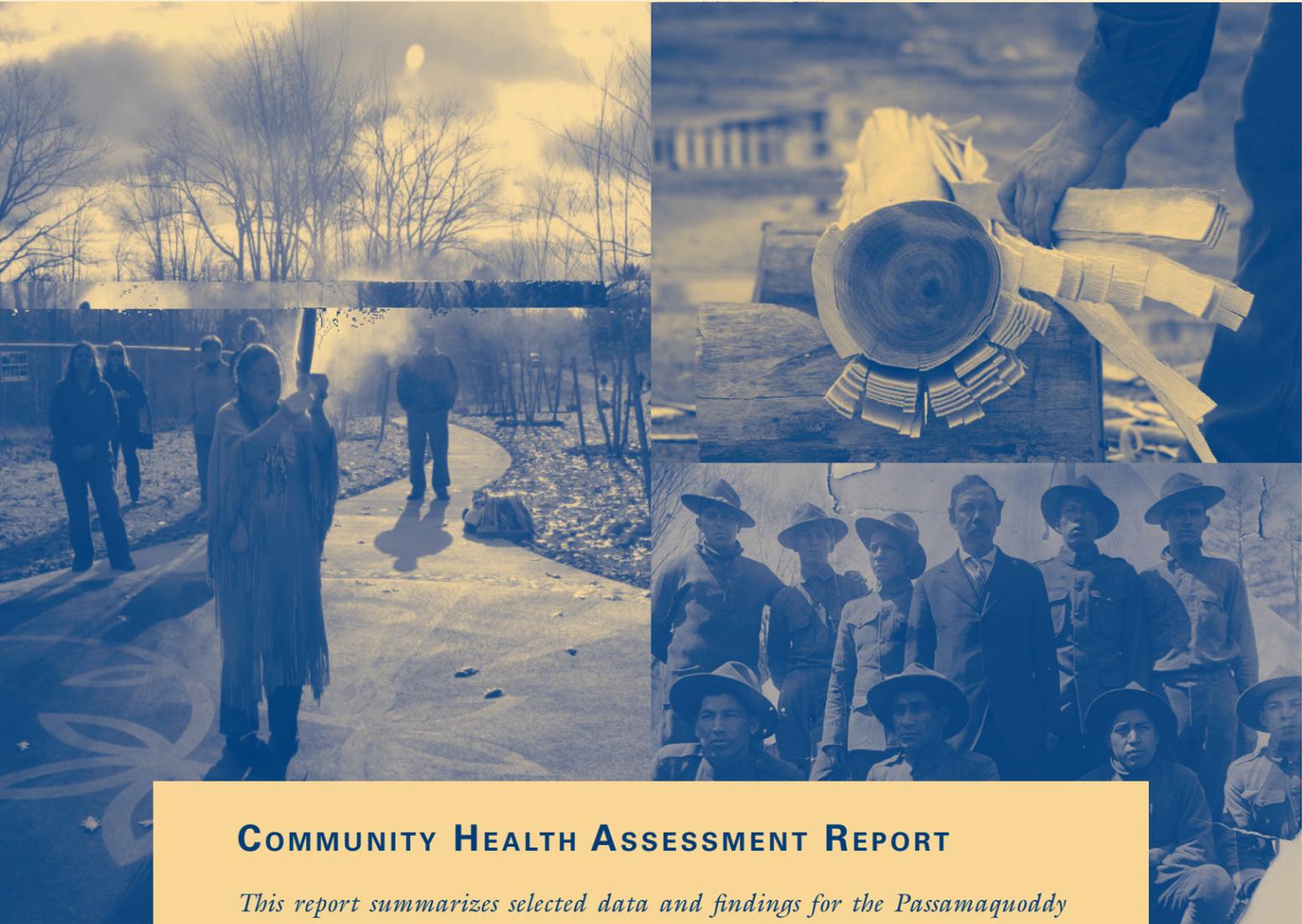




Passamaquoddy  
Health Needs  
Assessment  
Summary  
Report For  
Motahkomiqewiyik  
naka Sipayikewiyik



D E C E M B E R 2 0 1 3



## COMMUNITY HEALTH ASSESSMENT REPORT

*This report summarizes selected data and findings for the Passamaquoddy Motahkomikuk and Sipayik communities from the Waponahki Needs Assessment Survey. The report is designed to share key information with community members and other interested parties for further discussion, planning and follow-up.*

*The Waponahki Needs Assessment Survey was completed in 2012 by a partnership of Maine Tribal Health Directors and the University of Nebraska Medical Center. The School of Community and Population Health (SCPH) at the University of New England produced this report utilizing the data from that survey in collaboration with the Passamaquoddy tribal health directors and the Office of Health Equity of the Maine CDC.*

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## Background



The Passamaquoddy Tribe has two communities on the US side of the border, located 50 miles apart: Motahkomikuk and Sipayik, and one community on the Canadian side, Qonasquamkuk, at Saint Andrews, NB.

The Passamaquoddy, one of several tribes that form the Waponahki Confederacy, are known as the easternmost tribe in the United States. The ancestral home of the Passamaquoddy covers the entire St. Croix River watershed in Washington County, Maine, and adjacent New Brunswick, Canada.

The Passamaquoddy Tribe has two communities on the US side of the border, located 50 miles apart: Motahkomikuk and Sipayik, and one community on the Canadian side at St Andrews, NB.



The name Passamaquoddy derives from Peskotomuhkatiyik, which means “the people who spear pollack”.

Geographically, the term refers to the bay between New Brunswick (Canada) and Maine, where the St. Croix River widens to join the Atlantic Ocean. Linguistically, Passamaquoddy belongs to the Algonquian language family.

The Passamaquoddy language has been adversely impacted by the same social, political, and economic pressures that have marginalized indigenous languages all across North and South America. Over the past 200 years, the number of tribal members who grew up speaking Passamaquoddy declined drastically.

Passamaquoddy language survived, but is now largely spoken only in the privacy of people’s homes and among friends.

Currently, there are enough Native language speakers remaining in the tribe to support a revitalization effort. Early population estimates place Passamaquoddy population in the thousands. A census taken in 1812 enumerated only 360 persons due to casualties from both disease and war.

The Passamaquoddy Tribe supported the Americans in the Revolutionary War based on promises and assurances endorsed by General George Washington. Once the war was won, however, these alliances and promises remained unfulfilled. By the mid-1830’s, the Passamaquoddy Tribe had been deprived of almost all of its aboriginal territory. State-appointed Indian Agents exercised total control over the dispensing of food, clothing, shelter, health care, and other necessities. For many generations, the Passamaquoddy people lived at a bare subsistence level.

