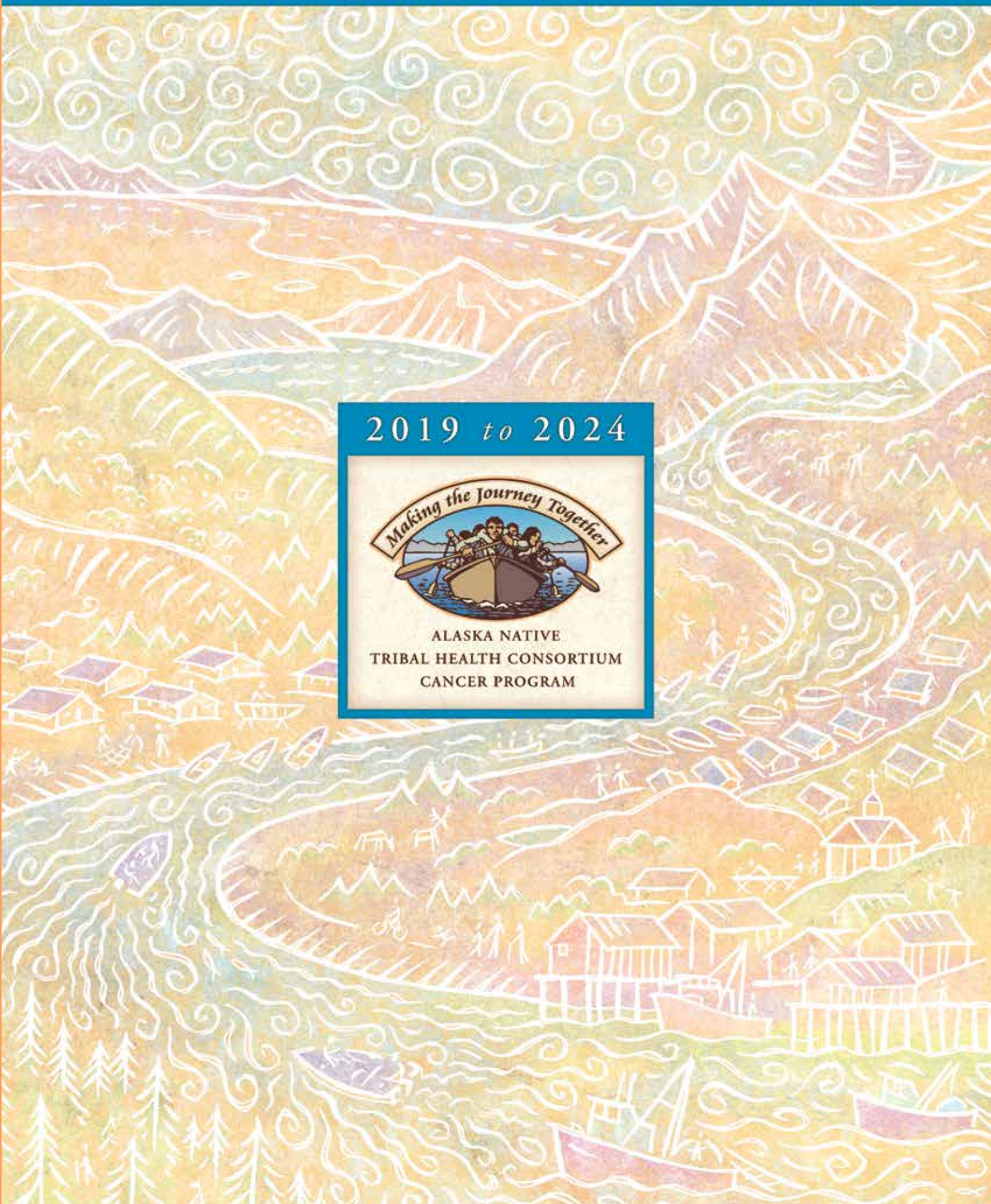
Comprehensive Cancer Plan *for the* Alaska Tribal Health System



2019 *to* 2024

Making the Journey Together

ALASKA NATIVE
TRIBAL HEALTH CONSORTIUM
CANCER PROGRAM

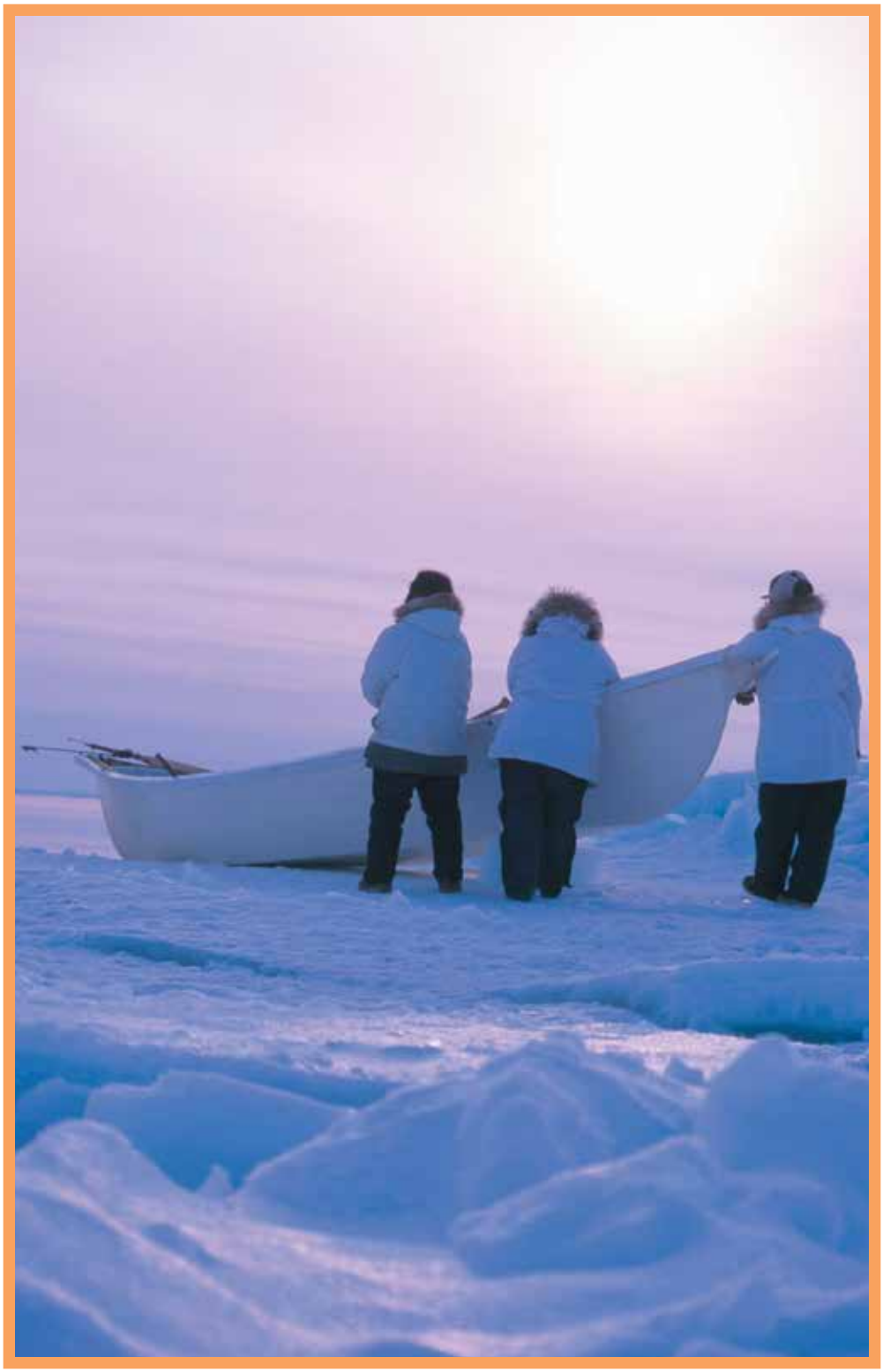


Photo © ANTHC Marketing

VISION

The Alaska Native people will be cancer-free

MISSION

Provide the Alaska Native people with cancer prevention, screening, diagnosis, treatment, survivorship, and palliative education and care through a comprehensive, integrated Alaska Native cancer program

GOAL

Reduce cancer death and disease among Alaska Native people

Dedication

Dedicated to Alaska Native people who make the cancer journey.
May their pain and suffering return as skills and knowledge
so that Alaska Native people and all people can be cancer-free.

Acknowledgements

To honor the waterways that are so important to Alaska Native life, the Alaska Native Tribal Health Consortium Cancer Program logo shows a boat with a cancer patient at the bow navigating the way. Behind the patient are family, friends, and healthcare providers supporting the cancer journey.

The patient is the focus of the journey and takes charge of fighting the disease—spiritually, mentally, emotionally, and physically. Yet, the patient does not make the journey alone.

We make the journey together.

Special Thanks

A sincere thank you to the many individuals who helped write the Cancer Plan for the Alaska Tribal Health System, 2019 to 2023. Your expertise and generosity of time are greatly appreciated. Together we share in the hope that the goals, objectives, and strategies included in the plan will reduce the burden of cancer among the Alaska Native people. – Judith Muller, MHA, MSc (Econ)

We would like to acknowledge that this publication was supported by Cooperative Agreement (Grant #NU58DP006325) funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

CANCER@ANTHC.ORG

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3	Norton Sound Health Corporation
4	Yukon-Kuskokwim Health Corporation
5	Bristol Bay Area Health Corporation
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7	Eastern Aleutian Tribes
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Venetie
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Noorvik
Selawik
Bettles
Evansville
Alatna
Allakaket
Beaver
Birch Creek
Circle
Buckland
Hughes
Stevens Village
Central
Huslia
Rampart
Livengood
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Healy
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Petersburg
Wrangell
Sitka
Hyder
Kasaan
Ketchikan
Saxman
Klawock
Craig
Metlakatla
Hydaburg
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Village
Regional Hospital
Alaska Native Medical Center
(jointly managed by ANTHC & SCF)
Regional Area Border
Road
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300
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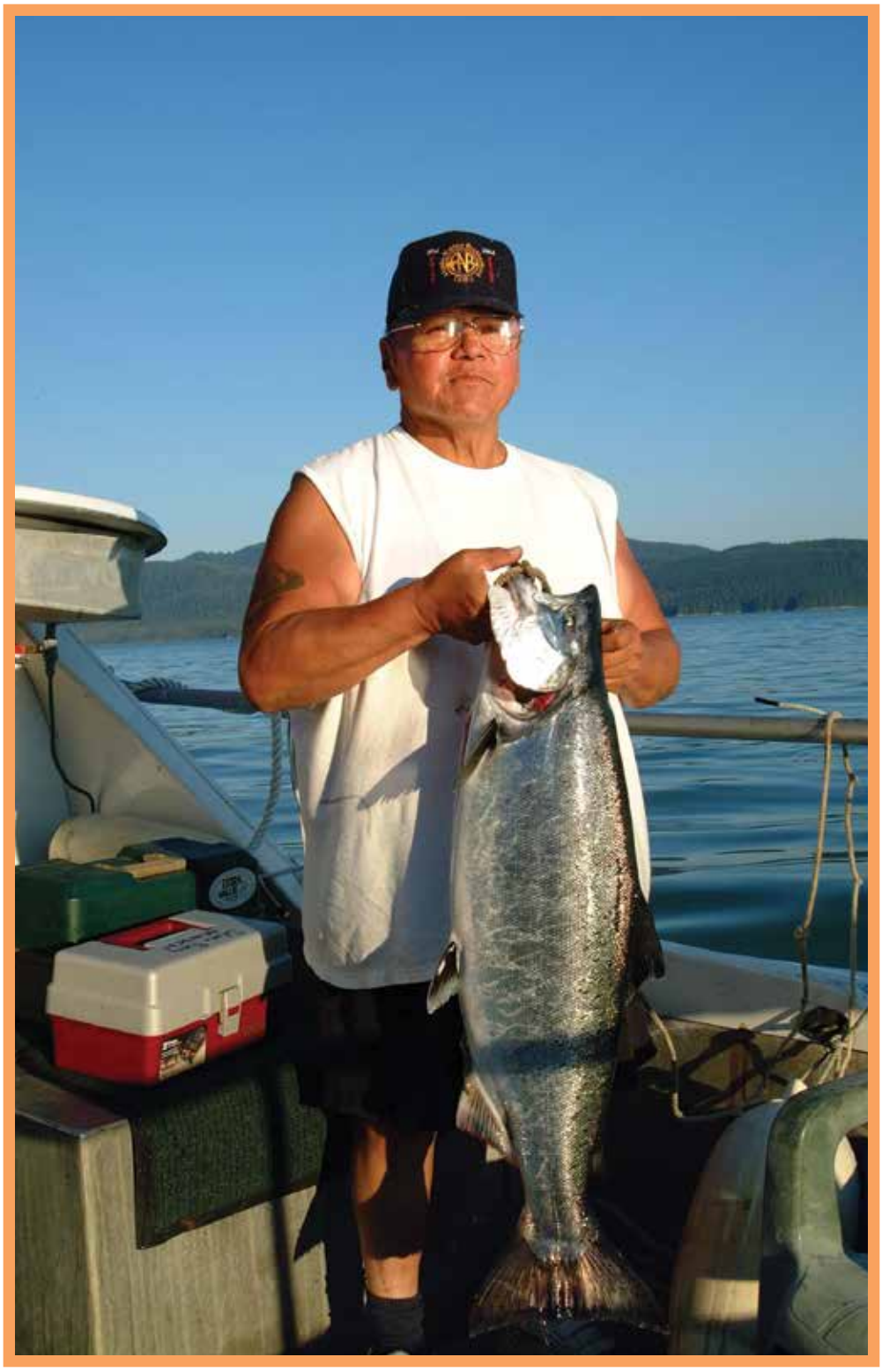


Bob Beierly.

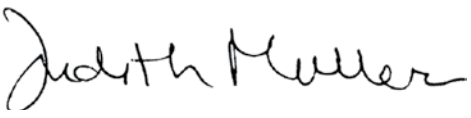
INTRODUCTION

Cancer continues to be the leading cause of death for Alaska Native people. Yet we can see progress when our data show that many people are now living longer and with a better quality of life after a cancer diagnosis than previously. Some cancers can even be considered chronic diseases, like heart disease or diabetes. Like other chronic diseases, cancer must be treated when it is diagnosed and continuously monitored throughout a person's life. Also, like other chronic diseases, the earlier cancer is found, the easier it is to treat, and the more likely the treatment will be successful. This plan emphasizes the importance of preventing cancer and screening for its early detection, understanding that we can prevent some cancers, but when it does occur, we want to find it early.

The first comprehensive cancer control plan for the Alaska Tribal Health System was written and implemented in 2006. This is the third cancer plan, and a review of cancer incidence and mortality, program activities, and outcomes since 2006. Progress is being made in many areas. But we still have work to do to reduce the burden of cancer among the Alaska Native people.

This plan recommends goals, objectives, and strategies to provide cancer care in the areas of prevention, early detection, diagnosis, treatment, survivorship, palliative care, cancer surveillance, and research. It takes the combined effort of many programs to accomplish these goals. Dedicated health care providers and staff across many disciplines assist patients through their diagnosis and care, while others provide education on nutrition and tobacco cessation. Some oversee immunization programs, some others keep track of cancer data so we know where our greatest needs are, and some sit quietly with patients and their families when they are grieving. The cancer program is pleased to be able to work with many other programs which share the vision of ANTHC, to help make Alaska Native people the healthiest people in the world.

This plan is a roadmap to help Alaska Native people reduce disease and death from cancer. The plan does not include everything that must be done to make cancer a disease of the past. The fight against cancer will continue to be a long journey filled with challenges. It is a journey that requires everyone to work together. As individuals we need to choose to live healthy lives for ourselves and our families, encouraging each other to eat healthy foods and enjoy physical activity together. As communities, we must provide support for our children to grow strong and for our elders to share their traditional knowledge and healthy ways. We must welcome our cancer survivors when they come home and care for others at the end of life. As health care providers and a health care system, we must remain dedicated to providing the very best care at every step of the cancer journey for Alaska Native people.



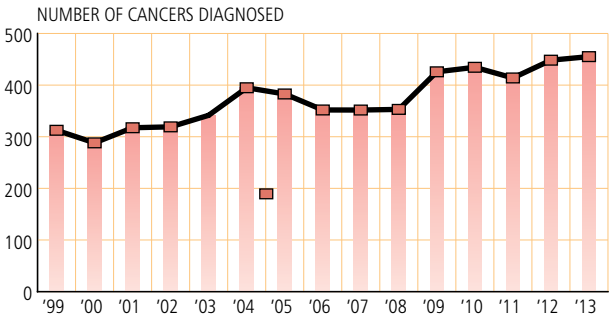
Judith Muller, MHA
Cancer Plan Manager

CHAPTER 1

THE BURDEN OF CANCER IN ALASKA NATIVE PEOPLE

Cancer is the leading cause of death in Alaska Native people.[1] Approximately 425 Alaska Native people are diagnosed with cancer and 173 die from cancer each year.[2] Understanding and monitoring cancer diagnoses and deaths among Alaska Native people can help the Alaska Tribal Health System provide better care to Alaska Native people. Cancer impacts patients, families, and communities as well as healthcare resources. Prevention and screening programs can help reduce the incidence of some cancers.

