Reinforcing Tribal Data Sovereignty Through Electronic Case Reporting

Turtle Mountain Public Health Department

Cassandra Fonseca, MPH
TMBCI Epidemiologist

Christa Monette
Administrative Support Specialist (and more)
Overview

01 Turtle Mountain Band of Chippewa Indians
02 TMBC Public Health Department
03 Electronic Case Reporting
04 Wins and Obstacles as a Tribe
Turtle Mountain Band of Chippewa Indians
When the Federal Government issued allotments to tribal members, the land approved by Congress was insufficient to meet the allotments needs of the Tribe. As a result, Congress authorized members of the Band to take allotments on the Public Domain in Montana, South Dakota, and North Dakota.
12 miles long x 6 miles wide land base of the TMBCI Reservation is located within Rolette County.

About 33,000 enrolled members

About 14,500 living on or near the reservation
Demographics

Median Age by Race
Rolette County, North Dakota, and the United States
U.S. Census, 2020

Rolette County | North Dakota | United States
---|---|---
American Indian | 31 | 27 | 34
White, Non-Hispanic | 38 | 44 |

<table>
<thead>
<tr>
<th></th>
<th>Rolette County, ND</th>
<th>North Dakota</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Household Income (2021)</td>
<td>$49,434</td>
<td>$68,131</td>
</tr>
<tr>
<td>Per Capita Income (2020)</td>
<td>$20,424</td>
<td>$36,289</td>
</tr>
<tr>
<td>Below Poverty Level (2021)</td>
<td>27%</td>
<td>11%</td>
</tr>
<tr>
<td>Total Known Children in Poverty (2021)</td>
<td>34%</td>
<td>14%</td>
</tr>
</tbody>
</table>
Education Level of Rolette County, ND vs. North Dakota
ACS 5-Year, 2020

Percent of 25 or older population

- No high school diploma
- High school/GED complete
- Some College
- Associates
- Bachelors
- Master's or Higher

Rolette County
North Dakota
Turtle Mountain Public Health Department

Our Journey
Tribal Ownership of COVID-19 Response

27 contact tracers & 2 case managers

Established public health coalition with TMBCI stakeholders
   Including school system, state partners, county partners, and IHS

Distributed care packages (oximeters, thermometers, gloves, masks)

Developed weekly infectious disease reports

Mobile Public Health Unit for COVID-19 Testing

Increased vaccination rates to be highest in the state and above US average

Trained contact tracers on epidemiology and outbreak investigation

Care Coordination Agreement for sustainable public health funding
Results: COVID-19 Vaccination

United States: 92%
North Dakota: 81%
TMBCI: 92%

At least one dose of COVID-19 vaccine
Results: COVID-19 Vaccination

United States: 2.9
North Dakota: 3.1
TMBCI expected: 6.2-8.5

Mortality Rate per 1,000 population
Tribes need SPECIFIC data to tackle epidemic level problems

Other conditions are at epidemic level
Opioid Epidemic

Figure 1a. 12 Month-ending Provisional Counts of Drug Overdose Deaths: North Dakota
From 2018-2020, the age-adjusted rate for drug-induced causes was **49.2 per 100,000 persons** for the American Indian population compared to **11.4 per 100,000 persons** for the White, Non-Hispanic population in North Dakota.
Opioid Epidemic

Percent of Children in Foster Care
TMBCI vs. North Dakota
2022-2023

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2023</th>
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<tbody>
<tr>
<td>TMBCI</td>
<td>8.7%</td>
<td></td>
</tr>
<tr>
<td>North Dakota</td>
<td>12.6%</td>
<td>0.9%</td>
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</tbody>
</table>

Data Sources: TMBCI Child Welfare
Rolette County Human Services
North Dakota KIDS COUNT
Chronic Hepatitis C

2022

- 148.1 per 100,000 population in Rolette County
- North Dakota had a rate of 66.2 per 100,000 population
- US had a rate of 40.7 cases per 100,000 population
- AI/AN persons in the US had a rate of 66.8 cases per 100,000 population

<table>
<thead>
<tr>
<th>County</th>
<th>Case Count</th>
<th>Rate Per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sioux</td>
<td>24</td>
<td>567.38</td>
</tr>
<tr>
<td>Hettinger</td>
<td>12</td>
<td>480.19</td>
</tr>
<tr>
<td>Benson</td>
<td>24</td>
<td>351.29</td>
</tr>
<tr>
<td>Mountrail</td>
<td>16</td>
<td>151.73</td>
</tr>
<tr>
<td>Rolette</td>
<td>21</td>
<td>148.14</td>
</tr>
</tbody>
</table>
23-35-02.1. Tribal health units. An Indian nation that occupies a reservation the external boundaries of which border more than **four counties** may form a health district or public health department as provided in this chapter. A tribal public health unit and bordering public health units shall collaborate regarding the provision of public health services. If an individual who is not an enrolled member of an Indian tribe of the Indian reservation that forms a tribal public health unit is a party to a civil action in which the tribal public health unit is also a party, that individual may bring the action in or move the action to tribal court or district court.
Electronic Case Reporting
Role of the Epidemiologist