In 1790, Congress had passed the Non-intercourse Act to assert the role of the federal government as the only sovereign entity that could make treaties with tribes. In 1975, a United States District Court ruled that this law applied to the Passamaquoddy Tribe (Passamaquoddy v. Morton), invalidating any agreements made between the tribe and the state of Maine. The subsequent negotiated settlement of this case marked a critical turning point for the Passamaquoddy Tribe. The land claim settlement created a unique situation for the tribe. By virtue of the Act and its accompanying State legislation (the Maine Implementing Act), the tribe has both the sovereign status of a federally recognized Indian tribe and a unique status within Maine law. In the past thirty plus years since the land claims settlement, the Passamaquoddy Tribe has established basic governmental services, physical infrastructure (roads, sewer, water, housing, and schools), and health & social services in tribal territories.

While national data indicates that American Indians and Alaska Natives (AI/AN) experience significant health disparities when compared to White Americans, such as higher mortality rates from diabetes, suicide, unintentional injuries, sudden infant death syndrome, and alcohol related factors,<sup>1, 2</sup> a lack of data exists on the health status and health risk behaviors of Maine AI/AN populations at the aggregate and individual tribal level. The State’s four federally recognized tribes are: The Aroostook Band of Micmac Indians, The Houlton Band of Maliseet Indians, the Passamaquoddy Tribe (Motahkomikuk naka Sipayik) and The Penobscot Tribe.

The Behavioral Risk Factors Surveillance System (BRFSS) website on prevalence and trends data does not include data for AI/AN race.<sup>4</sup> Not only is there a lack of AI/AN data on the national level, it is not reflected in Maine State Public Health reporting.

In order to address the lack of data on the health of members of Maine Tribes, the Maine Tribal Health Directors identified the need for a multi-Tribal health assessment. In collaboration with researchers from the University of Nebraska Medical Center College of Public Health, the Tribal Health Departments conducted the Waponahki Health Assessment, the first-ever multi Tribal health assessment in the state of Maine. The results of the survey are expected to provide guidance for:

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

## SUMMARY REPORT OBJECTIVES

The major objectives of the Tribal Health Needs Assessment included:

- Present a comprehensive baseline profile of health status and health related indicators of the Waponahki of Maine;
- Identify critical health issues for follow-up

This summary report provides selected results of the Waponahki Health Assessment in order to provide tribal communities and their partners with a foundation for addressing identified health concerns.

1 Trends in Indian Health 2002-2003 part 4: General mortality statistics [Internet]. Available from: <http://www.ihs.gov/dps/files/Trends%20Part%204-General%20Mort.pdf>

2 Castor ML, Smyser MS, Tualii MM, Park AN, Lawson SA, Forquera RA. A nationwide population-based study identifying health disparities between American Indians/Alaska Natives and the general populations living in select urban counties. *Am J Public Health.* 2006 Aug;96(8):1478-84.

3 Johansson, P. Interview with Maine Tribal Health Directors: Hanson, A., Knox Nicola P, Ouellette J, Stevens A, Yarmal S. 2009.

4 Prevalence and trends data, Maine 2010, Race/Ethnicity Maine 2010 [Internet]. Available from: <http://apps.nccd.cdc.gov/brfss/display.asp?cat=DE&yr=2010&qkey=559&state=ME>

## Methods in Brief

### *Respondent Recruitment*

The Tribal Chief invited selected individuals to participate in the survey by letter. Tribal Health Departments then contacted selected participants to schedule an in-person interview. The interview was conducted in a private room in the Tribal Health Department building or other Tribal facility. All interviewers were tribal members who had been trained on: human subjects research, confidentiality/consent, sampling and survey topics, interview techniques, and the survey questions. Interviewers obtained a signed informed consent form from each respondent to conduct the interview. Following the completion of the survey, the interviewer offered a list of resources and support services for specific issues.

### *Community Specific Questions*

Community specific open-ended questions, developed by the tribal health directors and the University of Nebraska Medical Center research team, were designed to obtain tribal members' views on tribal health priorities, needed elder health services, and community sources of strength and pride.

### *Historical Loss Questions*

To examine historical trauma/response, the survey included a series of questions developed by Dr. Les Whitbeck<sup>4</sup> to examine historical grief losses and how frequently the people think about these losses as well as feelings associated with historical grief losses.

Respondents were asked of their thoughts regarding various facets of historical loss faced by Maine tribes, as well as any resultant negative feelings of mistrust or sadness. Specifically, respondents were asked about how often they thought about:

- Loss of tribal lands
- Loss of traditional spiritual ways
- Loss of family ties due to boarding/residential schools
- Loss of families from the reservation/reserve to government relocation
- Loss of self respect from poor treatment by state and federal government officials
- Loss of self respect from poor treatment by tribal government officials
- Loss of trust in Whites from broken treaties
- Loss of culture and language
- Loss from the effects of alcoholism

- Loss of respect by children and grandchildren for elders
- Loss of people through early death
- Loss of respect by children for traditional ways

Follow-up questions inquired about responses to these losses, including feelings of: sadness or depression; anger or rage; unwelcome remembrances of these losses; anxiety or nervousness; discomfort around white people; shame; a sense of weakness or helplessness; a loss of concentration; bad dreams or nightmares; isolation or distance from other people; loss of sleep; a need to drink or take drugs; fear or distrust of the intentions of white people.

### *Sensitive Topics*

Several survey questions dealt with very sensitive issues, such as racism and discrimination, historical loss/response, domestic violence, substance abuse, childhood trauma, HIV/AIDS, and depression/anxiety.<sup>3</sup> Because of the sensitive nature of these questions and responses, they are not included in this report.