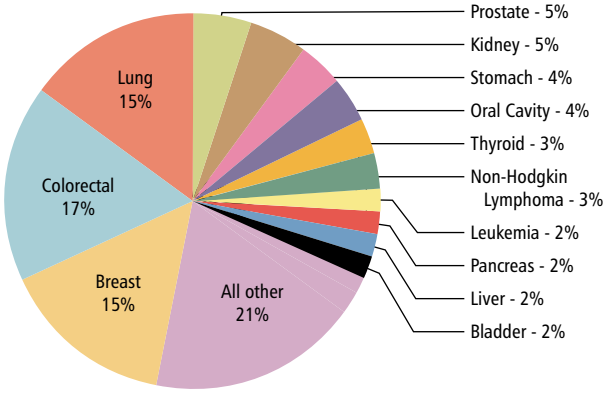
Invasive Cancers Diagnosed in Alaska Native People (1999-2013) *(Source: Carmack et al 2015)[3]*



There are many factors that contribute to the increase in number of people diagnosed with cancer over time, including an increase in total population, an aging population, an increase in life expectancy, better screening procedures, and exposure to risk factors, such as tobacco use and obesity. The majority of cancers (78%) in Alaska Native people are diagnosed in individuals 50 years of age and older.[4]

Colorectal, lung, and female breast cancers are the three most common cancers diagnosed among Alaska Native people (men and women combined), followed by prostate, kidney, stomach and oral cavity cancers. Leading cancers diagnosed among Alaska Native men are colorectal, lung, and prostate cancer. Leading cancers diagnosed among Alaska Native women are breast, colorectal, and lung cancers.

New Invasive Cancers Diagnosed in Alaska Native People (2009-2013) *(Source: Carmack et al 2015)*

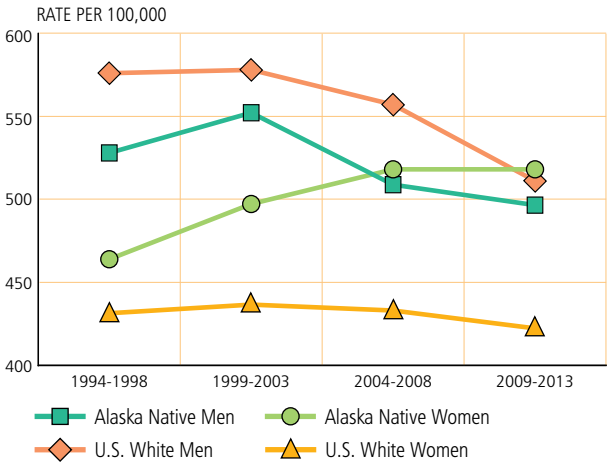


Incidence

Cancer incidence is the number of newly diagnosed cases of a cancer in a given length of time (e.g. a five year period). The cancer incidence rate is the number of newly diagnosed cancers per 100,000 people. A rate is used so that the incidence of a particular cancer in a population can be compared to other populations or to other cancers.

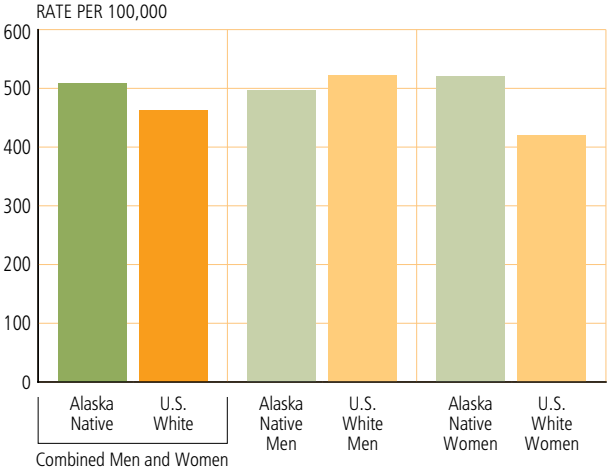
In the most recent five year period (2009-2013) the cancer incidence rate among Alaska Native men for all cancer sites combined declined slightly. Incidence rates for Alaska Native women remained the same. Rates for both U.S. White men and women declined during this same period.

Five-Year Average Annual Age-Adjusted Cancer Incidence Rates (1994-2013) *(Source: Carmack et al 2015)*



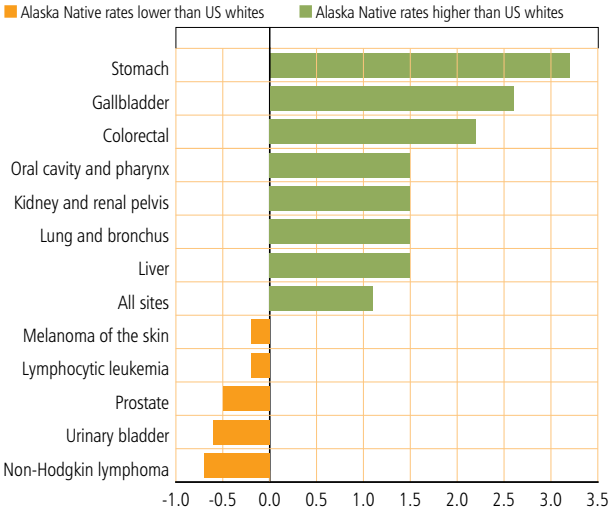
Cancer incidence among Alaska Native men are similar to the cancer incidence among U.S. White men, while the cancer incidence for Alaska Native women is about 20% higher than that of U.S. White women.

Incidence Rates for All Cancers in Alaska Native and U.S. White People (2009-2013) *(Source: Carmack et al 2015)*



Patterns of cancer for Alaska Native people differ from all other racial groups in the U.S. including whites, blacks, American Indians and other minority populations. The rate ratios shown on the histogram below compare Alaska Native cancer rates to U.S. White cancer rates. Rate ratios above 1.0 indicate cancers where Alaska Native people have higher rates than U.S. White people, while rate ratios that are lower than 1.0 indicate cancers where Alaska Native cancer rates are lower than U.S. White rates.

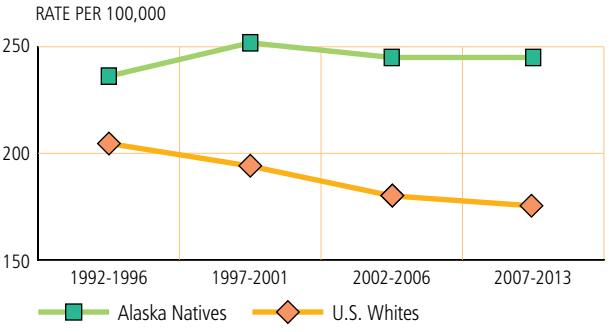
Rate Ratios Comparing Cancer Incidence Rates between Alaska Native Men and Women and US White Men and Women *(Source: Carmack et al 2015)*



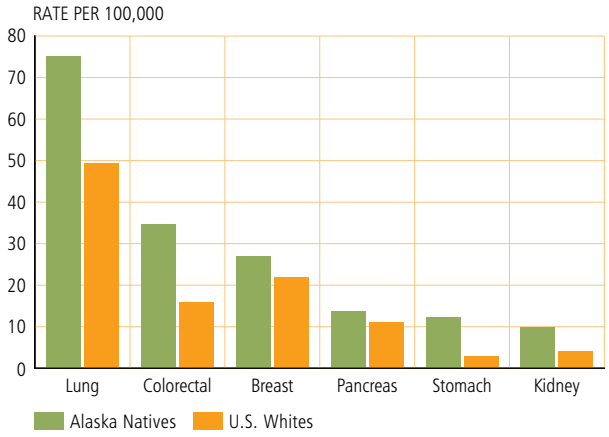
Mortality

The mortality rate, or death rate, is a measure of the number of deaths (in general, or due to a specific cause) in a particular population in a given length of time. The age-adjusted cancer mortality rate (2007-2011) is significantly higher in Alaska Native people than in the U.S White population.[5] Mortality can be affected by many things including cancer stage at diagnosis, access to treatment, the type of cancer, and lifestyle choices around tobacco use, diet and physical activity among other things. While U.S. White people have experienced a consistent drop in cancer mortality since 1992, Alaska Native people have seen little change in cancer mortality in the same time period.

Five-year Mortality Rate (1992-2011) *(Source: Blake et al 2016)*



Leading Site-Specific Cancer Mortality Rates (2007-2011)
(Source: Blake et al 2016)



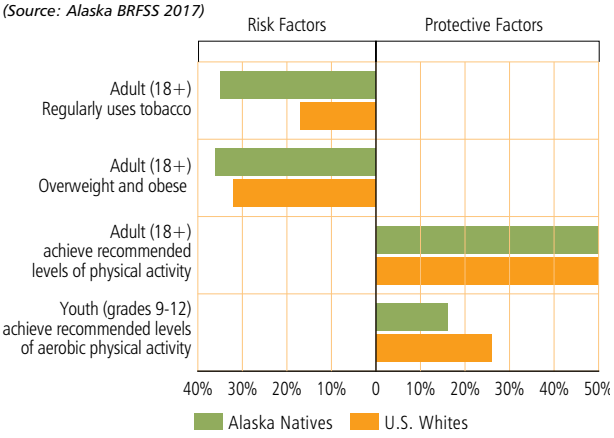
Survival

The majority of Alaska Native cancer survivors are living more than five years beyond their diagnosis. Five-year cancer survival among Alaska Native people varies by the type of cancer. A recent study by ANTHC shows that survival for the five leading cancers (prostate, breast, lung, colorectal and kidney cancers) varied by cancer type. The lowest five-year survival was for lung cancer (15%), and the highest was for female breast cancer (90%).[6]

Cancer Risk and Protective Factors

Certain behaviors or exposures, such as tobacco use and physical activity, are known to increase or decrease an individual's chance of developing cancer and other chronic diseases. These are known as risk and protective factors.

Chronic Disease Risk and Protective Factors
(Source: Alaska BRFSS 2017)



Endnotes:
1. Blake I, Holck P, Provost E. Alaska Native Mortality Update: 2009-2013. Anchorage (US): Alaska Native Epidemiology Center; 2016.
2. Cancer Among Alaska Native People: An Executive Summary of the Alaska Native Tumor Registry's 45 Year Report. Alaska Native Epidemiology Center, 2016
3. Carmack AM, Schade TL, Sallison I, Provost EM, Kelly JJ. Cancer in Alaska Native People: 1969 – 2013, The 45 Year Report, Anchorage, AK: Alaska Native Tumor Registry, Alaska Native Epidemiology Center, Alaska Native Tribal Health Consortium, 2015
4. Ibid.
5. Ibid.
6. Sarah H. Nash, PhD, MPH,; Angela L.W. Meisner, MPH, Garrett L. Zimpelman, BA, Marc Barry, MD, and Charles L. Wiggins, PhD Cancer Survival Among Alaska Native People, published online Month 00, 2018 in Wiley Online Library (wileyonlinelibrary.com)

CHAPTER 2

PREVENTION

Cancer continues to be the leading cause of death among Alaska Native people. Cancer is not just one disease, but more than 100 different diseases. It is caused by a complex mixture of factors related to lifestyle, heredity, and environment. Some of these factors are within an individual's control, while others are not. A person can choose not to use tobacco, but has no control over inherited factors such as sex or race. However, even if there are inherited factors, there is still a lot that can be done to prevent cancer.

Protective factors are conditions that decrease the likelihood that cancer might occur. Avoiding excessive alcohol use, being physically active, maintaining a healthy weight, and eating food that is low in fat and high in whole grains, fruits and vegetables are protective factors.

Risk factors are conditions that increase the likelihood that cancer might occur. Smoking is a significant risk factor for lung and many other cancers. Risk factors can be more or less dangerous. For example, the impact of environmental contaminants that cause cancer appears to be less of a risk than daily exposure to tobacco smoke.

Risk factors and protective factors are the same for cancer as for many chronic diseases including diabetes and heart disease. Individuals who purposefully increase protective factors and decrease risk factors in their lives may reduce their likelihood of having cancer as well as several other chronic diseases.

TOBACCO

Tobacco use is the most preventable cause of premature and preventable death in the United States, in Alaska, and among Alaska Native people. Nationally, tobacco use accounts for at least 32% of all cancer deaths and 81% of lung cancer deaths.[1] Lung cancer is also the leading cause of cancer deaths in Alaska Native people. The number of cancer deaths related to tobacco use among Alaska Native people is higher due to increased tobacco use.

Smoking among Alaska non-Native adults decreased significantly from 25% in 1996 to 17% in 2016. Among Alaska Native adults the trend in smoking, from 1996 to 2006 shows a significant decrease. However, smoking rates from 2007 to 2016 do not show a continued downward trend.[2] Alaska Native adults smoked at a rate more than twice that of Alaska white adults (40 vs 17). Similarly, Alaska Native adults are more likely to use smokeless tobacco than Alaska non-Native adults (16% vs 5%).[3]

The burden of tobacco use in Alaska is important both in length and quality of life, but also in monetary costs. The annual cost of smoking in 2014 dollars is estimated to be over $575 million annually and an additional $264 million in lost productivity due to smoking-related deaths.[4]

Youth Tobacco Use

Alaska achieved success in reducing the prevalence of smoking among high school youth from 18% in 2007 to 11% in 2017.[5] However, Alaska Native high school students are still more than twice as likely as Alaska non-Native high school students to currently smoke tobacco (18% vs 7%).[6] Not only do they start smoking at a younger age, but Alaska Native high school students are also more likely than Alaska non-Native high school students to have ever tried smoking and to smoke frequently.[7] They also use spit tobacco at higher percentages than Alaska non-Native youth (20% vs 6%).[8]

Tobacco TTS Training

The ANTHC Tobacco Prevention and Control Program hosts an annual Tobacco Treatment Specialist (TTS) Training on the Alaska Native Medical Center (ANMC) Campus. The training started in the fall of 2006 when ANMC decided to go tobacco free as a campus. Each year, the training brings in a variety of providers including doctors, nurses, community health aides/practitioners, and behavioral health aides. Throughout the week, participants study a range of topics including motivational interviewing, treating tobacco among people with substance abuse and mental health conditions, and pharmacotherapy for tobacco cessation. At the completion of training, participants have the skills needed to go back to their clinics and home communities and offer direct treatment for tobacco cessation to patients and community members.

Participants that go through the course must pass a post-training test and complete a predetermined number of tobacco treatment service hours to be eligible for national certification as a tobacco treatment specialist. The course is accredited through the Association for Treating Tobacco Use Dependence and is approved for continuing education units for physicians and nurses. Currently the Tobacco Prevention and Control Program is introducing an online TTS course which will allow participants to access the training from their home communities.

Pregnant Women Tobacco Use

Smoking during pregnancy can harm the health of the mother and her baby by increasing the chances of premature birth, low birth weight, problems with the placenta, certain birth defects like cleft lip or palate, and sudden unexplained infant death (SUID). After birth, secondhand smoke is harmful to a baby's developing immune and respiratory systems. Babies who breathe in other people's cigarette smoke are more likely to have ear infections or more frequent asthma attacks. A higher percentage of Alaska Native women smoke during the last three months of their pregnancy when compared to Alaska non-Native women (28% vs 6%). There is also a high rate of smokeless tobacco use among Alaska Native women during pregnancy. In 2015, 16% of Alaska Native women used smokeless tobacco during pregnancy.[9] The ANTHC Tobacco Prevention and Control Program can help women who want to quit using tobacco before and during a pregnancy.

Cancer Survivors Tobacco Use

Cigarette smoking not only causes cancer but can also negatively impact cancer treatment and survival. Approximately 34% of Alaska Native cancer survivors continue to smoke after their diagnosis compared to all Alaskans at 19%.[10] Tobacco use among survivors can increase their risk for having their cancer return, for having poor outcomes from treatment, for developing a new primary cancer, and for dying from other related causes such as pneumonia and infection. Quitting tobacco can improve a survivor's prognosis. Cancer survivors who receive information about tobacco use effects on cancer treatment and advice about cessation from their health care providers are more likely to quit using tobacco.[11]

Smokeless Tobacco Use

Smokeless tobacco, which includes chewing tobacco, spit tobacco, dip, chew and snuff, is a known cause of cancer of the mouth and gum, and is linked to oral health problems such as periodontitis and tooth loss. The availability of nicotine in smokeless tobacco is more than twice that of cigarettes. Iqmik is a homemade form of smokeless tobacco, sometimes referred to as Blackbull or Dediguss and is used among some Alaska Native populations. It is prepared by mixing leaf tobacco with ash derived from burning punk fungus from alder, willow bushes, or driftwood. The availability of nicotine in Iqmik is more than double the amount of nicotine available in most commercial dipping tobacco. Beyond the perception of Iqmik being a safer product, anecdotal reports also point to its lower cost, suggesting that Alaska Native people might switch from commercially prepared to home-made tobacco products.

