The Waponahki Tribal Health Assessment: Successfully Using CBPR to Conduct a Comprehensive and Baseline Health Assessment of Waponahki Tribal Member

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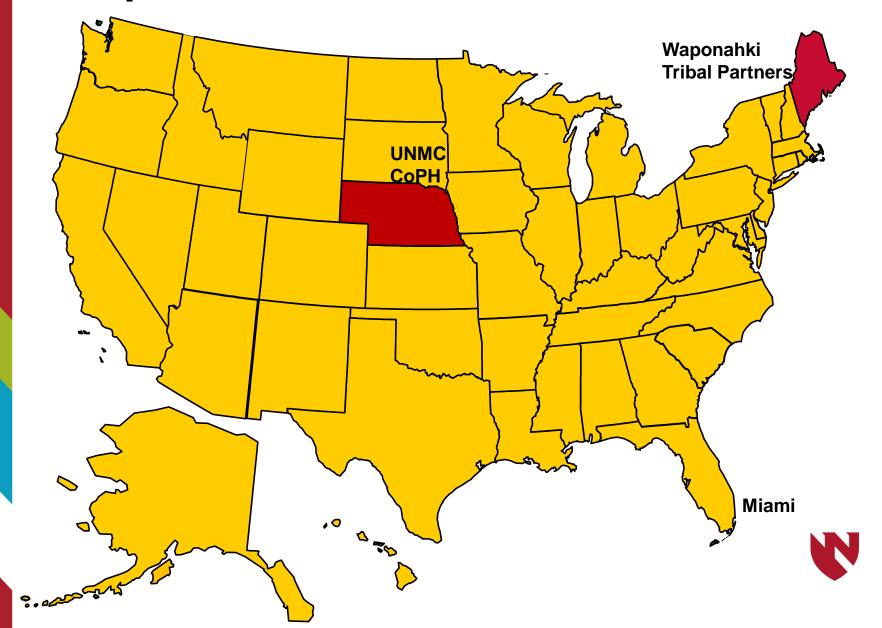
DATA ON AI/AN RESIDING IN MAINE

"Accurate aggregate and Tribal specific data on health issues of Native Americans in Maine does not exist."

Ms. Pat Knox-Nicola, Tribal Health Director, Penobscot Nation, 2009



Waponahki Tribal and UNMC Partners



Waponahki Tribal Communities in the State of Maine

- Aroostook Band of Micmacs
- Houlton Band of Maliseets
- Passamaquoddy Tribe Indian Township
- Passamaquoddy Tribe Pleasant Point
- Penobscot Nation



Purpose of the Waponahki Tribal Health Assessment

The survey will serve as a guide for:

- Health program planning
- Development of services
- Education and research
- Seeking future funding



Tribal Sovereignty and Research

- As sovereign nations American Indian tribes have full authority to regulate research conducted with their citizens.
- Public Law 93-638, the Indian Self-Determination and Education Assistance Act of 1975, as well as the federal doctrine of Self-Governance, provides American Indian tribes with a legal basis for taking over the administration of health and social services provided to their citizens. These services would include research related to health and social issues.

Freeman W. The protection of potential individual volunteers and tribal communities in research involving the Indian Health Service - in guidelines for researchers. 2004



Methods

Community-based participatory research incorporating National Congress of American Indians core research values

- Indigenous knowledge is valued and should be valued
- 2. Research is not culturally neutral
- 3. Responsible stewardship includes the task of learning how to interpret and understand data and research
- 4. Tribes exercise sovereignty when conducting research
- 5. Tribes maintain ownership of data
- 6. Research must benefit Native people

Institutional Review Board approval received from UNMC IRB and approval received from each respective Tribal Council



Sample

Tribe	Total eligible Tribal population residing within Tribal Health Center self-defined health service area	Sample size by Tribe
Aroostook Band of Micmac Indians	336	216
Houlton Band of Maliseet Indians	339	217
Passamaquoddy Tribe of Indian Township	644	311
Passamaquoddy Tribe at Pleasant Point	966	371
Penobscot Indian Nation	729	330
Total	3014	1,445

The Waponahki Tribal Health Assessment sample included randomly selected male and female Tribal members 18 years and above, who lived within each Tribe's respective health service delivery area. Sample size was calculated for estimation of a proportion and a 95% confidence interval with a precision of 4% using a finite population correction to account for the small and differing size of each tribe. (NCSS/PASS)

Organizational Chart

Legend

CoPH-College of Public Health

IT-Information Technology

UNMC-University Nebraska Medical Center

*UNL - University Nebraska Lincoln

 For the qualitative data analysis eth academic included a graduate student from the Sociology Department at UNMC's sister campus UNL



Interviewers

- 19 interviewers (excluding Tribal Health Directors)
- Underwent Collaborative IRB Training Initiative (CITI) training via UNMC web-site
- Underwent long distance training provided by UNMC via adobe connect on:
 - 1. Confidentiality/consent
 - 2. Sampling and survey topics
 - 3. Prepping for survey and administration of survey
 - 4. Interview techniques
 - 5. Commonly asked questions



Waponahki Tribal Health Assessment

Currently there is little data on the health status and quality of care for enrolled members of the federally recognized tribes in Maine. The purpose of the Waponahki Tribal Health Assessment Survey is to gather data on the health status of Tribal Members. By having access to improved data, tribal leaders will be to able shape the current and future health services that are beneficial to tribal communities. The survey is a collaboration between the tribal health departments of the Aroostook Band of Micmac-Micmac Service Unit, Houlton Band of Maliseet Indians, Passamaquoddy Tribe-Indian Township, Passamaquoddy Tribe-Pleasant Point, Penobscot Indian Nation and researchers at the University of Nebraska Medical Center (UNMC) College of Public Health (CoPH). The tribal principal investigator is Pat Knox-Nicola, Health Director at Penobscot Indian Nation and the UNMC principal investigator is Patrik Johansson, MD MPH. Director of the Rural Health Education Network, UNMC CoPH.