### *Health Risk Questions*

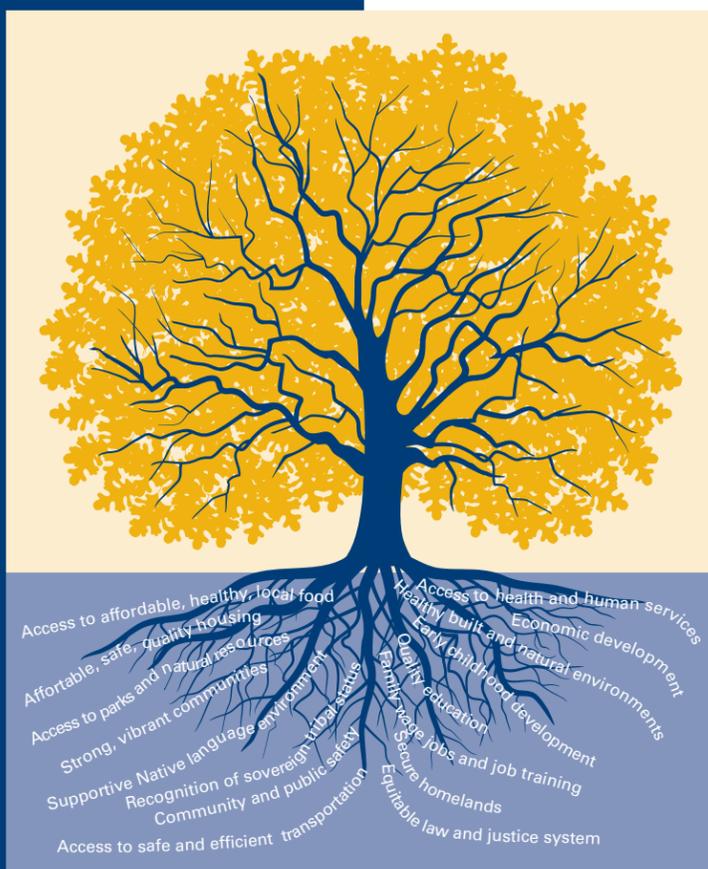
The Waponahki Health Assessment included questions from the Behavioral Risk Factors Surveillance System (BRFSS)<sup>2</sup>. The Tribal Health Directors selected the sections from the BRFSS for inclusion in the Waponahki Health Assessment. Examples of BRFSS questions include questions about diabetes, exercise, tobacco use, heart disease, cancer screening, food and nutrition, asthma, HIV risk factors, depression, anxiety, and adverse child experiences.

### *Data Weighting*

The data has been weighted to adjust for non-response, to match the total Passamaquoddy adult population eligible for the survey based upon sex and age. The weighted data set is designed to provide data that can be generalized to the Passamaquoddy population in Washington County, and allow statements to be made about this population compared to the total Washington County population and the state as a whole with a known standard error and confidence interval. The population size reflected in the final data set is the total adult Passamaquoddy population of Washington County, or 1,143 residents age 18 and older.

### *Limitations of the study*

- Social desirability
- Snapshot in time
- Self reported data
- Issues with comparison populations and methodology — e. g. in person interview vs. telephone survey for BRFSS
- Limited tribal population represented



<sup>1</sup> Image adopted from *Researching Indigenous Health: A Practical Guide for Researchers*, Alison Laycock with Diane Walker, Nea Harrison & Jenny Brands 2011, The Lowitja Institute, Melbourne, chapter 9, p. 147.



<sup>2</sup> The BRFSS was established in 1984 by the Centers for Disease Control and Prevention (CDC) data are collected monthly in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. More than 350,000 adults are interviewed each year, making the BRFSS the largest telephone health survey in the world.

<sup>3</sup> To examine perceived discrimination we used a series of questions developed by Dr. David R. Williams and the Behavioral Risk Factors Surveillance System in the survey.

<sup>4</sup> Whitbeck, Les, et al., *Conceptualizing and Measuring Historical Trauma Among American Indian People*. *American Journal of Community Psychology*, Vol. 33, Nos. 3/4, June 2004, p. 19-30.

## Findings

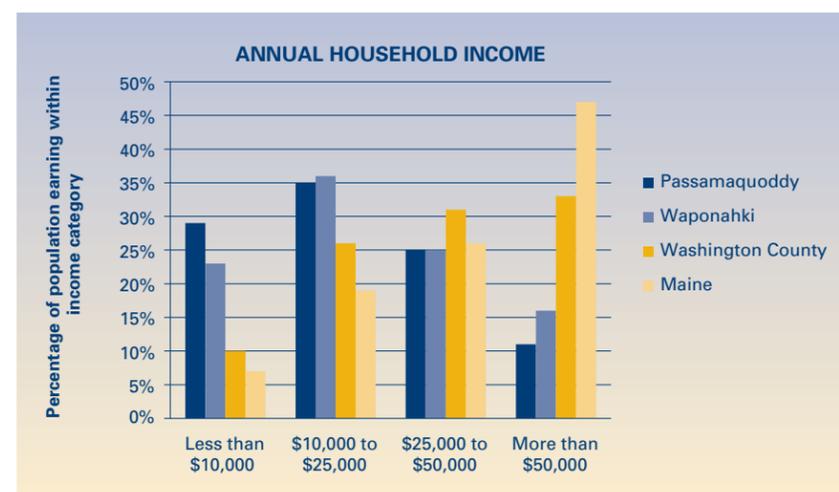
### Community Profile

To understand the health of a population, it is important to first understand social and economic factors that play a significant role in health. Below, we present a set of such indicators on the tribes from the assessment survey. These include income, education, and employment levels.

**SOCIAL AND ECONOMIC INDICATORS – HEALTH STATUS PROFILE (HSP)**

DEMOGRAPHICS	PASSAMAQUODDY	WAPONAHKI	WASHINGTON COUNTY	MAINE
Total Population Adults	1,143	2,586	26,292	1,053,828
Mean Annual Household Income	\$16,250	NA	\$43,818	\$59,300
Annual Household Income				
Less than \$10,000	29%	23%	10%	7%
\$10,000 to \$25,000	35%	36%	26%	19%
\$25,000 to \$50,000	25%	25%	31%	26%
More than \$50,000	11%	16%	33%	47%
% of Labor Force Unemployed	28%	21%	10%	8%
% Population Not Attaining H.S. Diploma (>25 yrs.)	20%	16%	20%	15%

On average, most Passamaquoddy are poorer than either Washington County or Maine residents, (see table), with 29% of Passamaquoddy and 23% of Waponahki making less than \$10,000/year, compared to 10% of Washington County and 7% of Maine. Additionally, more Passamaquoddy (28%) are unemployed compared with Washington County (10%) and Maine (8%). However, the proportion of the Passamaquoddy adult population over the age of 25 that has not attained a high school diploma (20%) is equal to Washington County (20%), and only slightly more than Maine (15%).



### Community Identified Strengths and Concerns

Respondents were asked open-ended questions about the major strengths of their community, sources of pride, and biggest health problems. The original analyses of these questions from the University of Nebraska Medical Center report are displayed in this section. Although Passamaquoddy responses were re-coded for this report, they basically confirmed the same ranking patterns.

Both Passamaquoddy and Waponahki respondents overall identified similar community strengths. The most common answer was “Sense of Community, Solidarity and Shared Values,” followed by “Culture” and “Family/Family Ties” for both groups. However, among Passamaquoddy, “Language” was ranked fourth, followed by “The Elders,” while among the entire Waponahki sample “Health Care” was ranked fourth and “Language” was fifth.

When respondents were asked to identify specific “Sources of Pride” for their communities, responses were again very similar between Passamaquoddy and Waponahki. The most common answer was “Culture” for both groups. For the Passamaquoddy, “Language” was ranked second and “Children/Next Generation” was third, while Waponahki ranked these two as third and second, respectively. Both identified “Native/Tribal Identity” as fourth and “The Elders” as fifth.