Closing the Gap at the Top of the World: *Reducing Racial Disparities in Smoking in Alaska's North Slope Borough*

In 2015, ANTHC's Tobacco Prevention and Control Program (TPCP) was awarded a State Partnership Initiative grant from the Office of Minority Health to reduce tobacco use among Alaska Native adults in the North Slope Borough. To accomplish the objectives in this grant, key strategies for the ANTHC TPCP are to collaborate with the North Slope Borough Health Department (NSBHD) and Arctic Slope Native Association (ASNA) to: 1) integrate tobacco screening, education and treatment into routine healthcare practices; 2) develop two culturally relevant community awareness campaigns to increase knowledge of the health effects of smoking and; 3) to support current tobacco prevention efforts in the region.

The project is in its fourth year and has completed a health disparities profile, has conducted listening sessions and focus groups with local community members, and created and launched two community awareness campaigns that include print and digital ads, radio public service announcements and a 30 second television spot. The community awareness campaigns were developed based on results from the listening sessions and focus groups conducted in Utqiaġvik in 2016. The statistics and health information highlighted in the campaign is specific to the northern region.

For more information, please contact CANCER@ANTHC.ORG.

Secondhand Smoke

Tobacco kills not just those who choose to smoke, but also nonsmokers who are exposed to smoke from other people's cigarettes. Secondhand smoke exposure is associated with an increased risk of lower respiratory tract infections such as bronchitis and pneumonia. It increases the risk and severity of ear infections and asthma symptoms in children. Even brief exposure can be dangerous.

Nonsmokers who are exposed to secondhand smoke at home or work increase their risk of heart disease and lung cancer. Eliminating smoking in indoor spaces is the only way to fully protect nonsmokers from secondhand smoke exposure.[12] Separating smokers from nonsmokers, cleaning the air, and ventilating buildings cannot eliminate secondhand smoke exposure. According to the 2014 Surgeon General's Report there is no risk-free level of secondhand smoke exposure. In response to this concern, in 2018 a Smoke-Free Workplace law was

passed in Alaska banning secondhand smoke and e-cigarette aerosol in the workplace.

E-Cigarette Use

E-cigarettes (also known as e-cigs, e-hookahs, vape pens, apes, vaporizers, cigalikes, e-cigars, mods, tank systems) are electronic devices that allow users to inhale a heated aerosol containing nicotine, flavorings, and other substances. E-cigarettes are considered to be tobacco products. Using an e-cigarette is commonly referred to as "vaping." E-cigarettes generally emit lower levels of dangerous toxic elements than combusted cigarettes. However, in addition to nicotine, e-cigarette aerosols can contain propylene glycol, glycerin, flavorings, heavy metals, ultrafine particulates, and cancer-causing agents like acrolein. Nationally the use of e-cigarettes increased among high school students from 2% in 2011 to 16% in 2015.[13] New regulations are being developed on marketing restrictions, vendor licensing requirements and compliance checks to help enforce the Alaska tobacco sales law.

ANTHC Tobacco Prevention and Control Program

In September 2003, ANTHC established the Tobacco Prevention and Control Program (TPCP) to develop the capacity and infrastructure needed for comprehensive tobacco control programs in the state of Alaska and for Alaska Native people. The Program provides assistance to hospitals and clinics in the Alaska Tribal Health System in developing, expanding, and revitalizing tobacco dependence treatment services. Program development is based on the United States Preventive Services Task Force (USPSTF) guidelines which outline a systematic approach to treating tobacco use in the healthcare setting.

The ANTHC TPCP maintains a tobacco treatment program for patients, employees, and visitors in the Alaska Native Medical Center. Individuals who are interested in quitting tobacco can enroll in the TPCP cessation program and receive free pharmacotherapy and counseling, increasing the likelihood of quitting tobacco. By increasing access to tobacco treatment services and building capacity for comprehensive tobacco prevention and control, ANTHC can help Alaska Native people quit using tobacco, while improving their health and the health of their families.

ANTHC TPCP collaborates with the State of Alaska TPCP to assist in the implementation and provide technical assistance to tribal health organizations to integrate the Alaska Tobacco Quit Line e-referral system into a shared electronic health record system. This project expands access to the statewide quite line for our tribal health partners and is especially beneficial for tribal health organizations who do not have comprehensive tobacco cessation programs.

Policy changes such as clean indoor air legislation and taxation of tobacco products limits the availability of tobacco, the cost of tobacco, who can purchase it, and the locations where tobacco use is allowed. Smoke-free policies are the most economic and effective approaches for providing protection from exposure to secondhand smoke. ANTHC partners with Breathe Free Alaska, the State of Alaska Tobacco Prevention and Control Program, local coalitions, health care providers, non -profit agencies, and others who collaborate in areas of policy and advocacy with the mission of reducing death and disease as a result of tobacco use.

Goals, Objectives and Strategies for Prevention - Tobacco

GOAL: Prevent Cancer among Alaska Native people

Objective 1.1. Reduce cancer incidence and mortality due to tobacco use among Alaska Native people.

***Strategy 1**: Support the goals of the ANTHC Tobacco Prevention and Control Program.*

***Strategy 2:** Increase the number of Alaska Native patients screened for tobacco use in Alaska Tribal Health System hospitals and clinics.*

***Strategy 3:** Support efforts to decrease the number of pregnant women who smoke or use tobacco during pregnancy.*

***Strategy 4:** Educate the public about the health effects from e-cigarette use.*

***Strategy 5:** Support the Community Health Services Chronic Disease Committee and other tribal programs to decrease tobacco use.*

***Strategy 6:** Support education and cessation activities aimed at cancer patients and cancer survivors.*

MEASURES - TOBACCO

Alaska Native adults who smoke tobacco

Baseline (2017).....35%

2024 Goal.....33%

(Source AK BRFSS)

Alaska Native cancer survivors who smoke

Baseline (2017).....35%

2024 Goal 33%

(Source AK BRFSS)

Alaska Native youth who use e-cigarettes

Baseline (2015).....16%

2024 Goal 14%

(Source AK YRBS)

NUTRITION, PHYSICAL ACTIVITY & OBESITY

Nutrition

For most Americans who do not use tobacco, the most important cancer risk factors that can be changed are body weight, diet, and physical activity. The World Cancer Research Fund estimates that about 20% of all cancers diagnosed in the United States are related to body fat, physical inactivity, excess alcohol consumption or poor nutrition and could be prevented.[14]

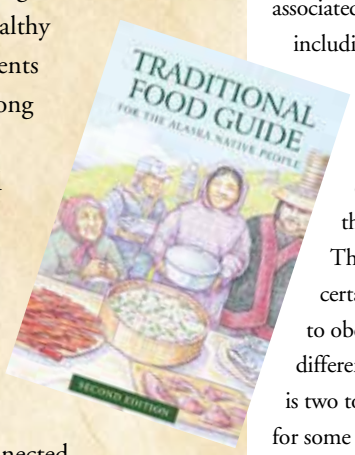
Obesity continues to be a serious health concern in Alaska. In 2017 nearly 32% of students were overweight or obese. Obese children and adults are more likely to suffer from chronic illnesses such as diabetes, high blood pressure, heart disease and certain cancers. Each year, obesity-related medical expenses cost an estimated $459 million in Alaska.[15]

Traditional Foods

In the past Alaska Native people relied on the land and sea to provide them with a healthy diet. The diversity of climates and geography in the state has led to many different adaptations in lifestyle and foods. Traditional foods in general are much healthier than store-bought foods, being higher in healthy fats and lower in saturated fats, vitamins A and C, and minerals. However, over the last 100 years Alaska Native people have experienced profound cultural upheaval and change. Western foods, such as sugared beverages, baked goods, rice, and potatoes are now widely available in village stores. Reliance on some of these foods has contributed to overweight and obesity statistics.

Traditional Food Guide

Each year approximately 400 Alaska Native people are diagnosed with cancer. A challenge for cancer patients is maintaining a healthy diet. For Alaska Native cancer patients living in rural Alaska, there is a strong reliance on traditional animal and plant foods gathered from the land and sea. Traditional foods are an important part of the Alaska Native culture. The gathering, hunting, preserving and eating of traditional foods is more than just a diet—it's a way of life. A subsistence lifestyle has long connected Alaska Native people with the land and sea through celebrated rituals and practices passed down from generation to generation. "Without ritual, without storytelling, without the drum, subsistence is only food." –Andrew Paukan



The Traditional Food Guide for Alaska Native Cancer Survivors was published by the Cancer Program in April 2008. The goal of developing the guide was to provide easy-to-understand nutrition information for cancer patients and families. It is also designed as an evidence-based resource for healthcare teams to encourage the inclusion of traditional foods in cancer patient diets. Now in its third printing, the book is considered to be the best guide to Alaska's wild foods and a healthy lifestyle nutrition resource.

The guide is available at no cost to Alaska Native cancer patients. Others can purchase it for a nominal cost. Funds from the sales are used to reprint the book.

For more information or to order a copy of the book contact CANCER@ANTHC.ORG

Diet and Disease

Current scientific understanding about the relationship between diet and disease is limited. However, research studies have associated dietary habits with some cancer risks. Studies have shown that a healthy diet, reduced animal fat, reduced alcohol consumption and increased vegetable and fruit consumption can lower the risks of certain kinds of cancer such as breast, colon, lung and prostate cancer. In some cases, research suggests specific diets can be linked to the risk of particular cancers. For example, people who eat a diet that largely includes salted or smoked foods are at a greater risk of stomach cancer.[16] In addition to the cancer risk associated with specific diet components, overweight and obesity are also associated with many cancers including cancers of the colon, breast, endometrium, kidney, ovarian, gastric, liver, esophagus, gallbladder, thyroid and pancreas.[17] The increased risk of certain cancers attributed to obesity varies widely for different cancer types, but is two to four times higher for some cancers, particularly endometrial and esophageal cancers.[18] In addition to cancer, obese children and adults are also more likely to suffer from chronic illnesses, such as diabetes, high blood pressure, and heart disease.

Physical Activity

Physical activity is essential to overall health and can help control weight, reduce the risk of heart disease and cancer, strengthen bones and muscles, and improve mental health.

The lack of physical activity is increasingly recognized as a risk factor for cancer. There is substantial evidence that adults who are physically active can reduce their risk of developing colon cancer, breast cancer, and endometrial cancer compared to those who are sedentary. More

recent studies determined that physical activity was associated with a lower risk of several other cancers with the greatest risk reductions seen in esophageal cancer, liver cancer, cancer of the stomach, kidney cancer, and myeloid leukemia and cancers of the head and neck, rectum, and bladder.[19] Healthy Alaskans 2020 data (2015) indicates that fewer Alaska Native people engage in regular physical activity than all Alaskans combined (48% vs 59%).[20]

In addition to health benefits such as reducing heart disease, stroke, diabetes, osteoporosis and depression, physical activity can also have beneficial effects for cancer survivors in helping them avoid weight gain, reduce the chance that their cancers will come back, and increase their rates of survival.[21]

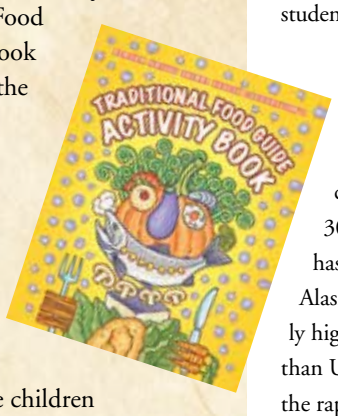
Similar to diet changes, physical activity patterns among Alaska Native people have changed due to outside influences. Traditional subsistence lifestyles were characterized by physical demands of hunting, fishing, and food gathering. Other traditional physical activities included travel on land by dogsled or walking, travel on water with a paddle, wood cutting by handsaw, water hauled by hand, and traditional dancing. Although many of these traditional activities are still practiced, their frequency continues to decline along with increasing modernization of village life and availability of mechanized vehicles.

Alaska has many barriers to physical activity, including extreme temperatures and seasonal daylight limitations. There are special issues to be aware of when exercising in the cold outdoors, such as hypothermia and frostbite. Furthermore, the size of the state and the limited availability of sports facilities (for example gyms and swimming pools) limit the availability of physical activity programs. However, some communities are developing outdoor programs such as cross country skiing. Any physical activity programs in Alaska must take into consideration the length of winter and design appropriate outdoor and indoor activities that are enjoyable and safe for those of varying physical abilities.

Physical Activity in schools

Schools are an ideal setting for teaching children how to adopt and maintain a healthy, active lifestyle. Physically active students are better prepared for school and for life. Research shows that physical activity benefits children's physical, mental and cognitive health. It affects perception, memory, judgment, focus, and reasoning. Regular physical activity also decreases the risk of obesity-related risk factors such as type 2 diabetes and heart disease. Physical activity increases social skills, encourages an active lifestyle, and helps students focus better in the classroom throughout the school day. The Alaska State Legislature passed the Alaska Physical Activity in Schools Law in April 2016 which requires school districts to establish guidelines to provide opportunities for 54 minutes of physical activity each full school day for students in grades K-8.[22]

Children's Activity Guide



The Traditional Food Guide Activity Book is an offshoot of the Traditional Food Guide for the Alaska Native People and was published in 2012. The activity book targets 8-10 year old Alaska Native children and provides nutrition information in a fun, easy to understand format. Importance is placed on traditional Native foods as part of a healthy diet. Suggestions for healthy lifestyle choices and nutrition habits are highlighted to help children make informed and responsible decisions to reduce their risk for obesity, cancer, and other diseases.

In 2017, a Two Week Journal for Healthy Living was developed to complement the activity book. The journal targets the same age range, and challenges children to take two weeks to make good eating and activity choices with the goal of developing good habits sustainable past the completion of the journal. Both the activity book and journal are provided free of charge to 3rd and 4th grade classrooms outside the Anchorage area. The Healthy Living Journal will be piloted in a small number of rural school districts the first year. For more information about the activity booklet or journal, email CANCER@ANTHC.ORG.

Obesity

Overweight and obesity continue to be a serious health concern in Alaska. Over the past 30 years overweight and obesity has increased significantly among all Alaska adults, but is disproportionately higher among Alaska Native adults than U.S. White adults.[23] The causes for the rapid rise of overwieght and obesity are many and varied. A number of prevention strategies exist for children, students and communities that address the problem of obesity by encouraging the eating of healthy foods and increased physical activity.

Alaska Native youth are more likely to be obese (16%) than are White youth (10%).[24] Similar to Alaska Native adults, Alaska Native youth also consume about the same amount of fruit and vegetables as other groups, but also are more likely to drink one or more non-diet sugary drinks daily. School based programs provide a focal point in which families, community organizations, businesses, health care workers and youth themselves can focus on the well-being of young people. Strong wellness policies are a key component of obesity prevention in schools. A combination of student health education, good nutrition, and increased physical activity would reduce the problem of childhood obesity in Alaska.

The State of Alaska Obesity Prevention and Control Program works with early care and education programs, and partners to help Alaska's young chil-

dren (birth to 5 years old) grow up at a healthy weight. Ways to improve nutrition and physical activity include nurturing healthy eaters, providing healthy beverages, getting kids moving, reducing screen time (including TV, computers & hand-held devices) and supporting breastfeeding. Mothers of young children also have the opportunity to introduce and regularly use traditional foods in the diets of their infants and young children.

Goals, Objectives and Strategies for Prevention - Nutrition, Physical Activity and Obesity

GOAL: Prevent Cancer among Alaska Native people

Objective 1.2: Reduce cancer incidence and mortality due to poor nutrition, physical inactivity and obesity among Alaska Native people.

