaign under development to encourage all sites to prioritize routine immunization by assessing Every Patient at Every Encounter for Every Recommended Vaccine
Planning for future pandemics
Lessons from prior epidemics

- SARS (original, 2002) – Countries most affected (China, Canada, Singapore, Vietnam and other countries in Asia)
  - Many countries ramped up their public health infrastructure with enhanced capability for testing, case reporting, contact tracing, isolation and quarantine.
  - The U.S. had only 8 confirmed cases and 19 probable cases
  - CDC issued guidelines for laboratory biosafety and healthcare settings
  - Travel alerts were issued and increased surveillance was used for cargo and passenger conveyances from affected areas but there were no travel restriction orders issued
Lessons from prior epidemics

- **SARS (original, 2002)** –
  - Collection of appropriate and timely clinical specimens for laboratory testing is central to monitoring the status of SARS-CoV transmission at the local, state, and federal levels.
  - Timely reporting of cases, updates on the clinical status and disposition of patients, real-time analysis of data, and timely dissemination of information are essential for outbreak-management decisions.
  - A rapid and efficient electronic reporting system that facilitates real-time analysis of clinical, epidemiologic, and laboratory information at the local level is essential.
Lessons from recent epidemics

- **H1N1 (2009) – Global pandemic**
  - In the US, rapid development and distribution of specific vaccine was a primary focus. Despite this, limited supplies were available initially (September, 2009) though demand was high. By December, supply improved but demand waned.
  - Racial/ethnic inequities observed in H1N1 vaccination\(^1\)
  - Issues of trust, concerns over safety and side-effects and low perceived risk of the disease all influenced decisions to receive the vaccine\(^1\)
Lessons from recent epidemics

- H1N1 (2009) – Global pandemic
  - Tribes expressed concerns regarding vaccine distribution via States and regulation of use, particularly prioritization
  - Developed new models for distributing antiviral medication (oseltamivir) via the Strategic National Stockpile (SNS) including use of retail pharmacies
  - IHS developed weekly Influenza-like Illness surveillance system which proved to be accurate, timely and included most IHS facilities
  - Recognized the importance of increasing hospital surveillance including severity of infections to estimate the impact on bed availability and ICU/ventilator capacity

Journal of the American Medical Informatics Association, Volume 21, Issue 1, January 2014
Opportunities for Learning from the SARS-CoV2 Pandemic

- Now is the time to document the most critical lessons learned from the largest pandemic in our lifetime
  - What worked for tribal communities?
  - What didn’t work?
  - What changes can we make that will result in improvement?
- Models for pandemic preparedness and response planning can provide a framework for evaluation
  - National pandemic influenza preparedness planning Influenza Other Respir Viruses. 2009 Jul; 3(4)
Public Health Emergency Preparedness and Response Capabilities Planning Model

1. Assess Current State
   - Step 1a: Assess Organizational Roles and Responsibilities
   - Step 1b: Assess Resource Elements
   - Step 1c: Assess Performance

2. Determine Strategies and Activities
   - Step 2a: Identify and Review Jurisdictional Inputs
   - Step 2b: Prioritize Domains and Capabilities
   - Step 2c: Develop Short-term and Long-term Goals

3. Develop Plans
   - Step 3a: Plan Organizational Initiatives
   - Step 3b: Plan Capacity Building and Sustain Activities
   - Step 3c: Plan Capacity Evaluations and Demonstrations

Public Health Emergency Preparedness and Response Capabilities Planning Model

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Documenting Tribal Experiences During the SARS-CoV2 Pandemic

- Evaluation of local tribal responses could include a detailed review of the following:
  - Case investigation and reporting
  - Contact tracing (during initial phases)
  - Isolation of cases, quarantine of contacts
  - Availability of testing supplies/capability, personal protective equipment (PPE), treatments
  - Surveillance – outpatient, hospitals, schools, workplaces
  - Vaccination
  - Public health messaging of community mitigation measures Community supportive efforts – food distribution, medication and medical supplies for households impacted by COVID
  - Community mitigation measures

*National pandemic influenza preparedness planning Influenza Other Respir Viruses. 2009 Jul; 3(4)*
Disclaimer

THE VIEWS AND OPINIONS IN THIS PRESENTATION ARE THOSE OF THE AUTHOR AND DO NOT REPRESENT THOSE OF INDIAN HEALTH SERVICE OR THE DEPARTMENT OF HEALTH AND HUMAN SERVICES