Finally, when respondents were asked to identify one or more health issues of concern for their communities, both Passamaquoddy and Waponahki had “Drugs/Substance Abuse” as their most commonly mentioned concern, followed by “Diabetes” and “Alcohol”. The fourth most common response for Passamaquoddy was “Cancer,” and for Waponahki “Cancer” was fifth. This pattern was reversed for the fifth ranking, with Passamaquoddy having “Obesity/Overweight” in this ranking and Waponahki reporting “Cancer.”

**TOP 5 MAJOR STRENGTHS OF YOUR COMMUNITY**

RANK	PASSAMAQUODDY	WAPONAHKI
1	Sense of Community, Solidarity & Shared Values (count = 164)	Sense of Community, Solidarity & Shared Values (count = 325)
2	Culture* (count = 51)	Culture* (count = 92)
3	Family/Family Ties (count = 51)	Family/Family Ties (count = 87)
4	Language (count = 42)	Health Care (count = 58)
5	The Elders (count = 26)	Language (count = 56)

**TOP 5 GREATEST SOURCES OF PRIDE IN YOUR COMMUNITY**

RANK	PASSAMAQUODDY	WAPONAHKI
1	Culture* (count = 227)	Culture* (count = 400)
2	Language (count = 102)	The Children (count = 149)
3	The Children (count = 87)	Language (count = 129)
4	Native & Tribal Identity (count = 48)	Native & Tribal Identity (count = 93)
5	The Elders (count = 39)	The Elders (count = 62)

**TOP 5 BIGGEST HEALTH PROBLEMS FACING YOUR COMMUNITY**

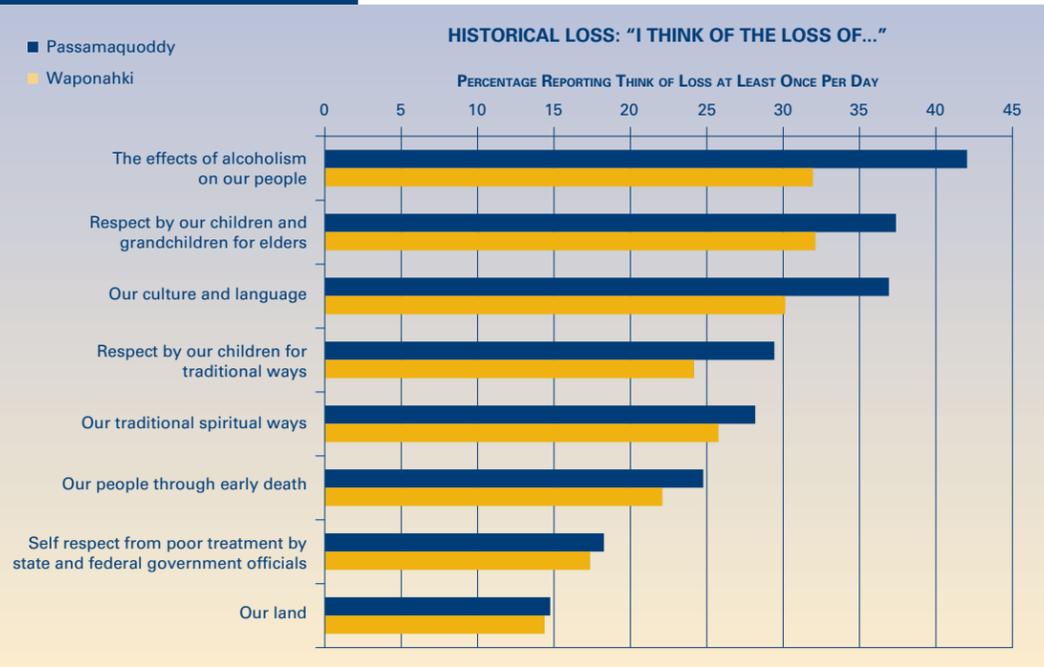
RANK	PASSAMAQUODDY	WAPONAHKI
1	Drug/Substance Problems (count = 338)	Drug/Substance Problems (count = 584)
2	Diabetes (count = 217)	Diabetes (count = 460)
3	Alcohol Problems (count = 204)	Alcohol Problems (count = 363)
4	Cancer (count = 126)	Obesity/Overweight** (count = 185)
5	Obesity/Overweight* (count = 67)	Cancer (count = 184)

\* This category includes responses about culture, heritage/history, customs, and traditions as well as tribal/cultural activities. Count refers to the number of survey participants who listed a specific topic in their response to the question.

This table excerpted from PIPtHNA Report – pg 11

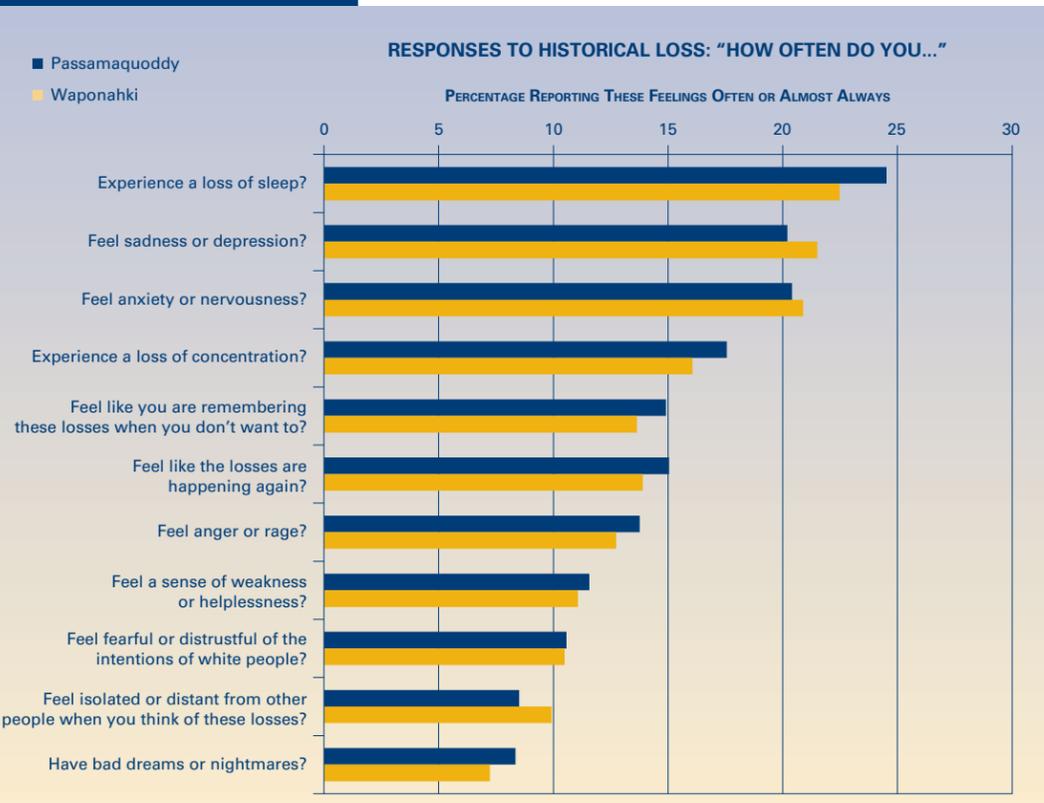
\*\*This category also includes weight management issues. Count refers to the number of survey participants who listed a specific topic in their response to the question. This table excerpted from PIPtHNA Report – pg 9