Strategy 1: *Distribute culturally appropriate materials to schools that support healthy food choices and increased physical activity.*

Strategy 2: *Increase the number of schools that provide physical activity opportunities and establish policies that promote physical activity.*

Strategy 3: *Encourage safe areas for physical activity including playgrounds, sidewalks, and designated areas for walking, basketball, baseball, and similar activities.*

Strategy 4: *Support efforts at decreasing the use of sugar-sweetened beverages in tribal health organizations and among Alaska Native people.*

Strategy 5: *Support the Community Health Services Chronic Disease Committee and other tribal programs to increase healthy decisions in nutrition and physical activity.*

MEASURES - NUTRITION, PHYSICAL ACTIVITY AND OBESITY:

Alaska Native adults who are obese.
Baseline (2017) 36%
2024 Goal 30%
(Source AK BRFSS)

Alaska Native adults who get recommended amount of aerobic physical activity
Baseline (2017) 50%
2024Goal 52%
(Source AK BRFSS)

Adults who report drinking one or more sugar-sweetened drinks per day
Baseline (2017) 40%
2024Goal 38%
(Source AK BRFSS)

ENVIRONMENTAL CONTAMINANTS

Alaska Natives live in some of the healthiest environments in the world, characterized by clean air and water, and an abundance of wild foods. Studies have shown that traditional foods are healthy and generally safe and that the benefits of a traditional diet by and large outweigh the small amount of risk associated with trace levels of contaminants. Even store bought foods may not be free of contaminants. Based upon current knowledge it is recommended that eating traditional foods be encouraged for good nutrition and overall wellness. A recent study clearly shows that some of the health problems encountered by Alaska Native people are related to the decline in the eating of traditional native foods. It appears that some of that change is from the fear of contaminants and some from the competition of the taste between native and non-Native foods (the latter typically containing more sugars and unhealthy fats).[25]

Pathways for environmental contaminants include food, air, water and even dermal exposure for people working frequently with fuels and chemicals. Today, due to climate change, the risk of exposure is increasing as glacier ice melts releasing pollutants that have accumulated for decades. Permafrost thaw is another driver releasing contaminants from both natural sources and man-made spills and dumpsites. Erosion in coastal and river areas is causing waste from communities, dumps and industrial sites to pass into watersheds and ultimately out to sea. Wildfires, too, are occurring at levels, places, and times never seen before. Exposure to extended periods of wildfire smoke is another seasonal source for exposure to contaminants. In a new era of climate change, the behavior of contaminants in the environment is a moving target.

When considering cancer prevention, it is important to have an appreciation of relative risk. In the case of contaminants, perception of risk is often greater than actual risk. This is partially due to the fact that people are often exposed to contaminants through the essential things we rely upon every day: air, water, food, and consumer products. Additionally, the high degree of attention paid by the media to contaminants may distort perception. The data on contaminant exposure, particularly among Alaska Native people, is far from complete. It will take years before health implications are clearly understood. The current understanding is that known risks due to contaminants may be relatively small compared with risk factors associated with tobacco use, for example. Providing reliable information and raising awareness about the relative risks associated with environmental contaminants in the diet is an important prevention strategy for reducing cancers associated with diet and obesity, as well as other chronic illnesses such as diabetes and heart disease.

Goals, Objectives and Strategies for Prevention - Environmental Contaminants

GOAL: Prevent Cancer among Alaska Native people

Objective 1.3: Educate Alaska Native people about ways to reduce harmful exposure to contaminants.

Strategy 1: *Increase awareness of the benefits and risks associated with traditional diets.*

Strategy 2: *Increase awareness about health risks associated with asbestos and radon exposure.*

Strategy 3: *Increase awareness about the Local Environmental Observer (LEO) Network to monitor observable local climate change.*

INFECTIOUS AGENTS

Human Papilloma Viruses (HPV)

Cervical cancer incidence rates among Alaska Native women are similar to that of U.S. White women, except for women aged 20-29 who have a significantly higher incidence of cervical cancer when compared to U.S. White women in that same age group (14 vs 4) per 100,000 women diagnosed with cervical cancer.[26] Alaska Native women are also more likely to die from cervical cancer when compared to U.S. White women (6 vs 2) per 100,000 women diagnosed with cervical cancer.[27]

The Human Papilloma Virus (HPV) is a group of more than 150 related viruses that can lead to cervical cancer. Most people with HPV never develop symptoms or health problems. Most HPV infections go away by themselves within two year. However, in some people HPV infections can last longer, and can cause several kinds of cancers and other diseases. HPV infection can cause cancers of the cervix, vagina, and vulva in women; cancer of the penis in men; and cancers of the anus and back of the throat, including the base of the tongue and tonsils, in both women and men.

The Center for Disease Control Advisory Committee on Immunization Practices recommends that youth (boys and girls) who are 11 or 12 years old receive two shots of HPV vaccine 6 to 12 months apart. Adolescents who receive their two shots less than five months apart will require a third dose of HPV vaccine. Teens and young adults who haven't started or finished the HPV vaccine series should get it as soon as possible for cancer prevention. Three doses are recommended for teens and young adults who start the series at ages 15 through 26, and for men and women with certain immune compromising conditions.[28]

Because these vaccines will not protect against all types of HPV, they will not prevent all cases of cervical cancer. Cervical cancer screening (Pap tests) continue to be necessary.

The Alaska Native Medical Center suggests four strategies to eliminate or reduce the incidence of cervical cancer among Alaska Native people. Those strategies are to (1) vaccinate all eligible people as possible against the disease; (2) provide regular Pap tests for women ages 21 to 65; (3) evaluate and manage women with abnormal Pap tests; (4) track Pap test results and treatments including patient notification.[29]

The ANTHC Immunization Program encourages that all Alaska Native children receive the recommended vaccinations throughout their childhood, including the HPV immunization.

Hepatitis B and C Viruses

Hepatitis B and C viruses (HBV, HCV) can lead to the development of liver cancer. In recent years the incidence and mortality rates for liver cancer (also known as hepatocellular cancer or HCC)

LEO

With new concerns driven by climate change and natural resource development, ANTHC has developed programs that build tribal capacity to identify risk and encourage mitigation and prevention. Three active programs focus on contaminants in the built and natural environment: 1) The Local Environmental Observer (LEO) Network is a social network developed by ANTHC using web and hand held apps to collect observations of environmental change including wildlife die-offs and pollution. Observers are connected with topic experts and notifications are provided for surveillance of broader impacts; 2) The Contamination Support Program focuses on contaminated sites. Of particular importance is former industrial sites known as "brownfields" by the EPA program that funds identification and cleanup. ANTHC works with tribal brownfields experts across the state to encourage site identification and clean up; 3) The Rural Alaska Monitoring Program (RAMP) is a field test methodology used to collect blood samples of subsistence harvested wildlife. A simple paper test strip is used which are sent for laboratory analysis. The technique is used to detect contaminants such as heavy metals as well as antibodies for a variety of infectious diseases. This suite of activities helps tribal environmental programs to detect and respond to contaminant threats in their communities.

have doubled in the United States. Death from some cancers has decreased because of improvements in prevention, early detection, and treatments, but that is not the case for liver cancer. Increasing rates of liver cancer are due to a variety of reasons including excessive alcohol consumption, obesity, metabolic disorders, and a variety of fatty liver diseases. In the United States each year approximately 33,000 new cases of liver are diagnosed and almost 26,000 people die from the disease.[30]

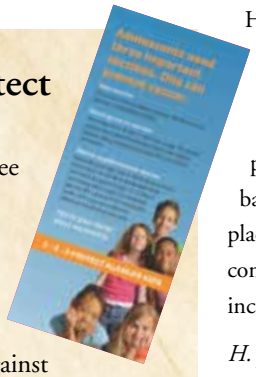
In the early 1970s, Alaska Native people were known to have a high rate of HBV infections which can lead to liver cancer. In the early 1980s, the Alaska Native Liver Disease and Hepatitis Program began a HBV immunization project in Alaska, which eventually led to a CDC funded universal vaccination program.[31] No symptomatic HBV has been seen in the vaccinated population since 1999. Alaska has gone from one of the highest rates of hepatitis B in the world, to one of the lowest. Immunizations are currently recommended for infants starting at birth or as adolescents if not previously vaccinated. Adults who are at a high risk of infection, such as people who inject drugs or health care providers at risk for occupational exposure, should also be vaccinated. There are over 1000 individuals living with chronic HBV in Alaska. Seventy-five percent of those are in rural communities and all of them are linked to care. Surveillance includes a liver ultrasound every six months.

Hepatitis C virus is spread from one person to another through contact with infected blood. People at highest risk are those born in the Baby Boomer years (1945-1965), before people fully understood how the disease was transmitted. While most disease is spread through injection drug use, it can also be caused by using non-sterile needles and other supplies during tattoo or ear piercings, unprotected sex with multiple partners, occupational exposures to blood or needles, and blood transfusions before 1992, among others. Most of those infected with HCV have no symptoms and do not feel sick until the late stages of the disease.

The best way to reduce liver cancer caused by HCV is through prevention, early detection, and surveillance. While there is no vaccine for hepatitis C, it is curable. The ANTHC Liver Disease and Hepatitis Program is working to find new and better ways to prevent and screen for liver cancer. The earlier the disease is found, the easier it is to treat and cure. Current efforts in place include providing education on preventing the transmission of disease by avoiding non-sterile needles and equipment, avoiding excessive alcohol, and reducing overweight and obesity by diet and physical activity. There is also evidence that statins, coffee, and potentially aspirin can help prevent HCC. Screening efforts, some involving assistance from Community Health Aides (CHAP), include a blood test for the alpha-fetoprotein marker for HCC done in conjunction with an ultrasound for HCC surveillance. Other options (to be investigated further) are genotype stratification for higher risk populations and use of an abbreviated MRI (aMRI) for detection.

In May 2019, the ANTHC Liver Disease and Hepatitis Program held a two-day workshop on liver cancer screening, detection, and treatment. National experts, local providers, tribal leaders, and liver cancer patients and survivors gathered to brainstorm solutions that address liver cancer among Alaska Native people. The suggestions and ideas that came from that collaboration that will drive future activities within the ANTHC Liver Disease and Hepatitis Program.

1 – 2 – 3 Protect Alaska's Kids



Adolescents need three important vaccines. One can prevent cancer

Tdap vaccine

One dose protects against tetanus, diphtheria, and pertussis (whooping cough).

Meningococcal vaccine

Two doses (one ate age 11and one at age 16) protect against four types of meningococcal (meningitis) disease. Many colleges require this vaccine for admission.

Human Papillomavirus vaccine

Depending on age, two or three doses prevent many types of cancer. It works best when two shots are given at age 11-12. Teens and young adults aged 13-26 should get the HPV vaccine if not vaccinated earlier. HPV vaccine is safe and effective in both boys and girls

TALK TO YOUR DOCTOR ABOUT VACCINATING.!

Helicobacter Pylori (H. pylori)

Helicobacter pylori are bacteria that can live in the stomach and duodenum. They are the most common cause of ulcers. It is not known how *H. pylori* passes from one person to another, but bacteria have been found in saliva, dental plaque and in the stools of children. Close contact with others in households may increase the spread of infection.

H. pylori infection is very common in the United States, but most people do not have any symptoms. Only a small percentage of people develop any disease from the infection. In addition to ulcers, infection with *H. pylori* can cause gastritis, gastric cancer, and gastric mucosa-associated lymphoid tissue lymphoma.

Attention was focused on *H. pylori* among Alaska Native people when it was discovered that anemia caused by blood loss in the stool appeared to be associated with *H. pylori*. High rates of iron deficiency had been observed among Alaska Native people dating back to the 1950s. This led to the discovery that 99% of those with increased fecal blood loss had chronic gastritis caused by *H. pylori*.

Because of the high rates of gastric cancer in Alaska Native people, and its association with *H. pylori* infection, the CDC

Arctic Investigations Program and Alaska Native tribal health organizations are investigating the relationship with the intent of identifying ways to screen for gastric cancer so that it might be identified early while it is easier to treat.

Epstein-Barr Virus (EBV)

Epstein-Barr virus is a virus that causes infectious mononucleosis, a benign disease generally diagnosed in young adults. It has been associated with some types of lymphoma and nasopharyngeal carcinoma (NPC), a cancer that occurs at very high rates in Alaska Native people.

NPC is rare in most populations, but it is a leading form of cancer in a few well-defined populations, including natives of southern China, Southeast Asia, the Arctic, and the Middle East/North Africa. The distinctive racial, ethnic and geographic distribution of NPC worldwide suggests that both environmental factors and genetic traits contribute to its development.

NPC is the leading cancer disparity among Alaska Native people, with an incidence rate 17 times higher that U.S. Whites (6.9 vs 0.4) per 100,000 people.[32] To better understand this health disparity, the Alaska Native Medical Center created an Alaska Native NPC patient database using data from the Alaska Native Tumor Registry and Alaska Native Medical Center Tumor Registry to study all cases of NPC in Alaska Native people over the past forty years.[33]

Goals, Objectives and Strategies for Prevention - Infectious Agents

GOAL: Prevent Cancer among Alaska Native people

Objective 1.4: Reduce cancer incidence and mortality due to infectious agents.

Strategy 1: *Increase awareness among Alaska Native people that HPV vaccination prevents cancer.*

Strategy 2: *Promote the use of HPV vaccination for cancer prevention for both males and females through statewide education and outreach campaigns.*

Strategy 3: *Promote an annual HPV awareness campaign.*

Strategy 4: *Increase the knowledge of the general public and healthcare providers about the connection between Hepatitis C and liver cancer.*

Strategy 5: *Educate high risk populations, including Baby Boomers and veterans, on the importance of getting tested for Hepatitis C.*

Strategy 6: *Support opportunities for collaborations between medical experts, health care providers and Alaska Native tribal leaders and cancer survivors for informed decision making.*

Strategy 7: *Increase the knowledge of the general public and health care providers about the connection between H. pylori and gastric cancer.*

MEASURES - INFECTIOUS AGENTS

Youth aged 11-17 years, boys and girls combined, who complete the HPV vaccine series

Baseline (2017) 43%

2024 Goal 50%

(Source AK DHSS)

Organize an annual event focusing on HPV vaccination

Baseline (2019) ..... Unknown

2024 Goal 1

(Source CCC Program)

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CHAPTER 3

SCREENING & EARLY DETECTION

Cancer screening and early detection means looking for cancer before a person has any symptoms. When abnormal tissue or cancer is detected early, it may be easier to treat and cure. By the time symptoms appear, the cancer may have grown and spread making a cure more difficult. Not all cancers have screening tests, so it is also important that people to be aware of their bodies and know when something seems unusual. People should contact their health care providers if they notice unexplained changes in their bodies.

It is important to remember that when a doctor suggests a screening test it does not necessarily mean that he or she thinks a person has cancer. The medical profession uses recommended screening guidelines issued by organizations such as the United States Preventive Services Task Force (USPSTF) that recommend when cancer screenings should be done for men and women and at what ages.[1] Some common cancers that have screening tests are colorectal cancer, breast and cervical cancer, lung cancer and prostate cancer.

Colorectal Cancer

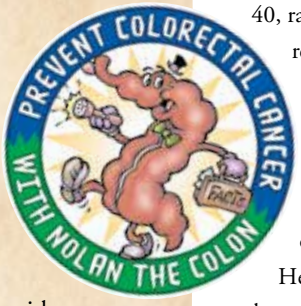
Colorectal cancer (CRC) is the cancer most often diagnosed in Alaska Native people. It can be found early through colorectal cancer screening when it is easier to treat. Colorectal cancer usually begins with the growth of a polyp in the colon. Polyps can be removed during the colorectal cancer screening (a procedure called a colonoscopy) which can prevent the polyp from becoming cancer.

The incidence of CRC is more than twice as high in Alaska Native people as it is in U.S. White people (91 vs 41) per 100,000 people.[2] It is the second highest cause of cancer deaths for Alaska Native men and women combined, second only to lung cancer. ANTHC received a Centers for Disease Control colorectal cancer grant in 2010 that supported the development of a Colorectal Cancer Screening Program at ANTHC. One benefit of that grant was to fund patient navigator positions in several tribal health organizations. The navigators received training on colorectal cancer screening and specifically ways to increase CRC screening rates among the Alaska Native people. This six year project increased Alaska Native screening rates to 66%, surpassing the screening rate of all Alaskans. Since the funding for this program ended in 2016, the screening rate for Alaska Native people has fallen from 66% to about 61%.[3] Currently colorectal cancer screening rates are not statistically different among Alaska Native people when compared to all Alaskans (61% vs 66%).[4]

In 2014, the Alaska Native Epidemiology Center led a review of the incidence and mortality of colorectal cancer among Alaska Native people at the Alaska Native Medical Center (ANMC). The review resulted in a policy change at ANMC to recommend that CRC screening for Alaska Native people start at age 40, rather than age 50 as previously recommended. This recommendation was put into effect at most tribal health organizations.

Colorectal cancer was identified as one of the top four priorities in previous Alaska Tribal Health System (ATHS) cancer plans. The Alaska Colorectal Cancer Partnership (Partnership) was formed in 2006 to increase public awareness about the disease and encourage colorectal cancer screening statewide. The Partnership, whose statewide membership includes the State of Alaska Cancer Program, American Cancer Society, tribal and non-tribal hospitals and clinics, cancer survivors and others, focuses on increasing CRC screening through education and capacity building (equipment, personnel and other resources). Partnership activities include provider and community education, the use of social media to encourage colorectal cancer screening, small media development specifically for Alaska Native people, participation in the National Colorectal Cancer Round Table, a series of community forums on colorectal cancer, and the use of characters such as Nolan the Colon and Polyp Men to promote colorectal cancer screening and education efforts across the state of Alaska.

Colon Cancer Education Program



Nolan is an inflatable model of a giant colon used by the Cancer Program to educate people statewide about colorectal cancer and the need for screening. The model is large and measures 25 ft long, 12 ft wide and 10 ft tall. Three people can walk side by side through him. Since 2011 Nolan has visited over 75 communities in Alaska with an estimated 25,000 visitors.