Keeping track of what is improving, what is worsening, and who is most impacted.
Public Health & Case Reporting was behind
Waste of Public Health Resources
Scavenger
Hunt for
Infection
Control...
Wasting
More Time
Little Johnny, you have COVID-19
Electronic Health Record
Reportable Conditions Knowledge Management System

What data do you want?

Just COVID-19 please
Little Johnny, you also have Salmonella.
Electronic Health Record

AIMS Platform

RCKMS (Mail Sorting Room)

COVID-19

SALMONELLA

Public Health Department
Oh no, Little Johnny has COVID-19 and it says he works as a QSP with our elders. We must make sure he has what he needs to isolate!
States choose which requested data they will send to tribes.
Moving Forward: eCR

Tribes receive case reports as well, allowing the Tribe to own their public health response and analysis.
### Patient Identifiers

- PT-47912

**Examples only.**

222-22-2222 United States Social Security Number.

### About

**Date of Birth:** 07/30/1969

**Sex:** Male

**Race:** American Indian or Alaska Native

**Ethnicity:** Hispanic or Latino

### Emergency Contact

- **Name:** Mr. Emer Contact 0

### Contact

- **Home:** 2232 Home Street
  - Sacramento, CA
  - 92203, US
  - Tel: (Primary Home) 565-565-2003
  - Email: jmoe@email.com

- **Work Place:** 1234 Facility Drive
  - Sacramento, CA
  - 92203
  - Tel: (Work Place) 555-777-0123
  - Fax: (Work Place) 555-777-0123

### Author

- **Time:** 05/13/2020, 11:06
  - 16.540.1.113883.3.72.5.210

### Encounter

**Identifier:** 0007010
- **Type:** Inpatient encounter
- **Date From:** 05/13/2020
- **Date To:** 05/13/2020

**Location:** Hospital
- **Responsible Party:** Gerson San Diego, MD of Sacramento Hospital

### Encounters

- **Inpatient Encounter:** 05/13/2020
  - Sacramento Hospital

### Problem Type

- **Problem:** Coronavirus as cause of disease
- **Date(s):** 05/14/2020
  - 21.800.1.14222.4.11758
  - 2010X429
Data Visualization

Figure 34: The prevalence (%) of High Cholesterol and Hypertension by ZIP Code.

High Cholesterol Prevalence (%) by ZIP Code:
- 58369: 32%
- 58329: 28%
- 58316: 24%
- 58357: 20%
- 58366: 16%

Hypertension Prevalence (%) by ZIP Code:
- 58369: 42%
- 58329: 38%
- 58316: 36%
- 58357: 32%
- 58366: 28%

High cholesterol and hypertension prevalence is highest in the ZIP code, 58369. The 58316 ZIP code has the lowest prevalence of high cholesterol and hypertension.

Figure 35: The prevalence (%) of Diabetes Type II and Mental Illness by ZIP Code.

Diagnosed Diabetes Prevalence (%) by ZIP Code:
- 58369: 14%
- 58329: 12%
- 58316: 10%
- 58357: 8%
- 58366: 6%

Mental Illness Prevalence (%) by ZIP Code:
- 58369: 17%
- 58329: 15%
- 58316: 13%
- 58357: 11%
- 58366: 9%

Diabetes and mental illness have a more even spread throughout the 5 ZIP codes, however, the highest prevalence of mental illness is between the 58316 and 58329 ZIP codes.

Frequency of COVID-19 Cases by Week in Rolette County, ND
Week Ending June 26, 2021 - April 20, 2023
04

Wins and Obstacles
IHS System

Not Modernized Enough to connect to AIMS

Huge chunks of data would not be seen
The State has onboarded most facilities

Facilities need to buy-in to send electronically

If your State already convinced systems to report, half the job is done
Policy

Tribal Resolution for reportable conditions

Resolution for public health activities once we receive reportable condition data
HIPAA Compliance
Documentation and Security

Do your due
diligence to make
staff aware of HIPAA
to protect
information when
accessing it

Systems,
servers should
be protected
with 2-factor
authentication
Connection takes time and money

Cannot stop getting data from your state in the mean time

States get dedicated money for epidemiology and lab capacity (ELC)...Tribes don’t
Thank you!

Do you have any questions?

Cassandra.Fonseca@tmbci.org
Christa.Monette@tmbci.org