### Historical Loss/Response



Tribal losses are thought about daily, or multiple times a day, among many members. "Losses from the effects of alcoholism on our people" is thought about the most (10% think about it multiple times a day; 32% think about it daily), followed by "Loss of respect by our children and grandchildren for elders" (9% think about it multiple times a day; 29% think about it daily), and "Our culture and language" (9% think about it multiple times a day; 28% think about it daily).

Primary responses to historical loss questions include loss of sleep, feelings of sadness or depression, as well as anxiety or nervousness.

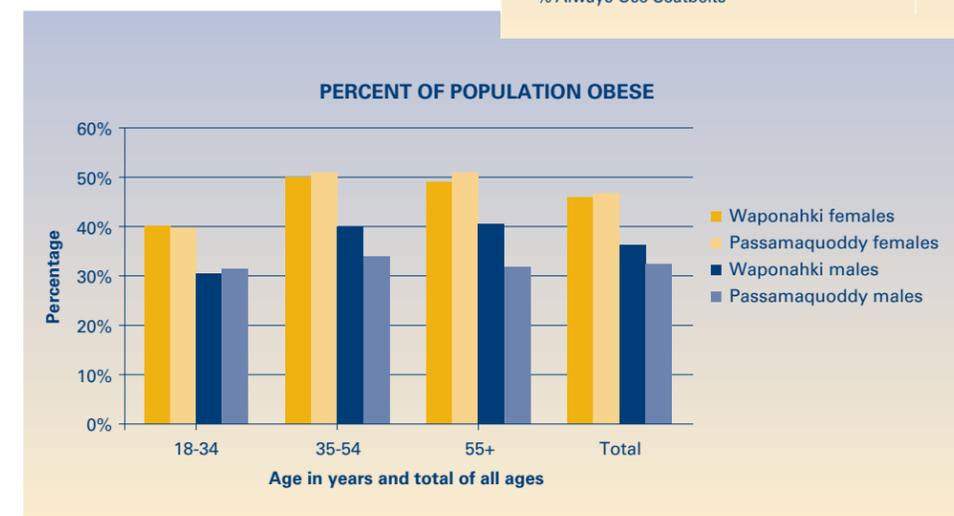


### Health Status Indicators

Self-reported health status provides a good indication as to the overall health status of a population. 27% of the Passamaquoddy adults surveyed reported their health as fair or poor. This is similar to what Waponahki adults reported and to what Washington County residents reported in the 2010 BRFSS survey. All are much higher when compared with Maine adults where only 15% reported their health as fair or poor.

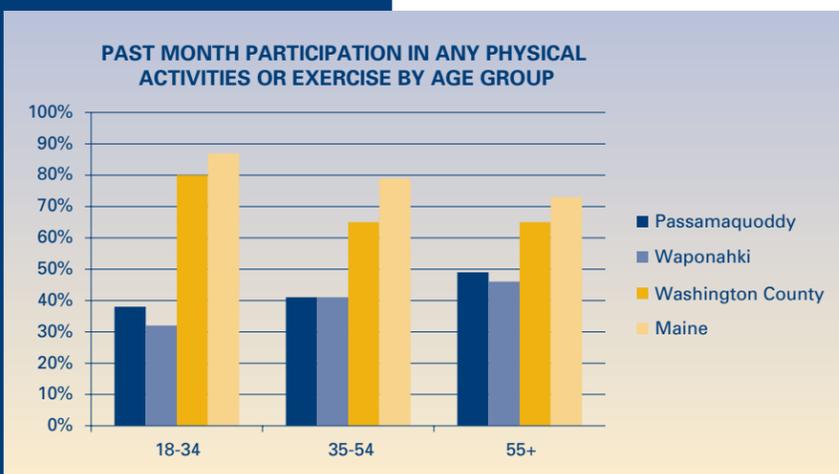
#### OBESITY & BODY MASS INDEX (BMI)

Obesity is a significant risk factor for developing many chronic diseases, such as diabetes, cancer, and/or cardiovascular disease. Body Mass Index, which is calculated using a person's height and weight, is used to screen for obesity/overweight. Normal BMI is 18.5 to 24.9. BMI range for overweight individuals is 25.0 to 29.9 and obese range is 30.0 and above (CDC). Currently, 42% of Passamaquoddy and 44% of Waponahki are reportedly obese. This is very high compared with Washington County (33%) and Maine (28%) both of which are already higher than in most states.



PERCEIVED HEALTH STATUS	PASSAMAQUODDY	WAPONAHKI	WASHINGTON COUNTY	MAINE
% Excellent, Very Good or Good	73%	74%	74%	85%
% Fair or Poor	27%	26%	26%	15%
% Population with 11+ Days Past Month Mental Health Not Good	21%	23%	12%	11%
11+ Days Past Month Poor Mental or Physical Health kept from doing usual activities	16%	15%	11%	8%

PERCEIVED HEALTH STATUS	PASSAMAQUODDY	WAPONAHKI	WASHINGTON COUNTY	MAINE
% Overweight by BMI	35%	33%	39%	37%
% Obese by BMI	42%	44%	33%	28%
Adequate Exercise – at Least 60 min. vigorous OR 150 min. moderate	37%	37%	34%	34%
Past month participation in any physical activities or exercise	58%	61%	68%	78%
Female	54%	59%	73%	77%
Male	63%	64%	64%	78%
18-34	38%	32%	80%	83%
35-54	41%	41%	65%	79%
55+	49%	46%	65%	73%
% No Physical Activity Past Month	42%	39%	32%	22%
% Consume 5 or More Fruit & Vegetables Everyday	8%	9%	27%	28%
% Current Smokers	54%	51%	31%	22%
% Always Use Seatbelts	65%	73%	69%	83%