Nolan the Colon travels to Alaska communities to encourage children and young people to live healthy lives to prevent cancer. He reminds people to be screened for colon cancer at age 40 or sooner if they have a family history of the disease.

If you would like Nolan to visit your community, contact CANCER@ANTHC.ORG.

The ANMC Outpatient Surgery Clinic manages a statewide CRC family history database. The database is used to contact first degree relatives of Alaska Native people recently diagnosed with colorectal cancer to encourage them to be screened for colorectal cancer. Research on CRC is being done in ANTHC Clinical Research Services and the Alaska Native Epidemiology Center. Projects include the evaluations of new CRC screening tests, studies of CRC risk and protective factors among Alaska Native people, and the potential benefits of increasing the amount of fiber in the diet of Alaska Native people.

Breast and Cervical Cancer

The incidence of breast cancer in Alaska Native women ranks first followed by colorectal and lung cancer similar to U.S. White women where the incidence of breast cancer is also followed by lung and colorectal cancer.[5] The incidence of breast cancer in Alaska Native women is comparable to that of U.S. White women (139 vs 128) in new cases of breast cancer diagnosed per 100,000 women.[6] There is no significant differences in the breast cancer screening rates of Alaska Native women and all Alaska women. Among women age 50 to74 years of age, 68% of Alaska Native women and all Alaska women reported receiving a mammogram in the last two years, whereas all U.S. White women reported slightly higher breast cancer screening rates at 76%.[7]

The incidence of cervical cancer in Alaska Native women is also comparable to that of U.S. White women (10 vs 8) per 100,000 new cases of cervical cancer.[8] There was no significant difference between cervical cancer screening among Alaska Native women and all Alaska women ages 21-65 (84% vs 77%).[9] Unlike most other cancers, cervical cancer (and six other related cancers) can be prevented by immunization. The Cancer Program is prioritizing Human Papilloma Virus (HPV) vaccination efforts to reduce the incidence of cervical and other cancers in Alaska Native people. The priority recommendation for vaccination is girls and boys ages 11-12, but it can be given to young people up to age 26.

All seven ATHS hospitals provide breast and cervical cancer screening. Breast cancer is usually screened with mammography. However, availability of mammography services in some regions can fluctuate because of workforce changes, availability of certified staff, and available equipment. Itinerant mammography technicians travel to some hospitals to provide mammograms. Creative attempts to expand mammography include coordination with local providers for mobile mammography services, chartering flights from villages to regional facilities for "Ladies Days," and bundling breast and cervical screenings with other medical check-ups or procedures.

Five breast and cervical screening programs in Alaska are funded by the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) of the Centers for Disease Control and Prevention (CDC). Four of those are tribal programs at Arctic Slope Native Association, Southcentral Foundation, SouthEast Alaska Regional Health Consortium and the Yukon-Kuskokwim Health Corporation. The fifth CDC sponsored screening program, *Ladies First*, is managed by the State of Alaska. *Ladies First* provides funding for services statewide for all women between the ages of 21-64 who meet income guidelines and do not have Medicare Part B.

The five NBCCEDP programs offer breast and cervical health screening services, case management, and access to referral for confirmation of cancer diagnosis and treatment when necessary. All five NBCCEDP programs regularly collaborate with ANTHC and the State of Alaska Comprehensive Cancer Control Programs in the Alaska Breast and Cervical Health Partnership. Together they maximize resources by sharing the cost and effort of providing education, patient resources, social media, and educational materials.

The Cancer Program also participates in the Alaska Breast Cancer Coalition whose membership includes tribal and non-tribal members, hospitals, mobile mammography providers, health care providers and breast cancer survivors in addition to the five NBCCEDP. The State of Alaska provides data mapping for decision-making on education and outreach efforts.

Lung Cancer

Lung cancer is the leading cause of cancer death in Alaska and in the U.S. Cigarette smoking causes the majority of lung cancers. In an effort to reduce the number of lives lost to lung cancer there is a strong commitment at ANTHC and the tribal health organizations to support tobacco use cessation. More recently there has also been an increase in lung cancer screening at several regional hospitals, so that the cancer can be found early while it is easier to treat and cure. The procedure is a computed tomography (CT) scan which gives detailed images of bones, organs and tissues and can be used to show if cancer is in the lungs. The CT scan is quick and painless. Lung cancer screening is relatively new in Alaska, but it is currently available through ANMC and several other regional hospitals.

The USPSTF recommends annual screening for lung cancer with low-dose CT scan in adults aged 55 to 80 years who have a 30 pack-year smoking history and currently smoke or have quit within the past 15 years.[10]

Lung Cancer Screening is now available at the Alaska Native Medical Center and several other tribal health organization hospitals. Ask your health care provider about options for screening.

The mortality rate from lung cancer is significantly higher among Alaska Native people than U.S. White people (75 vs 49) per 100,000 men and women combined.[11] Since the 1970s, lung cancer incidence rates have increased among Alaska Native people and these rates have remained consistently higher than U.S. White rates since the early 1980s.

Prostate Cancer

Prostate cancer is the third most common cancer behind colorectal and lung cancer in Alaska Native men. In contrast to the other leading cancers, prostate cancer incidence among Alaska Native men has remained relatively stable since the early 1970s and consistently lower than U.S. White men. The average annual age-adjusted prostate cancer incidence rate for the period of 2009-2013 for Alaska Native men was significantly lower than that of U.S. White men (60 vs132) per 100,000 men diagnosed.[12]

Two principal methods of screening for prostate cancer are the digital rectal examination (DRE) to identify abnormal nodules in the prostate, and the prostate specific antigen (PSA) blood test to identify abnormal antigen levels. PSA levels may be elevated in men who have enlarged or infected prostates or prostate cancer. The USPSTF recommends that each man make his own decision about screening after a discussion with a health care provider. In the discussion, each man has an opportunity to understand the potential benefits and harms of screening and to incorporate his values and preferences in his decision.[13] Furthermore, the USPSTF recommends against screening for prostate cancer in men age 75 years or older. The USPSTF found evidence that DRE and PSA screening can detect prostate cancer in its early stages, but found mixed and inconclusive evidence that early detection reduces prostate cancer deaths or improves health outcomes. Currently at ANMC the decision whether to be screened for prostate cancer is made jointly by the patient and his provider.

Goals, Objectives and Strategies for Screening & Early Detection

Goal: Detect cancer at its earliest stages

COLORECTAL CANCER

Objective 3.1: Reduce disease and death from colorectal cancer.

Strategy 1: *Support and coordinate with colorectal cancer screening programs throughout Alaska.*

Strategy2: *Encourage use of colorectal cancer family history data base to identify people at an increased risk for colorectal cancer.*

Strategy 3: *Implement mass and small media directed toward Alaska Native people to raise awareness about colorectal cancer screening.*

Strategy 4: *Utilize Nolan the Colon and Polyp Men characters to raise awareness about colorectal cancer screening.*

Strategy 5: *Support education and utilization of genetic counseling and screening services for colorectal cancer patients and especially those at risk for Lynch Syndrome.*

Strategy 6: *Encourage alternative screening methods when a colonoscopy is not an option for screening.*

MEASURES - COLORECTAL CANCER

Alaska Native adults aged 40-75 who were screened for colorectal cancer

Baseline (2016) 61%

2024 Goal 75%

(Source: Alaska BRFSS-ages 50-75)

BREAST AND CERVICAL CANCER

Objective 3.2: Reduce disease and death from breast and cervical cancer.

Strategy 1: *Continue to support and coordinate with breast cancer screening programs throughout Alaska.*

Strategy 2: *Utilize data mapping and identification of areas with low screening rates and focus resources to increase rates in those areas.*

Strategy 3: *Support breast cancer screening campaigns directed at disparate populations including women who are disabled or homeless.*

Strategy 4: *Implement mass and small media campaigns directed toward Alaska Native women.*

Strategy 5: *Support education about and utilization of genetic counseling and testing services for breast cancer patients.*

Strategy 6: *Support the National Breast and Cervical*

MEASURES - BREAST AND CERVICAL CANCER

Alaska Native women age 50-74 who had a mammogram in the past two years.

Baseline (2016) 68%

2024 Goal 73%

(Source: Alaska BRFSS)

Alaska Native women age 21-65 who had a Pap test in the past three years

Baseline (2016) 84%

2024 Goal 87%

(Source: Alaska BRFSS)

Cancer Early Detection Programs in Alaska to provide access to prevention, screening, and treatment for cervical cancer.

Strategy 7: *Educate providers in Federally Qualified Health Centers about current USPSTF recommendations for HPV screening.*

Strategy 8: *Educate general public about the link between HPV immunization, HPV testing and a patient's risk for cervical cancer.*

LUNG CANCER

Objective 3.3: Reduce disease and death from lung cancer.

Strategy 1: *Support efforts in tribal hospitals and tobacco cessation programs to identify candidates eligible for lung cancer screening.*

Strategy 2: *Implement mass and small media campaign to educate Alaska Native people about the benefits of lung cancer screening.*

Strategy 3: *Encourage the use of the Alaska Quit Line as a means to identify individuals eligible for lung cancer screening.*

Strategy 4: *Partner with tobacco cessation programs statewide to encourage smoking cessation in conjunction with lung cancer screening.*

MEASURES - LUNG CANCER

Increase the number of Alaska Native people at ANMC who receive lung cancer screening.

Baseline (2017) ..... Unknown

2024 Goal 100

(Source: CCC Program Records)

PROSTATE CANCER

Objective3.4: Increase informed decision-making regarding prostate screening by Alaska Native men.

Strategy 1: *Support USPSTF standards in prostate cancer screening education and decision-making.*

Strategy 2: *Provide education on decision-making for men recently diagnosed with prostate cancer.*

Strategy3: *Partner with the ANMC Urology Clinic to distribute patient education on decision-making regarding prostate screening to Alaska Native men recently diagnosed with prostate cancer.*

1. United States Preventive Services Task Force (USPSTF) https://www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/uspstf/index.html
2. Carmack AM, Schade TL, Sallison I, Provost EM, Kelly JJ. Cancer in Alaska Native People: 1969 – 2013, The 45 Year Report, Anchorage, AK: Alaska Native Tumor Registry, Alaska Native Epidemiology Center, Alaska Native Tribal Health Consortium, 2015 p.9. http://www.anthctoday.org/epicenter/publications/Cancer45-yearReport/45_Year_Report_FINAL_Online_Version.pdf
3. Behavioral Risk Factor Surveillance Survey 2016 http://ibis.dhss.alaska.gov/indicator/view/ColCAScr.AK_US.html
4. Ibid.
5. Carmack AM, Schade TL, Sallison I, Provost EM, Kelly JJ. Cancer in Alaska Native People: 1969 – 2013, The 45 Year Report, Anchorage, AK: Alaska Native Tumor Registry, Alaska Native Epidemiology Center, Alaska Native Tribal Health Consortium, 2015 p.11. http://www.anthctoday.org/epicenter/publications/Cancer45-yearReport/45_Year_Report_FINAL_Online_Version.pdf
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7. Alaska Behavioral Risk Factor Surveillance Survey 2016. http://ibis.dhss.alaska.gov/indicator/view/BreCAScrMam.AK__US.html
8. Carmack AM, Schade TL, Sallison I, Provost EM, Kelly JJ. Cancer in Alaska Native People: 1969 – 2013, The 45 Year Report, Anchorage, AK: Alaska Native Tumor Registry, Alaska Native Epidemiology Center, Alaska Native Tribal Health Consortium, 2015 p 11. http://www.anthctoday.org/epicenter/publications/Cancer45-yearReport/45_Year_Report_FINAL_Online_Version.pdf
9. Alaska Behavioral Risk Factor Surveillance Survey 2016. http://ibis.dhss.alaska.gov/indicator/view/CervCAScr21.AK_US_time.html
10. United States Preventive Services Task Force (USPSTF) https://www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/uspstf/index.html
11. Carmack AM, Schade TL, Sallison I, Provost EM, Kelly JJ. Cancer in Alaska Native People: 1969 – 2013, The 45 Year Report, Anchorage, AK: Alaska Native Tumor Registry, Alaska Native Epidemiology Center, Alaska Native Tribal Health Consortium, 2015p 121. http://www.anthctoday.org/epicenter/publications/Cancer45-yearReport/45_Year_Report_FINAL_Online_Version.pdf
12. Ibid.
13. United States Preventive Services Task Force https://www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/uspstf/index.html

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CHAPTER 4

DIAGNOSIS & TREATMENT

Cancer diagnosis and treatment might begin with a trip to a village community clinic or a primary care clinic. A person might just not be feeling well. He or she might have noticed a number of different things such as feeling tired, difficulties swallowing or breathing, unexplained weight loss, a cough, or a lump under the skin. Usually these problems are not cancer, but it is important that the person talk with their health care provider. Depending upon the symptoms, the provider will do a physical exam, perhaps order blood tests or radiology tests. If, after the tests are done, there is a reason to suspect cancer, the health care provider may order additional tests or refer the person to a specialist to confirm whether or not the disease is cancer.

Every year, more than 400 cases of cancer are diagnosed among Alaska Native people.[1] The most frequently diagnosed cancers for Alaska Native people are colorectal, lung, and breast. Together, these three types of cancer comprise almost half of all new cancer diagnoses.[2]

DIAGNOSIS

Confirming or ruling out a cancer diagnosis may take several weeks or months. Many tests and procedures may be necessary to determine a diagnosis. A combination of radiology, pathology and surgery services are typically used to diagnose cancer, determine the stage of the cancer, and design a treatment plan. Some diagnostic procedures, such as biopsies and colonoscopies, can be done at the six regional hospitals and contracted facilities, with patients then referred to the Alaska Native Medical Center (ANMC) with a suspected cancer diagnosis for further evaluation. ANMC uses nationally recognized standards of care to diagnose and confirm cancer. Expert reference laboratories outside Alaska may also be used to confirm a diagnosis.

Newly diagnosed cases are reviewed at interdisciplinary ANMC Tumor Board meetings. The weekly meeting, chaired by the Director of the Oncology Clinic, brings together many specialty physicians who examine the specifics of a case, share knowledge, and determine the best treatment plan for the cancer patient. Mid-level practitioners, nurses, dieticians, social workers, and genetic counselors also participate in the Tumor Board meetings. Recommendations of the Tumor Board are made to the patient and family.

TREATMENT

Cancer care generally involves a combination including surgery, radiation, chemotherapy, immunotherapy, and hormonal therapy. For some cancers, only surgery is needed. For others, a combination of two and sometimes three treatments are needed. A treatment plan is developed for the patient based on the type and stage of cancer, the patients overall physical health, and the recommended treatment guidelines set by the National Cancer Center Network (NCCN).[3] The treatment plan is based on the best available scientific knowlege and is tailored for each patient. This offers the best chance of long-term survival and quality of life and aligns with the patient's goals of care.

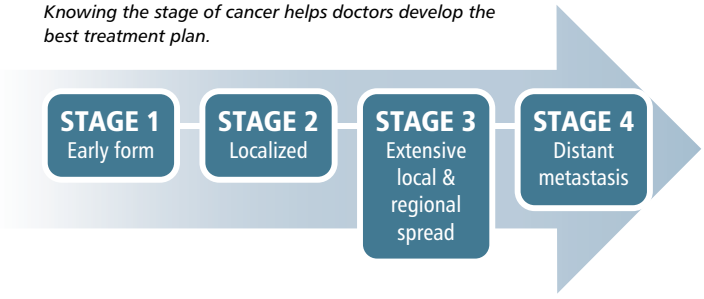
Cancer surgery is primarily done at ANMC. Radiation therapy is available at centers in Anchorage, Wasilla/Palmer, Juneau, and Fairbanks. Intravenous chemotherapy is usually administered in the ANMC Infusion Center under the direction of the medical oncologist. Immunotherapy, antibody, and hormone therapy are also provided at the ANMC Oncology Clinic.

With advances in clinical research, cancer treatments are becoming more personalized, lowering side-effects and increasing long-term survival. Advances in surgery have resulted in less invasive surgery including smaller incisions and shorter recovery times. Some of these advances result in increased use of outpatient services and shortened hospital stays. Longer survival also creates a need for additional services, including routine cancer care follow-up and cancer survivor services. When available and appropriate, new treatments are offered to cancer patients.

Cancer treatment takes more than the patient and one doctor. It requires an inter-disciplinary team that may include the patient, family, multiple physician specialists, nurses, nutritionists, social workers, radiology and laboratory staff, Community Health Aides/Practitioners and many others. ANMC staff include general and sub-specialty surgeons who provide cancer surgery and follow-up care to patients. Board-certified medical oncologists work in the ANMC Oncology Clinic as well as a well-trained nursing and support staff. The ANMC medical staff also provide consultative support to physicians at the six regional hospitals when a patient returns home.