Patricia Knox-Nicola, Penobscot Nation Health Director is the Tribal Principal Investigator/Project Director (PD)/Project Manager. The Tribal PD provides the primary fiscal and administrative responsibility of the Waponahki Tribal Health Assessment and oversees the survey.



Patrik Johansson,
M.D. MPH is with the
University of Nebraska
Medical Center research
team. Doctor Johansson
is a Consultant and
Principal Investigator of
the Waponahki Tribal
Assessment.

The survey will serve as a guide for:

- ☐ Health Program Planning
- □ Development of Services

- ☐ Education and Research
- Seeking future funding

The survey questions will relate to your health status, health risk behaviors, and your thoughts on what health care services should be available to tribal elders.

Your Input Is Important

Surveys will be administered to a random sample of tribal members, ages 18 and older, which live within their respective tribal health service delivery area.

What you can expect?

- Reasonable steps will be taken to protect your privacy and confidentiality of your data.

Interviews will take place in a designated private area such as the Tribal Health Clinic, or other designated Tribal facility.

For your time: A \$25.00 Wal-Mart gift card will be given to participants who complete the Waponahki Health Assessment Survey.



Survey

242 questions in length:

- Majority of domains from the BRFSS (chronic disease risk factors)
- Additional questions (tribal specific questions, historical loss, perceived discrimination, substance abuse, HIV risk factors, depression, domestic violence, maternal and child health) – Some questions sensitive



Open ended questions

- Q3.1 What do you feel are the biggest health problems facing your community?
- Q3.2 What specific health areas do you think your tribe's health programs should focus on?
- Q3.3 What specific health care services for elders would you like to see improved in your community?
- Q3.4 If additional health care services for elders were to be provided in your community, what specific service(s) should be added first?
- Q29.3 What do you think are the major strengths of your community?
- Q29.4 What do you think are your community's greatest sources of pride?



Recruitment

- Tribal health directors placed notices regarding the survey in the bimonthly joint community newsletter
- Tribal Public Health District produced large posters advertising the survey and placed them in the waiting areas of each health department
- Tribal health departments promoted the survey at health fairs
- Tribal Chief or Tribal health director sent a recruitment letter
- Interviewers attempted to contact prospective participants up to three times before contacting the next participant
- Word-of-mouth played an important role in promoting the survey
- Participants who completed the survey received a \$25 Walmart giftcard. In addition, participants received gas cards if they had to travel 30 or more miles roundtrip to complete the survey.



Survey Implementation

- Application in CSPro allowed handling of complex skip patterns and bundling of all needed files together for easy delivery via email
- UNMC delivered software package, trained tribal IT personnel, and received data responses back to UNMC encrypted and confidentially
- UNMC conducted interactive application training over the web
- UNMC provided ongoing technical support to IT contacts at all five Tribe locations
- Data transmission from Tribes to UNMC was seamless



Results

Based on the calculated sample size for each tribe, response rates were between 68% and 97%. Overall 78% (1127/1445) completed the survey resulting in a precision for estimation of 2% for all of Waponahki.

- •450 men (40%) and 677 women (60%)
- Mean age of participants 42.5 years



Results

Overall Waponahki tribal members engage in preventive care behaviors at rates that approximate, meet, or exceed the Healthy People 2020 objectives for:

- dental visits,
- •mammograms
- pap smears
- •eye and foot exams for diabetics
- colorectal cancer screening
- •flu shots
- •More than 95% of women who were pregnant within the past five years received prenatal care as early in their care as they wanted.



Results

Among risk behaviors that predispose to chronic disease, in comparison to other Maine residents, Waponahki tribal members appear to be:

- •1.6 times more likely to be obese
- •2.4 times less likely to exercise moderately five or more days per week, or vigorously for three or more days per week
- •3.4 times less likely to consume fruits and vegetables five or more times per day
- •2.8 times as likely to smoke cigarettes
- •2.4 times more likely to binge drink



Limitations

The research team could not accommodate Tribal members who were unable to travel to the areas designated confidential and secure areas to partake in the survey.

Elders were not familiar/not comfortable with using the computer during the self-administered portions of the computer.

In selecting participants 18 years and older we did not obtain substance abuse data on the youth population and there were concerns that substance abuse data did not reflect actual prevalence.

Using computer-assisted face-to-face interviews does not allow for an exact comparison with the BRFSS which is a random-digit dial survey. The BRFSS is a telephone survey while the Waponahki health assessment was an in-person survey.



Conclusions

Factors promoting project success included:

- Trust between different partners
- Tribal data ownership
- Tribal partner as fiscal agent
- Advertising and timing of survey
- User-friendly technology
- Funding from philanthropic organizations



Implications

Wabanaki Public Health has played a primary role in addressing findings from the health assessment. The organization has the responsibility of providing public health education to each of the five Tribal communities.

WPH has created a committee sanctioned by the Tribal leaders composed of representatives from different departments and programs in each community. The committee will address the need for a broader, community- wide approach to improve the health of the community.

Based on data from the health assessment, the committee has developed a Waponahki health improvement plan which will address the prevention, education, and health promotion needs of each community focusing on the following four priority areas:

- Obesity | Physical Activity
- Substance Misuse Prevention
- Tobacco Prevention
- Youth Engagement | Youth Empowerment



Acknowledgements

- Tribal Leadership
- Waponahki Tribal Health Directors
- Waponahki Tribal Employees
- University of Nebraska Medical Center, College of Public Health
- Maine Health Access Foundation
- Maine Office of Minority Health
- Maine Center for Disease Control and Prevention





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