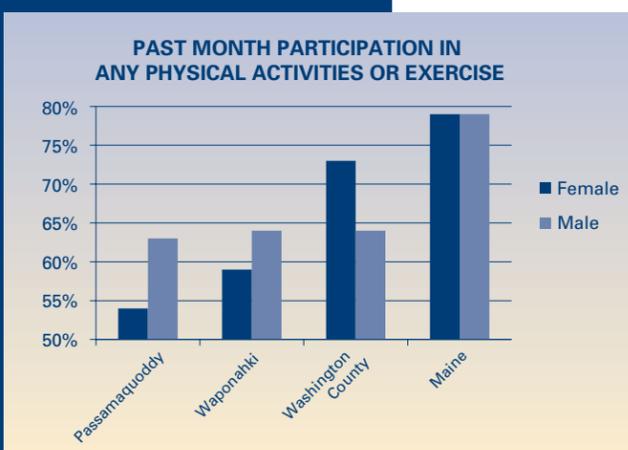


**PHYSICAL ACTIVITY**

The US CDC recommends that all adults maintain an exercise regimen of at least 150 minutes of moderate intensity exercise, such as brisk walking, or 75 minutes of vigorous intensity exercise, such as running, each week in order to see health benefits. Regular physical activity has a large number of benefits, including:

- Lowered risk of premature death
- Lowered risk of chronic disease
- Reduced feelings of depression, anxiety, and improved psychological well-being (CDC)

A large proportion of Passamaquoddy (42%) and Waponahki (39%) adults are not physically active and lead sedentary lifestyles. This is much higher than either Washington County (32%) or Maine adults (22%).



**FRUIT AND VEGETABLE CONSUMPTION**

Fruits and vegetables are essential for maintaining a healthy weight and for lowering one’s risk for chronic diseases including diabetes and some cancers. Current dietary guidelines from the U.S. Dept. of Agriculture suggest everyone should eat at least 5 to 13 servings of fruits and vegetables (2.5 to 6.5 cups) every day. Currently, only 8% of Passamaquoddy and 9% of Waponahki reported eating enough fruits and vegetables to meet the current standards for a healthy diet.

**TOBACCO USE**

Smoking is widely regarded as the single most preventable cause of disease and death in the U.S. Smoking tobacco has been found to harm every organ in the human body and leads to negative health conditions, such as respiratory disease, cardiovascular disease, and several different types of cancer (CDC). Secondhand smoke exposure from cigarettes also has similar negative health effects on adults; including heart disease and cancer. Children and infants exposed to secondhand smoke get sick more often with serious illnesses such as bronchitis and pneumonia (CDC). The prevalence of smoking among both Passamaquoddy (54%) and Waponahki (51%) adults is significantly higher than among Washington County or Maine adults (31% and 22%). For Waponahki and Passamaquoddy, females are somewhat more likely to currently smoke; female 56% and 53% respectively, males 49% and 51% respectively.

**SEAT BELT USE**

Motor vehicle crashes are the leading cause of death for the population between the ages of 5 to 34. Seat belts has been found to be the most effective way of reducing the chance of injury or death in a crash (CDC). It is important to use seat belts on every trip in a

car, no matter how short a trip it is. Currently, only 65% of Passamaquoddy and 73% of Waponahki adults reportedly use a seat belt for every car ride, which is similar to Washington County adults (69%) but lower than Maine adults (83%).

*Screening and Prevention*

**ORAL HEALTH**

Poor oral health indicates a person might be at higher risk for developing certain chronic diseases, such as respiratory disease, cardiovascular disease, and diabetes. Regular visits to the dentist are recommended for preventative oral screening purposes. Passamaquoddy (67%) and Waponahki (66%) report comparable rates of dental visits in the past year to Washington County (66%) but lower rates than Maine (78%).

ORAL HEALTH				
ORAL HEALTH	PASSAMAQUODDY	WAPONAHKI	WASHINGTON COUNTY	MAINE
% Visit Dentist/Dental Clinic in Past Year	67%	66%	66%	78%

**IMMUNIZATIONS**

It is recommended that anyone over the age of 6 months receive a seasonal flu vaccine before the onset of flu season every year, which typically lasts from October to May. However, it is especially important for those over the age of 65 to receive the flu vaccination due to their increased susceptibility to complications and severe illness. 80% of Passamaquoddy and 82% of Waponahki adults over age 65 report receiving a flu vaccination in the past year, which is high when compared to 72% for Maine adults over age 65.

Pneumonia vaccinations are typically given to children over the age of 2 and should also be given to adults over the age of 65. Again, a large proportion of both Passamaquoddy (80%) and Waponahki (75%) adults over the age of 65 report having a pneumonia vaccination.

IMMUNIZATIONS				
IMMUNIZATIONS	PASSAMAQUODDY	WAPONAHKI	WASHINGTON COUNTY	MAINE
% Received Flu Shot in Past Year (65+)	80%	82%	NA	72%
% Ever Had Pneumonia Vaccination (65+)	80%	75%	72%	73%

**CANCER SCREENING & PREVENTION**

The U.S. Preventative Services Taskforce (USPSTF) provides periodic preventative screening and vaccination recommendations for the U.S. population.<sup>5</sup> The most recent cancer screening recommendations are:

- All women between the ages of 40 and 74 should have routine mammograms once every two years in the absence of symptoms of breast cancer.
- Adults between the ages of 50 and 74 should have a colonoscopy (every 10 years), sigmoidoscopy (every 5 years, every 3 years with blood stool test) and home blood stool test (every year) to screen for colorectal cancer.
- All women over the age of 18 should have a regular pap smear to test for cervical cancer at least every 3 years.
- Testing for prostate cancer using either a Digital Rectal Exam or a Prostate specific antigen (PSA) test is not recommended for any adult not showing symptoms of prostate cancer.

**CANCER SCREENING & PREVENTION**

CANCER HEALTH	PASSAMAQUODDY	WAPONAHKI	WASHINGTON COUNTY	MAINE
% Colonoscopy in Past 2 Years (Age 40+)	25%	26%	NA	NA
% Colonoscopy in Past 2 Years (Age 50+)	34%	36%	48%	50%
% Digital Rectal Exam Past Year (Age 40+)	22%	22%	35%	44%
% Home Blood Stool Test Past Year (Age 40+)	7%	13%	33%	25%
% PSA Test in Past 2 Years (Age 40+)	42%	38%	51%	50%
% Mammogram in Past 2 Years (Age 40+)	74%	78%	82%	81%
% Pap Smear in Past 3 Years (18+)	82%	83%	82%	81%
% Ever received an HPV vaccine (Age 18-26)	63%	44%	NA	NA

- Human Papillomavirus (HPV) vaccination, which assists in the prevention of cancers such as cervical cancer, is recommended for all women and men over the age of 13, until the age of 26.