STAGES OF CANCER

The stage of cancer describes how far the cancer has spread from where it first started. It can describe the size of the tumor, whether the cancer is found in lymph nodes or has spread to different parts of the body. Stage 1 means the cancer has been diagnosed early. Stage 4 means the cancer has spread to another part of the body (metastasis). Knowing the stage of cancer helps doctors develop the best treatment plan.



Children with Cancer

Compared with adult cancers, childhood cancers are rare. In the United States they make up less than 2% of all cancers. The rate among all Alaska Native children for all cancers combined is similar to U.S. White children. When cancer is suspected in Alaska Native children, care is coordinated between ANMC and the Pediatric Oncology and Hematology Clinic at Providence Hospital in Anchorage. The Clinic specializes in the care of children who require diagnosis and treatment of cancer or blood disorders. The clinic at Providence currently has three physicians who are Board Certified in Pediatric Oncology-Hematology.

Genetic Counseling

Genetic counseling and testing is done for Alaska Native patients at the Providence Hospital Cancer Center. Most cancers are sporadic, which means they happen by chance. A smaller number of cancers (5-10%) are inherited and some (15-20%) are familial meaning they can run in a family due to shared genes and environment, but may not be inherited by a single factor.

Genetic testing may

- Provide an explanation for a patient's personal or family history of cancer.
- Determine a patient's risk of developing future cancers.
- Help patients make informed medical decisions including treatment, surveillance, and preventive options.
- Identify other at-risk relatives for whom genetic testing is recommended.

If patients are at an increased risk of developing cancer based on genetic test results they can work with their healthcare provider to understand their options and create a plan if preventive or additional treatment is recommended.

Clinical Trials

Clinical trials are research studies in which people help doctors find ways to improve health care. Each study tries to answer scientific questions and to find better ways to prevent, diagnose, or treat cancer. A clinical trial consists of a long and careful cancer research process. Studies are done with cancer patients to find out whether promising approaches to cancer prevention, diagnosis, and treatment are safe and effective. Acceptance into a clinical trial is dependent on many factors including the type of cancer, condition of the patient, and availability of the needed clinical trials. If participants do not benefit directly, they still make an important contribution to medicine by helping researchers better understand the disease in order to help future generations.

"Recommended treatment for cancer changes often as new research findings result in new therapies. In the future we will better understand the make up of each patient's genes and cells and be able to develop more effective targeted cancer treatments."

-Matthew Olnes, MD, PhD, ANMC Oncology Clinic

There are five different types of clinical trials:

- Treatment trials test new treatments such as a new cancer drug, new approach to surgery or radiation therapy, new combinations of treatments, or new methods such as gene therapy.
- Prevention trials test new approaches like medicines, vitamins, minerals, or other supplements that doctors believe may lower the risk of a certain type of cancer. These trials look for the best way to prevent cancer in people who have never had cancer or to prevent cancer from coming back or to have a new cancer occurring in people who have already had cancer.
- Screening trials seek to find new ways of detecting cancer in people before they have any symptoms.
- Diagnostic trials seek to find how new tests or procedures can identify cancer more accurately and at an earlier stage.
- Quality of life trials (also called supportive care trials) explore ways to improve comfort and quality of life for cancer patients.

Although clinical trials are not currently being done at ANMC, there are opportunities for Alaska Native people to participate in trials offered elsewhere in Alaska or outside of the state.

1. Carmack AM, Schade TL, Sallison I, Provost EM, Kelly JJ. Cancer in Alaska Native People: 1969 – 2013, The 45 Year Report, Anchorage, AK: Alaska Native Tumor Registry, Alaska Native Epidemiology Center, Alaska Native Tribal Health Consortium, 2015. http://www.anthctoday.org/epicenter/antr/index.html
2. Ibid.
3. For more information about the National Cancer Center Network: https://www.nccn.org/professionals/physician_gls/

CHAPTER 5

SURVIVORSHIP

Cancer survivorship begins when a cancer is diagnosed and continues through the remainder of life. As screening tests enable us to detect some cancers earlier, and treatment for cancer continues to improve, many survivors are living longer with their diagnosis. Some cancers can be chronic (long-term) illnesses similar to diabetes or heart disease. The majority of Alaska Native cancer survivors are living more than five years beyond their diagnosis.

Five-year cancer survival rates among Alaska Native people varies by the type of cancer. A recent ANTHC study showed that survival for the five leading cancers (colorectal, lung, breast, prostate, and kidney) varied by cancer type. The lowest five-year survival was for lung cancer (15%) and the highest was for female breast cancer (90%).[1] Survival was higher among people who were diagnosed at earlier stages, which is a good reason to make sure that age-appropriate cancer screenings are being done. The study also found that Alaska Native people have experienced improvements in survival from lung and colorectal cancers over the past 20 years. Reasons for improvement may include increased access to care (including cancer screening) as well as improvements in treatment.

The proportion of Alaska Native people surviving five years past their cancer diagnosis is similar to, or slightly lower than, the proportion among U.S. White people.[2] Differences in survival among Alaska Native people may be because of the types of cancer that occur more frequently in this population. Cancers of the esophagus, pancreas, lung, gallbladder, and nasopharynx tend to be diagnosed at later stages and have lower survival in all populations, and these cancers are more common among Alaska Native people than in the U.S. White population. For example, cancer of the nasopharynx is 17 times more likely to occur in Alaska Native people than in U.S. White people, and cancer of the stomach is more than three times more likely to occur in Alaska Native people than in U.S. White people.[3]

Living with Cancer

The number of people living with a cancer diagnosis is increasing. Currently, over 4,250 Alaska Native people have survived five years or longer with a cancer diagnosis. Because of this, there is an increased focus on the complications of both cancer and its treatment. There is a greater need to understand the practical daily issues of living with cancer as a chronic disease, along with the physical, social, and mental challenges that are encountered by survivors following their cancer diagnosis.

Cancer survivors face many concerns. The most common being the fear that their cancer will come back. Other concerns include fatigue, cognitive problems, changes in family roles and daily activities, financial, employment, and disability. Patient education that includes this information can allay some of these concerns, or provide tools for survivors and caregivers to use to deal with the changes.

The challenge of survivorship is to assist the patient and family through the stages of cancer, the diagnosis and treatment process, the post-treatment check-ups, a period of rehabilitation, and finding their "new normal" after cancer treatment ends. When cultural and language differences exist between a patient and their health care provider, a patient's questions can go unanswered, and fears can go unresolved. Hospital and clinic nurses, social workers, and discharge planners can be encouraged to provide patient navigation services for cancer patients as they move through the system.

Living longer after a diagnosis of cancer is an important outcome of cancer treatment. It also means that more cancer patients need continued medical follow-up. In the Alaska Tribal Health System, this type of medical care for survivors is the responsibility of primary care providers with supplemental appointments with cancer specialists as recommended. Organizations such as the American Society of Clinical Oncology (ASCO) and the National Comprehensive Cancer Network (NCCN) publish national guidelines for cancer treatment and follow-up care.

Risk Factors and Protective Factors

It is important that cancer survivors make healthy lifestyle choices. Anything that increases a person's chances of developing a disease is called a risk factor; anything that decreases a person's chances of developing a disease is called a protective factor. For

The Story Behind the Faces

"Healing.... one bead at a time

"When going through cancer, there were many feelings and thoughts that happened. Some days we were brave, other days we needed someone else to be brave for us. Some days our emotions were present on our faces, other days we hid them as we didn't want to be a burden on our loved ones or we thought by not showing our real feelings we were being strong. Cancer is a lot to deal with and we all do the best that we can.

In many of our communities, storytelling was used to communicate, heal, share knowledge, entertain, and pass on traditions. Storytelling can come in many forms. In our cultures, stories can be told in song, dance, art, and beading."

–Laura Revels, 2x cancer survivor, support group leader, and beader.

Join Laura and other cancer survivors and caregivers in a beading project called "Facing Forward." Come share your cancer story in beading.

For more information contact CANCER@ANTHC.ORG.

example, using tobacco is a risk factor and can increase the chance of a cancer coming back again. Thirty-five percent of Alaska Native cancer survivors smoke tobacco, compared to 19% of all Alaska survivors[4] and 12% of survivors nationally.[5] Cigarette smoking not only causes cancer, but also can have a negative impact on cancer treatment and survival. Quitting tobacco can improve a survivor's prognosis, reduce the risk of the cancer coming back and lessen the chance of developing a new cancer.

Protective factors decrease the likelihood of a cancer coming back, such as when a decision is made to increase physical activity or eat healthy foods. Research suggests that survivors who engage in regular physical activity are more likely to live longer and have a higher quality of life.

Not to be forgotten are the family and friends who care for cancer survivors as they transition from a newly-diagnosed cancer patient, through treatment, and into their new normal life. Often things a person may have been able to do in the past are no longer possible after a cancer diagnosis and the family, friends, and even the community will need to adapt to those changes. The caregivers' support can be under-recognized, and efforts are needed to support the caregivers as well as the cancer survivors.

Programs and resources for survivors developed through the cancer program include a *Traditional Food Guide for Alaska Native People*, a Men's retreat for prostate and testicular cancer survivors, and Camp Coho for children who have lost a loved one to cancer. The Cancer Program developed and distributes *Life after Cancer Treatment*, a booklet that addresses some of the main concerns of Alaska Native cancer survivors.

Goals, Objectives and Strategies for Survivorship

Goal: Increase quality and length of life for all Alaska Native cancer survivors

Objective 5.1: Increase an understanding of the physical, mental, and social challenges faced by Alaska Native cancer survivors among health care providers and decision makers.

Strategy 1: *Produce a report on Alaska Native cancer survivors that identifies common concerns of survivors and suggests solutions to the issues survivors encounter.*

Strategy 2: *Utilize key informant interviews with Alaska Native cancer survivors, caregivers, and providers to broaden the understanding of cancer survivorship.*

Objective 5.2: Increase opportunities for provider and patient education on cancer treatment guidelines for follow-up care.

Strategy 1: *Support education for primary care providers on the guidelines for follow-up care.*

Strategy 2: *Develop appropriate education for cancer survivors and their caregivers on the importance of understanding their cancer diagnosis, treatment plan, and recommended follow-up care.*

Objective 5.3: Educate the public about the growing number of Alaska Native cancer survivors and understanding of cancer as a chronic disease.

Strategy 1: *Support the development of community resources to support cancer survivors.*

Strategy 2: *Increase survivor and caregiver education through local cancer support groups.*

Strategy 3: *Support the training of formal and informal patient navigators who assist cancer patients during their cancer diagnosis and treatment and as cancer survivors.*

Objective 5.4: Support healthy lifestyles choices among cancer survivors.

Strategy 1: *Utilize tobacco use prevention and cessation education and services to reduce tobacco use rates among Alaska Native cancer survivors.*

Strategy 2: *Develop culturally appropriate education for survivors and caregivers about importance of healthy lifestyle choices.*

1. Sarah H. Nash, PhD, MPH,; Angela L.W. Meisner, MPH, Garrett L. Zimpelman, BA, Marc Barry, MD, and Charles L. Wiggins, PhD Cancer Survival Among Alaska Native People, published online Month 00, 2018 in Wiley Online Library (wileyonlinelibrary.com)
2. Ibid.
3. Ibid.
4. Behavioral Risk Factor Surveillance System (BRFSS) 2015-2016 Alaska DHSS
5. Journal of Cancer Survivorship. Smoking Cessation Attitudes and Practices among Cancer Survivors – United States, 2015. M. Shayne Gallaway, et al. Published online January 2019. https://link.springer.com/article/10.1007/s11764-018-0728-2

MEASURES - SURVIVORSHIP

Decrease the percentage of Alaska Native cancer survivors who use tobacco.

Baseline (2016).....35%

2024 Goal.....30%

(Source: AK BRFSS)

Increase the number of patient navigators working in thetribal health system.

Baseline (2019)..... Unknown

2024 Goal.....10

(Source: ANTHC CCC)

Create and disseminate a timely report on Alaska Native cancer survivors.

Baseline (2019).....0

2024 Goal 1

(Source: ANTHC CCC)

CHAPTER 6

PALLIATIVE CARE

Palliative care is medical care focused on the relief of pain, other symptoms, and the stress of a serious illness. It is care that is aimed at the whole person, not just the disease. The goal of palliative care is to help patients and their families live peacefully and comfortably with the best possible quality of life. Ideally, all patients diagnosed with an initial chronic disease, such as cancer, have a palliative care consultation as treatment begins.

Palliative Care Team

At the Alaska Native Tribal Health Consortium (ANTHC), patients who are seriously ill, and their families, work with a palliative care team. The Palliative Care Team is made up of physicians, mid-level practitioners, nurses, and social workers who specialize in this area of care. The ANTHC Palliative Care Program provides specialty level support within the inpatient, outpatient, and regional settings for people suffering from cancer and other chronic diseases.

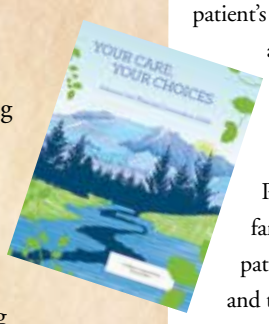
The Palliative Care Team works closely with the patient's healthcare team to

- Manage the stress, symptoms, and side effects caused by the disease, and problems that can arise as the result of some medical treatments.
- Support the patient and family physically, emotionally, and spiritually.
- Understand and use the patient's culture, values, and beliefs to guide their care.
- Provide the best possible care for the patient as a whole person.
- Listen to the patient's story to find out what is important to him or her.
- Help communicate the patient's wishes to his or her family, caregivers, and healthcare team.
- Help the patient understand the disease and choices for treatment.
- Plan for the patient's future medical needs and connect him or her with useful resources.

Caring for people with life-limiting diseases, especially for those who live in rural Alaska, is challenging. Most patients want to go home or as close to home as possible to spend the last part of life with their family and friends in familiar surroundings. Palliative care works with the patient and their family to meet their goals of care.

The Palliative Care Team works with the patient's primary care provider on the best approach for palliative care including the management of pain and symptoms. When patients are discharged from the hospital, the Palliative Care Team works with the family and caregivers to manage the patient's pain and other symptoms, and to reduce the need for difficult trips to the emergency room or admissions to inpatient or intensive care units.

Advance Care Planning



Advance care planning is one way to be prepared for the unexpected. If you become seriously ill or badly hurt, advance care planning lets your family, friends and healthcare team know how you wish to be cared for.

As part of your planning you should complete an advance healthcare directive. This is a form that communicates your healthcare wishes to your medical providers and the people who are important to you. When filled out properly, an advance healthcare directive becomes a legal record of your medical choices. It is very helpful to your family to know what your wishes are when you are not able to express yourself. It can shelter your family from the burden of making difficult medical treatment decisions

Anyone age eighteen and older may complete an advance healthcare directive. Once completed it should be reviewed every year to make sure it still represents your wishes. You can change your advance healthcare directive at any time

For more information about advance care planning, contact CANCER@ANTHC.ORG.

Palliative Care across the Alaska Tribal Health System

The ANTHC Palliative Care Program supports access to primary palliative care through a community-based program model. The Palliative Care Program is developing networks of trained providers and healthcare staff designed to increase access to high quality, cost effective primary palliative care throughout the tribal health system. By supporting the clinical, educational, and quality improvement needs, the program provides expertise and support to healthcare staff. Training opportunities and collaborative learning events are provided on the Alaska Native Medical Center (ANMC) campus and statewide, utilizing technology, telehealth, workshops, presentations, and other educational resources.

Central to supporting healthcare staff education is the Palliative Care TeleECHO (Extension for Community Healthcare Outcomes) program. The TeleECHO sessions are offered every other week and allow the extension of specialty services through the development of a professional network of learning and practice. Palliative

Care TeleECHO incorporates telehealth technology, case-based learning, best practices and patient goals of care to provide high-quality palliative care education and networking. The palliative care team supports regional providers through the identification of possible gaps in practice and services. It provides opportunities for collaborative solutions to provide the best possible patient care. For more information about Palliative Care TeleECHO https://anthc.org/palliative-care/palliative-care-echo/

Palliative Care Alaska Network

The ANMC Palliative Care Program is a founding member of the Palliative Care Alaska Network (PCAN), a statewide collaboration formed around the desire to support the growth and development of palliative and end-of-life care services statewide, whether clinically- or volunteer-based. PCAN is a comprehensive and dynamic network of individuals, agencies, and communities that share palliative care tools and resources throughout the state. PCAN organizes an annual symposium each year which is free and open to the public. For more information about PCAN, contact Palliativecare.alaska@outlook.com.

Goals, Objectives and Strategies for Palliative Care

GOAL: Increase access to high quality palliative care

Objective 6.1: Provide high quality palliative care at ANMC within the inpatient and outpatient clinics, and statewide with tribal health organizations.

Strategy 1: *Support the expansion of palliative care services and the palliative care resources team throughout ANMC.*

Strategy 2: *Integrate advanced communications skills training into simulation labs, including identifying and training palliative care actors for labs and workshops.*

Strategy 3: *Support the development of resources to address staff distress, including critical incident stress management.*

Objective 6.2: Enhance health care providers' knowledge and expertise in primary palliative care.