Survey results indicate that Passamaquoddy and Waponahki females have comparable rates of cancer screening compared to women in Washington County and Maine. 82% of Passamaquoddy women have received a pap smear in the

past 3 years, 83% for all Waponahki women and 78% for Washington County. 74% of Passamaquoddy women (40+) also say they have received a mammogram in the past 2 years, which is comparable to Washington County and Maine. 63% of Passamaquoddy women report being vaccinated for HPV; however, only 34% of Passamaquoddy over the age of 50 say they have received a colonoscopy in the past 2 years.

**MATERNAL AND CHILD HEALTH**

Prenatal care allows doctors and midwives to treat any health issues over the course of pregnancy. Early prenatal care can help improve child and maternal health and

reduce the risk of maternal death or miscarriages. Almost all Passamaquoddy (97%) and Waponahki (95%) women who have been pregnant in the past 5 years report receiving prenatal care as early as they wanted.

However, a very high proportion of Passamaquoddy and Waponahki women (36% and 39%, respectively)

report smoking cigarettes while pregnant. Smoking during pregnancy puts both mothers and babies at high risk for premature birth (being born too early), birth defects, and infant death.

*Selected Health Outcomes and Chronic Conditions*

**CARDIOVASCULAR DISEASE**

Cardiovascular disease is a category of disorders affecting the heart and blood vessels and includes coronary heart disease, diseases of the heart, arteriosclerosis, hypertension, and cerebrovascular disease (stroke). Much like other chronic diseases, prevention of cardiovascular disease requires maintaining a healthy diet, getting plenty of exercise, and

avoiding cigarettes. In addition, medical risk factors for cardiovascular disease include hypertension and high cholesterol.

The proportion of Passamaquoddy and Waponahki adults who report having a heart attack (4% and 6%, respectively) or being diagnosed with angina/coronary artery disease (4% and 6%, respectively) is similar to adults in both Washington County and Maine.

**HYPERTENSION**

Hypertension, or high blood pressure, is a major risk factor for strokes, heart attacks, heart failure, chronic kidney disease, and other chronic conditions. The prevalence of diagnosed hypertension among Passamaquoddy (43%) and Waponahki (40%) adults is high compared to the State of Maine (30%), but similar to adults in Washington County (40%).

**HIGH CHOLESTEROL**

High cholesterol significantly raises the risk of cardiovascular diseases, such as stroke and heart disease. It is highly recommended that adults have regular cholesterol screenings over the age of 20 at least every 5 years – especially men over the age of 35 and women over the age of 45. Passamaquoddy (36%) and Waponahki (35%) adults both report slightly higher prevalence of high cholesterol compared with Maine (29%). However, the prevalence is similar to Washington County adults (33%).

**DIABETES**

The estimated prevalence of diabetes is 16% in Passamaquoddy adults and 17% for all Waponahki adults. This is much higher than reported prevalence in either Washington County (13%) or Maine (10%).

Prevention of diabetes requires adequate exercise, a healthy diet with low amounts of sugar and fat, and not smoking. Currently, a large percentage of both Passamaquoddy and Waponahki adults are obese (42% and 44%, respectively), a major risk factor for developing diabetes. Many Passamaquoddy and Waponahki also report being a current smoker (54% and 51%, respectively) and not exercising (42% and 39%, respectively). Finally only 8% of Passamaquoddy and 9% of Waponahki report eating at least 5 servings of fruits and vegetables every day.

**CARDIOVASCULAR DISEASE**

CARDIOVASCULAR DISEASE	PASSAMAQUODDY	WAPONAHKI	WASHINGTON COUNTY	MAINE
% Diagnosed with Heart Attack	4%	6%	7%	4%
% Diagnosed with angina or coronary artery disease	4%	6%	5.1%	6.3%
% Diagnosed with congestive heart failure	2%	2%	NA	NA

**HYPERTENSION**

HYPERTENSION	PASSAMAQUODDY	WAPONAHKI	WASHINGTON COUNTY	MAINE
% Diagnosed with high blood pressure	43%	40%	40%	30%

**HIGH CHOLESTEROL**

CHOLESTEROL	PASSAMAQUODDY	WAPONAHKI	WASHINGTON COUNTY	MAINE
% Diagnosed with high cholesterol	36%	35%	33%	29%

**DIABETES**

DIABETES	PASSAMAQUODDY	WAPONAHKI	WASHINGTON COUNTY	MAINE
% Diagnosed with Diabetes	16%	17%	13%	10%
Ever taken a course or class in how to self manage diabetes	37%	43%	29%	54%
Had A1C checked at least once in past year	97%	96%	72%	89%
% Reported pupil dilation eye exam in past year	79%	80%	78%	76%
% Reported foot examination in past year	83%	80%	73%	78%

## Final Thoughts

Of those Passamaquoddy and Waponahki diagnosed with diabetes, almost all (97% and 96%, respectively) say they have had their A1C checked at least once in the past year. This is much higher than adults with diabetes in either Washington County (72%) or Maine (89%). A large proportion of Passamaquoddy and Waponahki adults with diabetes also report having a pupil dilation eye exam and foot exam in the past year. However, the proportion of Passamaquoddy and Waponahki adults with diabetes who have taken a course or a class on how to self-manage their diabetes is low (37% and 43% respectively) compared to Maine (54%), but higher than in Washington County (29%).

### ASTHMA

### ASTHMA

Asthma is a disease characterized by recurrent attacks of breathlessness and wheezing, which vary in severity and frequency from person to person. This condition is due to inflammation of the air

passages in the lungs. In an attack, the lining of the passages swell causing the airways to narrow, which reduces the flow of air in and out of the lungs (<http://www.who.int/respiratory/asthma>).

The proportion of Passamaquoddy (18%) and Waponahki (22%) adults reporting an asthma diagnosis is higher than both Washington County (11%) and Maine (10%). Asthma can be brought about or worsened by a number of different factors, including cigarette smoke, mold, or other environmental factors.

### Mental Health and Substance Use

#### ALCOHOL CONSUMPTION

Binge drinking, which is defined as drinking 5 drinks for males or 4 drinks for females during one occasion, is more common among Passamaquoddy and Waponahki respondents when compared to Washington County and Maine – especially among women respondents. 34% of Passamaquoddy and 29% of Waponahki female respondents reported binge drinking in the past month, compared with 8% for Washington County and 10% for Maine women.

Our collective health status is determined by many factors beyond the control of individuals. It's well known in public health that the places where we live work and play, income, wealth and poverty, social networks, racism and many other factors determine our health as a population. Our enjoyment of the basic human right to live safely and peacefully includes access to good housing, health services, education, and employment. When not employed, the social safety net should provide for the basic needs that enable us to maintain good health. When our health status is compromised due to illness, we need access to services to help regain, maintain, and improve health. Issues of inequality, such as racism and discrimination have persistent negative effects on individual and community health. Health status and health inequities reflect the advantages that wealth, influence, and other resources can have in determining community health.