Strategy 1: *Support policy, systems, and environmental changes that encourage tribal health organizations in the development of primary palliative care resource teams.*

Strategy 2: *Support education opportunities that include palliative care training for health care providers and staff.*

Strategy 3: *Support the development of culturally appropriate palliative care and end of life resources for patients, families, and health care staff.*

Strategy 4: *Support Community Health Aide training, curriculum development, and resources to support primary palliative care within the village setting.*

Strategy 5: *Encourage the developement of a system-wide palliative care formulary for the Alaska Tribal Health System.*

Objective 6.3: Increase the understanding of palliative care and the services it provides among Alaska Native people.

Strategy 1: *Develop and distribute resources to communities that introduces and addresses the benefits of palliative care, comfort care, and hospice.*

Strategy 2: *Increase the use of advance care directives among Alaska Native people.*

Objective 6.4: Determine the need and feasibility of establishing a virtual hospice program for the Alaska Tribal Health System.

Strategy 1: *Educate healthcare providers and communities about the benefits of community-based palliative care and virtual hospice programs.*

Strategy 2: *Identify needed resources and design approaches to establish a reimbursable virtual hospice service.*

Strategy 3: *Identify needed resources and design approaches to establish a palliative care home service program.*

MEASURES - PALLIATIVE CARE

Tribal healthcare providers attend palliative care educational events.

Baseline (2019): ..... 23 (average)

2024 Goal: ..... 30 (average)

(Source: ANTHC/New Mexico University ECHO database)

Percentage of Alaska Native patients over 65 who have an advance care directive (ACD) in their medical record at the Alaska Native Medical Center

Baseline (2019): 6%

2024 Goal:.....20%

(Source: ANTHC Business Intelligence Report's Portal ACD Report)

CHAPTER 7

SURVEILLANCE & RESEARCH

Accurate and timely data are necessary for making decisions on how to best use resources to address the cancer burden of Alaska Native people. The term surveillance is used to describe the systematic collection, analysis, and interpretation of health data for planning, implementing, and evaluating health programs. All aspects of the Alaska Native Tribal Health Consortium (ANTHC) Comprehensive Cancer Program, from defining the burden of cancer and guiding planning activities to monitoring changes and evaluating intervention efforts, rely upon the availability of strong and relevant data, collected through appropriate surveillance activities. Cancer data also support research that is used to better understand the causes of cancer among Alaska Native people, and what can be done to prevent cancer, find it early, diagnose or treat it.

Surveillance

Cancer surveillance data are gathered on the occurrence of cancer (incidence), cancer deaths (mortality), risk and protective factors for the development of cancer (tobacco use, physical activity), cancer screening activities, the use of diagnostic and treatment services, survivorship, and palliative care. Timely and high quality data can be transformed into easily accessible information necessary to prevent, control, and research cancer.

In the Alaska Tribal Health System (ATHS), cancer surveillance provides important data for use in activities such as:

- Identifying people at an increased cancer risk.
- Describing and monitoring cancer trends.
- Planning and evaluating cancer and educational programs.
- Planning for future needs for diagnostic and treatment services.
- Providing data to support the development of policies.
- Conducting and advancing research related to the cause, prevention, and treatment of cancer.

Cancer among Alaska Native People: Executive Summary

Cancer remains the leading cause of death among Alaska Native people. During the most recent five year period for which we have data (2009-2013), there were an average of 425 new cases of cancer diagnosed per year, and 173 cancer deaths per year. Monitoring cancer diagnoses and deaths among Alaska Native people can help tribal health organizations provide better care to cancer patients, as well as try to understand what is causing these cancer and how they can be prevented or found early while they are easier to treat.

This brochure summarizes 45 year of data on cancer diagnoses and deaths among Alaska Native people. It gives information on the leading cancers, how rates of these cancers vary throughout the state, and how they have changed over time.

The data in this booklet were collected by the Alaska Native Tribal Health Consortium's Alaska Native Tumor Registry and are available in full in the 45 Year report, which can be found on the Registry's website at http://anthctoday.org/epicenter/antr/.

Alaska Native Tumor Registry staff are available to assist tribal health organizations with questions regarding regional cancer data.

Cancer surveillance is supported by data from a variety of sources including the Alaska Native Tumor Registry (ANTR), the Alaska Cancer Registry (ACR), the Alaska Native Medical Center Cancer Registry, the Alaska Behavioral Risk Factor Surveillance System (BRFSS), Healthy People 2020 (HP 2020), Pregnancy Risk Assessment Monitoring System (PRAMS), Youth Risk Behavior Survey (YRBS), and the Surveillance, Epidemiology, and End Results (SEER) Program. The State of Alaska and U.S. databases are used for comparing Alaska Native people with other populations in the state or nation.

The ANTR shares the surveillance data it collects through publications such as *Cancer in Alaska Native people (1969-2013): The 45 year report*, factsheets, presentations, and scientific publications. ANTR staff also respond directly to requests for surveillance data from tribal health partners.

Research

Cancer research conducted by ANTHC is tribally-driven, meaning that the ANTHC Board of Directors reviews and approves research that meets ANTHC health priorities, and supports research necessary to improve Alaska Native health care and health status. Clinical and Research Services (C&RS), within the ANTHC Community Health Services (CHS), includes programs involved in clinical care, clinical and translational research, and public health surveillance projects. C&RS provides assistance to tribal health organizations in conceptualizing, designing, and implementing research studies.

Some examples of research studies at ANTHC include:

- Studying the benefits of tobacco cessation during pregnancy.
- Evaluating the effectiveness of decision-making aides used by newly diagnosed prostate cancer patients.
- Understanding the barriers to colorectal cancer screening among Alaska Native people.
- Comparing the effectiveness of different types of CRC screening among Alaska Native people.
- Studying the effect that increasing fiber in the diet of Alaska Native people has on their risk of colorectal cancer.

For more information about these research studies and others in the Alaska Tribal Health System contact RESEARCH@ANTHC.ORG.

Clinical Trials

A cancer clinical trial is a research study that looks for new ways to find or treat cancer. Before a new therapy becomes standard of care, it is tested in a clinical trial with many volunteers to make sure it is safe and it works. There are very few Alaska Native people who have the chance to volunteer in clinical trials. This makes it hard to tell how a new therapy works for Alaska Native people if the therapy is only tested with non-Native people.

The Alaska Native Medical Center Oncology Clinic is not currently engaged in clinical trials on-site, although access to cancer clinical trials at other facilities can be facilitated at ANMC.

While the impact of participation in a clinical trial may not be immediately known, the effect from participating is useful in determining such things as the impact of chemotherapy drugs and other treatments. Developing clinical trial opportunities at ANMC would help reduce barriers to Alaska Native volunteer participation in clinical trials.

Alaska Area Institutional Review Board

The main role of the Indian Health Service Alaska Area Institutional Review Board (AAIRB) is to protect research participants in the Alaska Tribal Health System and to ensure that research projects meet the requirements of federal regulations. The AAIRB reviews and approves all research that involves human participants conducted by faculty, staff, and students that use the ATHS. The AAIRB operates with the Federal Wide Assurance of the Indian Health Service.

The ANTHC Health Research Review Committee (HRRC) oversees health research conducted within ANMC, as well as all research involving ANTHC staff and facilities conducted throughout the state. The HRRC is comprised of six appointed members of the tribally-elected ANTHC Board of Directors, who review and approve research on behalf of the Board or recommend research for approval to the Board. Tribal approval is sought to affirm that research is conducted to benefit Alaska Native people, assuring that Alaska Native communities are not harmed, and that proposed research studies address health needs pertinent to Alaska Native people. To be eligible for HRRC review, all research must first be reviewed and approved by the AAIRB.

Goals, Objectives and Strategies for Surveillance & Research

GOAL: Utilize complete, accurate, and timely data on cancer in Alaska Native people to provide the basis for cancer programs and services.

Objective 7.1: Utilize quality cancer data collection and reporting systems to understand and address the burden of cancer among Alaska Native people.

Strategy 1: *Support the efforts of the Alaska Native Tumor Registry to gather, report, and distribute cancer data on Alaska Native people.*

Strategy 2: *Collaborate with State of Alaska Cancer Registry on the use of data to identify and assist communities with specific cancer concerns such as low cancer screening rates or high rates of obesity.*

Strategy 3: *Maintain an ongoing review of research outcomes to improve cancer care among Alaska Native people.*

Strategy 4: *Gather and utilize data to address the concerns of Alaska Native cancer survivors and caregivers.*

Objective 7.2: Increase the use and understanding of cancer data among Alaska Native people.

Strategy 1: *Support efforts in health literacy.*

Strategy 2: *Develop community education which includes cancer data and suggest ways that an individual, family, or community can influence the data.*

MEASURES - SURVEILLANCE AND RESEARCH

Create and disseminate timely reports on the burden of cancer among Alaska Native people.

Baseline (2019) 0

2024 Goal 2

(Source: CCC reports)

Create and disseminate a timely report on Alaska Native cancer survivors.

Baseline (2019) 0

2024 Goal 1

(Source: CCC reports)

APPENDIX I

Alaska Tribal Health System Comprehensive Cancer Plan
Goals, Objectives & Strategies

Chapter 2
PREVENTION

TOBACCO

Goals, Objectives and Strategies for Prevention - Tobacco

GOAL: Prevent Cancer among Alaska Native people

Objective 1.1. Reduce cancer incidence and mortality due to tobacco use among Alaska Native people.

***Strategy 1**: Support the goals of the ANTHC Tobacco Prevention and Control Program.*

***Strategy 2:** Increase the number of Alaska Native patients screened for tobacco use in Alaska Tribal Health System hospitals and clinics.*

***Strategy 3:** Support efforts to decrease the number of pregnant women who smoke or use tobacco during pregnancy.*

***Strategy 4:** Educate the public about the health effects from e-cigarette use.*

***Strategy 5:** Support the Community Health Services Chronic Disease Committee and other tribal programs to decrease tobacco use.*

***Strategy 6:** Support education and cessation activities aimed at cancer patients and cancer survivors.*

MEASURES - TOBACCO

Alaska Native adults who smoke tobacco

Baseline (2017)..... 35%

2024 Goal..... 33%

(Source AK BRFSS)

Alaska Native cancer survivors who smoke

Baseline (2017)..... 35%

2024 Goal 33%

(Source AK BRFSS)

Alaska Native youth who use e-cigarettes

Baseline (2015)..... 16%

2024 Goal 14%

(Source AK YRBS)

NUTRITION, PHYSICAL ACTIVITY & OBESITY

Goals, Objectives and Strategies for Prevention - Nutrition, Physical Activity and Obesity

GOAL: Prevent Cancer among Alaska Native people

Objective 1.2: Reduce cancer incidence and mortality due to poor nutrition, physical inactivity and obesity among Alaska Native people.

***Strategy 1:** Distribute culturally appropriate materials to schools that support healthy food choices and increased physical activity.*

***Strategy 2:** Increase the number of schools that provide physical activity opportunities and establish policies that promote physical activity.*

***Strategy 3:** Encourage safe areas for physical activity including playgrounds, sidewalks, and designated areas for walking, basketball, baseball, and similar activities.*

***Strategy 4:** Support efforts at decreasing the use of sugar-sweetened beverages in tribal health organizations and among Alaska Native people.*

***Strategy 5:** Support the Community Health Services Chronic Disease Committee and other tribal programs to increase healthy decisions in nutrition and physical activity.*

MEASURES - NUTRITION, PHYSICAL ACTIVITY AND OBESITY:

Alaska Native adults who are obese.

Baseline (2017).....36%

2024 Goal 30%

(Source AK BRFSS)

Alaska Native adults who get recommended amount of aerobic physical activity

Baseline (2017).....50%

2024 Goal 52%

(Source AK BRFSS)

Adults who report drinking one or more sugar-sweetened drinks per day

Baseline (2017).....40%

2024 Goal 38%

(Source AK BRFSS)

ENVIRONMENTAL CONTAMINANTS

Goals, Objectives and Strategies for Prevention - Environmental Contaminants

GOAL: Prevent Cancer among Alaska Native people

Objective 1.3: Educate Alaska Native people about ways to reduce harmful exposure to contaminants.

***Strategy 1:** Increase awareness of the benefits and risks associated with traditional diets.*

***Strategy 2:** Increase awareness about health risks associated with asbestos and radon exposure.*

***Strategy 3:** Increase awareness about the Local Environmental Observer (LEO) Network to monitor observable local climate change.*

INFECTIOUS AGENTS

Goals, Objectives and Strategies for Prevention - Infectious Agents

GOAL: Prevent Cancer among Alaska Native people

Objective 1.4: Reduce cancer incidence and mortality due to infectious agents.

Strategy 1: *Increase awareness among Alaska Native people that HPV vaccination prevents cancer.*

Strategy 2: *Promote the use of HPV vaccination for cancer prevention for both males and females through statewide education and outreach campaigns.*

Strategy 3: *Promote an annual HPV awareness campaign.*

Strategy 4: *Increase the knowledge of the general public and healthcare providers about the connection between Hepatitis C and liver cancer.*

Strategy 5: *Educate high risk populations, including Baby Boomers and veterans, on the importance of getting tested for Hepatitis C.*

Strategy 6: *Support opportunities for collaborations between medical experts, health care providers and Alaska Native tribal leaders and cancer survivors for informed decision making.*

Strategy 7: *Increase the knowledge of the general public and health care providers about the connection between H. pylori and gastric cancer.*

Chapter 3

SCREENING & EARLY DETECTION

Goals, Objectives and Strategies for Screening & Early Detection

Goal: Detect cancer at its earliest stages

COLORECTAL CANCER

Objective 3.1: Reduce disease and death from colorectal cancer.

Strategy 1: *Support and coordinate with colorectal cancer screening programs throughout Alaska.*

Strategy2: *Encourage use of colorectal cancer family history data base to identify people at an increased risk for colorectal cancer.*

Strategy 3: *Implement mass and small media directed toward Alaska Native people to raise awareness about colorectal cancer screening.*

Strategy 4: *Utilize Nolan the Colon and Polyp Men characters to raise awareness about colorectal cancer screening.*

Strategy 5: *Support education and utilization of genetic counseling and screening services for colorectal cancer patients and especially those at risk for Lynch Syndrome.*

Strategy 6: *Encourage alternative screening methods when a colonoscopy is not an option for screening.*

MEASURES - COLORECTAL CANCER

Alaska Native adults aged 40-75 who were screened for colorectal cancer

Baseline (2016) 61%

2024 Goal 75%

(Source: Alaska BRFSS-ages 50-75)

BREAST AND CERVICAL CANCER

Objective 3.2: Reduce disease and death from breast and cervical cancer.

Strategy 1: *Continue to support and coordinate with breast cancer screening programs throughout Alaska.*

Strategy 2: *Utilize data mapping and identification of areas with low screening rates and focus resources to increase rates in those areas.*

Strategy 3: *Support breast cancer screening campaigns directed at disparate populations including women who are disabled or homeless.*

Strategy 4: *Implement mass and small media campaigns directed toward Alaska Native women.*

Strategy 5: *Support education about and utilization of genetic counseling and testing services for breast cancer patients.*

MEASURES - BREAST AND CERVICAL CANCER

Alaska Native women age 50-74 who had a mammogram in the past two years.

Baseline (2016) 68%

2024 Goal 73%

(Source: Alaska BRFSS)

Alaska Native women age 21-65 who had a Pap test in the past three years

Baseline (2016) 84%

2024 Goal 87%

(Source: Alaska BRFSS)

Strategy 6: *Support the National Breast and Cervical Cancer Early Detection Programs in Alaska to provide access to prevention, screening, and treatment for cervical cancer.*

Strategy 7: *Educate providers in Federally Qualified Health Centers about current USPSTF recommendations for HPV screening.*

Strategy 8: *Educate general public about the link between HPV immunization, HPV testing and a patient's risk for cervical cancer.*

LUNG CANCER

Objective 3.3: Reduce disease and death from lung cancer.

Strategy 1: *Support efforts in tribal hospitals and tobacco cessation programs to identify candidates eligible for lung cancer screening.*

Strategy 2: *Implement mass and small media campaign to educate Alaska Native people about the benefits of lung cancer screening.*

Strategy 3: *Encourage the use of the Alaska Quit Line as a means to identify individuals eligible for lung cancer screening.*

Strategy 4: *Partner with tobacco cessation programs statewide to encourage smoking cessation in conjunction with lung cancer screening.*

MEASURES - LUNG CANCER

Increase the number of Alaska Native people at ANMC who receive lung cancer screening.

Baseline (2017) ..... Unknown

2024 Goal 100

(Source: CCC Program Records)

PROSTATE CANCER

Objective3.4: Increase informed decision-making regarding prostate screening by Alaska Native men.

Strategy 1: *Support USPSTF standards in prostate cancer screening education and decision-making.*

Strategy 2: *Provide education on decision-making for men recently diagnosed with prostate cancer.*

Strategy3: *Partner with the ANMC Urology Clinic to distribute patient education on decision-making regarding*

prostate screening to Alaska Native men recently diagnosed with prostate cancer.

Chapter 5
SURVIVORSHIP

Goals, Objectives and Strategies for Survivorship

Goal: Increase quality and length of life for all Alaska Native cancer survivors

Objective 5.1: Increase an understanding of the physical, mental, and social challenges faced by Alaska Native cancer survivors among health care providers and decision makers.

Strategy 1: *Produce a report on Alaska Native cancer survivors that identifies common concerns of survivors and suggests solutions to the issues survivors encounter.*

Strategy 2: *Utilize key informant interviews with Alaska Native cancer survivors, caregivers, and providers to broaden the understanding of cancer survivorship.*

Objective 5.2: Increase opportunities for provider and patient education on cancer treatment guidelines for follow-up care.

Strategy 1: *Support education for primary care providers on the guidelines for follow-up care.*

Strategy 2: *Develop appropriate education for cancer survivors and their caregivers on the importance of understanding their cancer diagnosis, treatment plan, and recommended follow-up care.*

Objective 5.3: Educate the public about the growing number of Alaska Native cancer survivors and understanding of cancer as a chronic disease.

Strategy 1: *Support the development of community resources to support cancer survivors.*

Strategy 2: *Increase survivor and caregiver education through local cancer support groups.*

Strategy 3: *Support the training of formal and informal patient navigators who assist cancer patients during their cancer diagnosis and treatment and as cancer survivors.*

Objective 5.4: Support healthy lifestyles choices among cancer survivors.

Strategy 1: *Utilize tobacco use prevention and cessation education and services to reduce tobacco use rates among Alaska Native cancer survivors.*

Strategy 2: *Develop culturally appropriate education for survivors and caregivers about importance of healthy lifestyle choices.*

MEASURES - SURVIVORSHIP

Decrease the percentage of Alaska Native cancer survivors who use tobacco.

Baseline (2016)..... 35%

2024 Goal..... 30%

(Source: AK BRFSS)

Increase the number of patient navigators working in thetribal health system.

Baseline (2019)..... Unknown

2024 Goal..... 10

(Source: ANTHC CCC)

Create and disseminate a timely report on Alaska Native cancer survivors.

Baseline (2019)..... 0

2024 Goal 1

(Source: ANTHC CCC)

Chapter 6
PALLIATIVE CARE

Goals, Objectives and Strategies for Palliative Care

GOAL: Increase access to high quality palliative care

Objective 6.1: Provide high quality palliative care at ANMC within the inpatient and outpatient clinics, and statewide with tribal health organizations.

Strategy 1: *Support the expansion of palliative care services and the palliative care resources team throughout ANMC.*

Strategy 2: *Integrate advanced communications skills training into simulation labs, including identifying and training palliative care actors for labs and workshops.*

Strategy 3: *Support the development of resources to address staff distress, including critical incident stress management.*

Objective 6.2: Enhance health care providers' knowledge and expertise in primary palliative care.

Strategy 1: *Support policy, systems, and environmental changes that encourage tribal health organizations in the development of primary palliative care resource teams.*

Strategy 2: *Support education opportunities that include palliative care training for health care providers and staff.*

Strategy 3: *Support the development of culturally appropriate palliative care and end of life resources for patients, families, and health care staff.*

Strategy 4: *Support Community Health Aide training, curriculum development, and resources to support primary palliative care within the village setting.*

Strategy 5: *Encourage the developement of a system-wide palliative care formulary for the Alaska Tribal Health System.*

Objective 6.3: Increase the understanding of palliative care and the services it provides among Alaska Native people.

Strategy 1: *Develop and distribute resources to communities that introduces and addresses the benefits of palliative care, comfort care, and hospice.*

MEASURES - PALLIATIVE CARE

Tribal healthcare providers attend palliative care educational events.

Baseline (2019):.....23 (average)

2024 Goal: .....30 (average)

(Source: ANTHC/New Mexico University ECHO database)

Percentage of Alaska Native patients over 65 who have an advance care directive (ACD) in their medical record at the Alaska Native Medical Center

Baseline (2019):..... 6%

2024 Goal:..... 20%

(Source: ANTHC Business Intelligence Report's Portal ACD Report)

Strategy 2: *Increase the use of advance care directives among Alaska Native people.*

Objective 6.4: Determine the need and feasibility of establishing a virtual hospice program for the Alaska Tribal Health System.

Strategy 1: *Educate healthcare providers and communities about the benefits of community-based palliative care and virtual hospice programs.*

Strategy 2: *Identify needed resources and design approaches to establish a reimbursable virtual hospice service.*

Strategy 3: *Identify needed resources and design approaches to establish a palliative care home service program.*

Chapter 7
SURVEILLANCE & RESEARCH

Goals, Objectives and Strategies for Surveillance & Research

GOAL: Utilize complete, accurate, and timely data on cancer in Alaska Native people to provide the basis for cancer programs and services.

Objective 7.1: Utilize quality cancer data collection and reporting systems to understand and address the burden of cancer among Alaska Native people.

Strategy 1: *Support the efforts of the Alaska Native Tumor Registry to gather, report, and distribute cancer data on Alaska Native people.*

Strategy 2: *Collaborate with State of Alaska Cancer Registry on the use of data to identify and assist communities with specific cancer concerns such as low cancer screening rates or high rates of obesity.*

Strategy 3: *Maintain an ongoing review of research outcomes to improve cancer care among Alaska Native people.*

Strategy 4: *Gather and utilize data to address the concerns of Alaska Native cancer survivors and caregivers.*

Objective 7.2: Increase the use and understanding of cancer data among Alaska Native people.

Strategy 1: *Support efforts in health literacy.*

Strategy 2: *Develop community education which includes cancer data and suggest ways that an individual, family, or community can influence the data.*

MEASURES - SURVEILLANCE AND RESEARCH

Create and disseminate timely reports on the burden of cancer among Alaska Native people.

Baseline (2019) 0

2024 Goal..... 2

(Source: CCC reports)

Create and disseminate a timely report on Alaska Native cancer survivors.

Baseline (2019)..... 0

2024 Goal 1

(Source: CCC reports)

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APPENDIX 2

The Alaska Native Tribal Health Consortium, the Alaska Tribal Health System, and the History of Cancer Planning in Alaska/Evaluation of Cancer Plan

The Alaska Native Tribal Health Consortium

Since 1970, a statewide system of regional and local tribal health providers has been in existence to provide health care to Alaska Native people. This unique system provides access to a comprehensive, integrated, and tribally owned and controlled health care delivery system.

For more than 30 years, the Alaska Native Health Board (ANHB) served as a statewide organization for the purpose of "promoting the spiritual, physical, mental, social and cultural well-being and pride of Alaska Native People." Primarily an advocacy organization for Alaska Native people, the ANHB Board of Directors represented the tribes and tribal organizations that carried out health programs throughout Alaska. Through ANHB, tribes and tribal organizations coordinated activities to develop common objectives and undertake statewide projects.

In 1994, several tribal health organizations joined together to form a compact that provided the opportunity for direct government-to-government negotiations between compact signers and representatives of the federal government through the Indian Health Service (IHS). Tribes and tribal organizations began to manage and operate hospitals and clinics. It allowed them to make faster and more efficient decisions that better addressed the health care needs and concerns among Alaska Native people. Over the past ten years, more tribes and tribal organizations joined the Compact.

In 1997, after years of inter-tribal discussion and negotiation with the IHS, the Alaska Native Tribal Health Consortium (ANTHC) was formed to promote the American Indian/Alaska Native vision of "self-governance and self-determination." ANTHC is a statewide 501(c) 3 non-profit health services organization owned by the Alaska Native people. A 15-member Alaska Native Board of Directors representing 229 tribes and 39 tribal health organizations across Alaska governs ANTHC. The Consortium entered into a self-governance agreement (the Alaska Tribal Health Compact) with the IHS for management of all statewide health services formerly provided by that agency for Alaska Native people.

ANTHC is the largest tribal self-governance entity in the United States. Unlike most boards of a corporation of this size, the board is made up of Alaska Native consumers comprised of fishermen, housewives, former village-based health workers, community activists, and others appointed by their tribes to represent them. It exists to "provide the highest quality health services for all Alaska Native people."

The ANTHC vision is for "Alaska Native people to be the healthiest people in the world." Along with that vision is the goal to have Alaska Native people trained to provide all levels of Alaska Native healthcare. Over time, more positions are being held by Alaska Native/American Indian people. Oversight continues to be provided by the ANTHC Board of Directors. The Board approves plans, programs, services and budgets.

The Alaska Tribal Health System

The Alaska Tribal Health System (ATHS) is a large network of village-based clinics, sub-regional clinics, regional hospitals, and a large tertiary care facility (Alaska Native Medical Center or ANMC). ANMC, a 167-bed hospital, is Indian Country's largest and most sophisticated medical center and is jointly managed by ANTHC and the Southcentral Foundation. The ATHS is complex in that it includes cradle-to-grave comprehensive care for over 166,000 eligible beneficiaries at multiple facilities of varied capacity, spread across the state.

The ATHS is organized around five levels of care:

- **Village-based services** are provided by Community Health Aide/Practitioners working in village clinics (180 sites in rural Alaska, majority without road access) and other health care workers such as behavioral and dental aides.
- **Sub-regional services** are provided by mid-level practitioners serving several village
- **Regional services** are provided at six regional primary care hospitals in Barrow, Nome, Kotzebue, Bethel, Dillingham and Sitka. Many other healthcare services are provided by the tribal organizations in these areas and governed by their own Board of Directors.

- **Statewide tertiary and specialty services** are provided at the Alaska Native Medical Center (located in Anchorage). ANMC multi-specialty outpatient clinics record more than 300,000 visits, perform over 17,000 surgical procedures, and admit over 10,000 patients each year. ANMC has also earned the distinction of being certified as the first Level II Trauma Center hospital in Alaska.
- **Contact health services** include coverage for private sector referrals beyond the direct care system.

As the major providers of healthcare within the ATHS, ANTHC and ANMC, incorporate organizational behaviors, practices, attitudes, and policies that are respectful and responsive to cultural diversity in the broader definition that includes socioeconomic status, age, religion, sexual orientation, gender, physical and mental capacity and other differences.

Cancer Program planning and implementation

In 1990, the State of Alaska Division of Public Health was awarded a "Data-Based Intervention Research Cooperative Agreement" by the National Cancer Institute to conduct a cancer control project using state cancer data to plan and undertake prevention and control activities. The project focused on tobacco-related, breast, and cervical cancers as they offered significant opportunities for prevention and early detection.

In 1994, the first State of Alaska Cancer Control Plan was written by the Alaska Division of Public Health, Section of Epidemiology and funded by the Division of Cancer Prevention and Control, National Cancer Institute. While these efforts were comprehensive and written to include Alaska Native people, the Alaska Tribal Health System has unique challenges and systems of care which were difficult to address in a statewide plan.

Although overall cancer mortality rates in the United States declined through the 1990s, Alaska Native cancer rates increased. From 1994 to 1998 the Alaska Native age-adjusted average annual mortality rate was thirty percent higher than that of U.S. Whites. Alaska Native people were forty percent more likely to die of lung cancer than U.S. Whites and demonstrated elevated mortality rates for several other smoking-related cancers as well. Also, Alaska Native people are at excess risk for nearly all cancers of the digestive system. Research in the area concluded that the burden of cancer on the Alaska Native healthcare system will continue to increase as the population ages and that intensified efforts to modify behavioral risk factors were needed.

These findings, coupled with the knowledge of the unique cultural differences and geographic barriers faced by many Alaska Native people, prompted ANTHC to apply to the Centers for Disease Control and Prevention (CDC) for assistance in writing a comprehensive cancer plan for Alaska Native people. In 2004, ANTHC received the grant and began a comprehensive planning process which resulted in this first Alaska Tribal Health System Comprehensive Cancer Plan, 2005-2010. The State of Alaska also received a grant to update their 1994 Cancer Plan. Alaska Native people are the largest minority in Alaska and the ATHS is often the only provider of healthcare in Alaska's remote communities. The ATHS is uniquely positioned to address many issues across the spectrum of cancer planning since it provides healthcare across a large and mostly road less state using innovative approaches refined and tested over many years.

The ATHS Comprehensive Care Plan, the first of its kind in 2006, includes all aspects of cancer care including prevention, screening and early detection, diagnosis, treatment, survivorship, palliative care, and surveillance and research. This is now the third ATHS Cancer Plan and it continues to be a valuable resource for tribal members and health care providers as they seek to address and provide the highest quality of health care for the people of Alaska.

Evaluation

The purpose of developing and implementing a comprehensive cancer pan is ultimately to reduce cancer incidence, morbidity and mortality and to improve quality of life. To determine whether the purpose is being achieved the plan will be evaluated. The evaluation will focus on process, outputs, and outcomes. The process evaluation will measure the extent to which the program accomplishes the strategies proposed in the plan. The output evaluation focuses on the short-term results of the program and whether the objectives are being addressed. The outcome evaluation will measure the success of plan measures such as increases in screening and vaccination rates. Evaluation results will be used to determine future cancer program goals, objectives and strategies.

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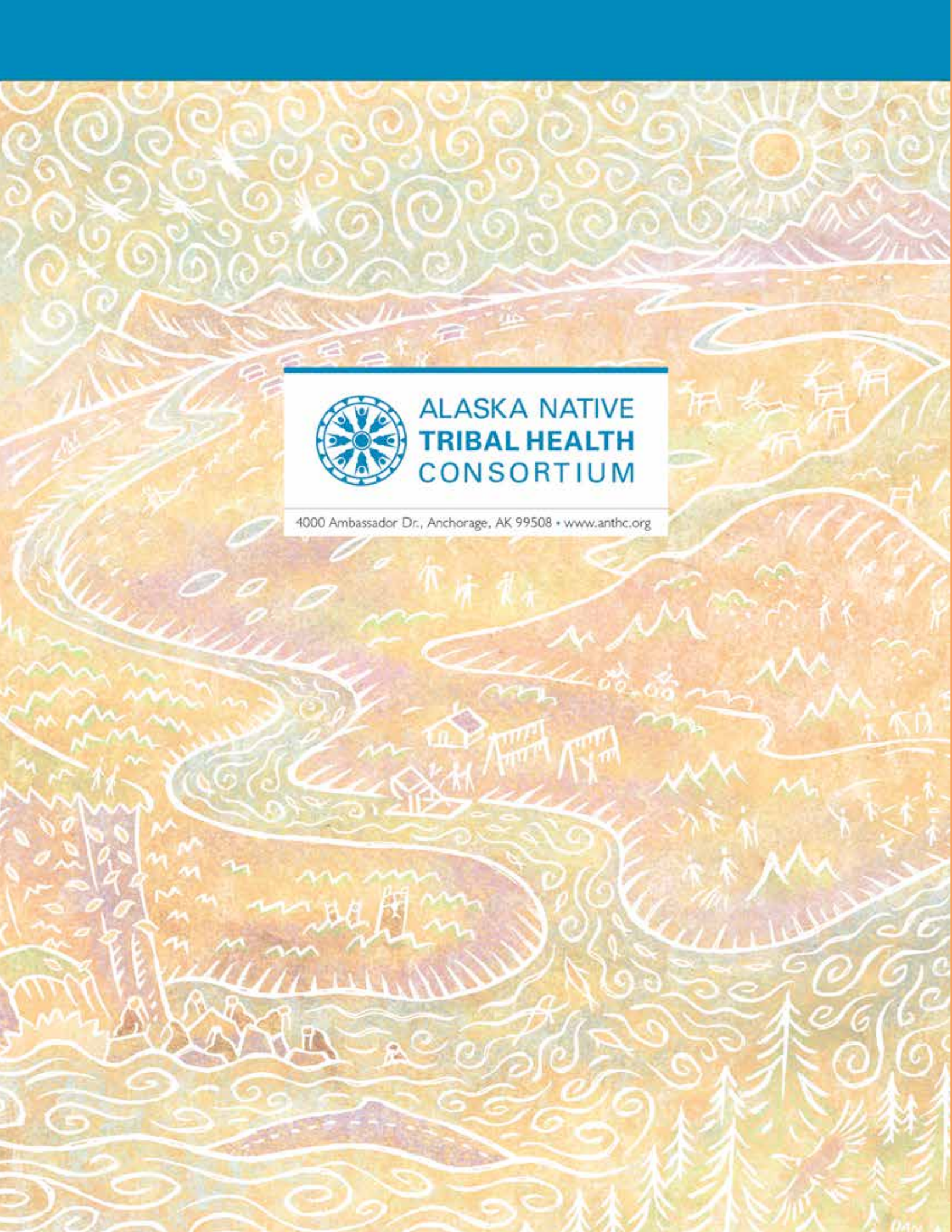

ALASKA NATIVE
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