Tribal communities are rooted in values and traditions expressed in Native languages that reflect our fundamental concern with community health. The Passamaquoddy language contains instructions about how to conduct oneself and how to maintain and develop relationships, in families and in the community, that will strengthen the fabric of our societies and provide a healthy environment for our children and generations to come. Zunkawedahuswogn (peace) forms the basis for health and strength in relationships providing a firm foundation for Wolibmousu (living the good life). Peace produces health as it provides security and an environment in which good relationships and good health can be nurtured. The revitalization of the Passamaquoddy language enables us to provide a collective expression of essential Passamaquoddy values and practices to build and sustain individual and community health.

In this survey, tribal members identified these community strengths among others: our language, our culture, our relationship with the land, close community ties, coming together in times of need, compassion, our ceremonies, our humor, our spiritual beliefs, helping each other, survival skills, resilience, extended family, kindness, pride, passion for others, strength, and hope.

Native communities share a history of dispossession and oppression that continues to negatively affect population health. We recognize that the impact of racism and sustained oppression reflected in institutional policies and practices prevents us from the enjoyment of basic human rights including health. While we have survived, endured, and become stronger and more resilient, the cost to our personal, family, and collective health has sustained negative intergenerational effects.

Land, language, and health are interwoven. We struggle on a daily basis with institutional practices designed to further our dispossession and alienation.

We report here on our current state of health but only selected measures are included. In the survey we asked questions about health, health risks, and health outcomes. We included questions about the use of alcohol and drugs and violence on our communities. Mental health and substance abuse have significant impact on health status. The findings in this report will be used to share select information about the state of Passamaquoddy health. Additional information, included in the complete version of the report, will be used by the tribe and its partners to address important tribal health concerns.



MENTAL HEALTH & SUBSTANCE ABUSE				
MENTAL HEALTH & SUBSTANCE ABUSE	PASSAMAQUODDY	WAPONAHKI	WASHINGTON COUNTY	MAINE
% Binge drinking in past month (5 or more for males and 4 or more for females)	35%	34%	14%	15%
Female	34%	29%	8%	9%
Male	36%	40%	22%	20%
% Currently Depressed	33%	35%	14%	10%
Female	37%	37%	N/A	11%
Male	30%	33%	N/A	9%
% Diagnosed with Depression	30%	34%	22%	21%
% Diagnosed with Anxiety	27%	32%	25%	17%
% During past 12 months – Felt so sad or hopeless almost every day for two weeks that stopped doing usual activities	21%	20%	NA	NA
% During past 12 months – Consider attempting suicide	7%	9%	NA	NA



We draw your attention to some of the findings that indicate areas in which we have made good progress as well as areas for improvement. The health services offered through the tribal health clinics have led to improvements in preventive services and chronic disease management. Long-term improvements in health status require attention to social determinants of health and broad based policy interventions at every level. Addressing important health issues requires leadership and courage at every level – individual, family, community, institutional and tribal state and federal levels. We all can contribute to raising the health status of our communities. We must continue to measure health outcomes and health status, and to assess progress every step of the way. We can move to redirect resources to those areas requiring more attention. This report takes an important first step to raise awareness of particular health issues and concerns and to draw attention to the community strengths and resources that can be brought to bear to make improvements. Genuine sustainable partnerships, allies, and networks committed to improving health can be further developed and strengthened. This report provides us with a place to start.

## Appendix

### METHODS

The University of Nebraska conducted the original study and this report reflects secondary data analysis by SCPH.

### SURVEY PARTICIPANTS AND SAMPLE SELECTION

For the Passamaquoddy, the Waponahki Health Assessment Survey sample included randomly selected adult tribal members 18 years and over, who lived within Washington County, Maine, where the two Passamaquoddy communities in the US are located. The sample included tribal members living in the area regardless of whether or not they utilize tribal health center services.

Participants were randomly selected for the survey using Tribal rolls and addresses. Each person 18 years old or older living within the Tribal health service delivery area had an equal chance of being selected. Participants included both Tribal Health Center and non-Tribal Health Center users.

### SURVEY DESIGN

The Tribal Health Directors identified the survey topics, while the University of Nebraska Medical Center team identified existing survey instruments suited to capture information of interest. Tribal Health Directors reviewed all questions, revised some questions and developed a few new questions. The survey covered a variety of topics and included 242 questions.

### SURVEY TOPICS

Survey topics included in this report:

- health status
- contributors to health – such as smoking, seat belt use, fruit and vegetable consumption, overweight, and physical activity
- community specific questions – community strengths and concerns
- screening and prevention
- health outcomes
- mental health
- historical trauma/response

The Passamaquoddy Tribe has reserved its right not to publish data that is sensitive in nature. Other survey topics not included in this report:

- substance abuse, racism, interpersonal violence, childhood trauma, and HIV/AIDS.

### ANALYSIS

For any given question if all of the participants answered, we can be 95% sure that the answer reflects what the total population would say within + or minus 3%. The secondary data analysis was conducted by SCPH and the results are weighted to reflect the composition of the population according to age and gender.

For many states, BRFSS is the only available source of timely, accurate data on health-related behaviors. Tribes and urban Indian programs have conducted surveys of their constituents using questions from BRFSS as a method for comparing their local results with county-, state-, or national-level BRFSS results.

Throughout this report we use US Census 2010, State of Maine BRFSS, and OneMaine data<sup>6</sup> as a means of comparison to Tribal data from the 2010 Waponahki Health Assessment. All State of Maine BRFSS data used for comparison are from 2009 or 2010. Respondents in the 2010 State of Maine BRFSS were 95.7% White, 0.4% Black, 1.5% Hispanic, 1.5% other, and 1.0% Multiracial. The State of Maine 2010 BRFSS data does not list American Indian/Alaska Native participation.

NUMBER OF ACTUAL INTERVIEWS AND ESTIMATED PRECISION			
TRIBE	TOTAL TRIBAL ADULT ELIGIBLE POPULATION RESIDING WITHIN WASHINGTON COUNTY	COMPLETED SURVEYS BY TRIBE	CONFIDENCE INTERVAL
All Passamaquoddy	1143	547	+/-3.03
Total Waponahki	2586	1127	+/-2.19

<sup>6</sup> In 2010, OneMaine Health, a collaborative of Eastern Maine Healthcare Systems, MaineHealth, and Maine General, commissioned UNE SCPH and partners to conduct a state-wide Community Health Needs Assessment. The research team conducted a telephone survey based on BRFSS questions. Where comparable, we have used data results from this survey for Washington County and Maine for certain measures.

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