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CANCER 101

A Cancer Education and Training Program for American Indians and Alaskan Natives

Written by—

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Cancer Information Service - Pacific Region

Fred Hutchinson Cancer Research Center

In collaboration with—

Northwest Portland Area Indian Health Board's

Northwest Tribal Cancer Control Project

CANCER 101

A Cancer Education and Training Program for American Indians and Alaska Natives

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The contents of this document are solely the responsibility of the author and do not necessarily represent the official views of CDC.

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Dear Cancer 101 User:

Welcome to Cancer 101: An Education and Training Program for American Indians and Alaska Natives.

The purpose of the Cancer 101 curriculum is to provide basic information about cancer. The intended audience is community members, staff of Indian health programs, and Community Health Representatives. You may also find the materials helpful for patient/family education in individual or classroom settings. We encourage you to use the curriculum and the supporting materials for other groups and in other settings as educational opportunities arise. The curriculum and materials are meant to be a comprehensive resource for you to use for your specific education and training needs.

As a Cancer 101 user, you are part of an important educational initiative to educate American Indian and Alaska Native people about cancer, and we need your help! A strong feedback loop between our office and the users of the Cancer 101 curriculum is critical to the ongoing success of the program. This feedback loop will provide you with the opportunity to let us know how you are using the materials, how the curriculum can be strengthened to more closely meet your needs, and how we can provide you with the assistance and support you may want with your

program planning. Your suggestions will enable us to modify the curriculum to suit your needs, and to provide you with additional resource materials and/or training assistance.

Please complete the "Trainer Activity Report" in the Evaluation section of the curriculum when you use the Cancer 101 curriculum. Instructions for faxing to our office are on the form. Thanks in advance for your participation in this process. Your feedback will allow us to track usage of the curriculum for reporting purposes, and will ensure that we have your contact information so you can quickly receive any updates to the materials.

We hope that you find the curriculum and accompanying materials useful in your training and education activities with American Indians and Alaska Natives. We look forward to hearing from you. Please feel free to contact Teresa Guthrie at tguthrie@fhcrc.org or 206-667-7593, or Cicelly Gabriel at cgabriel@npaihb.org or 503-228-4185 x319 if you have any questions.

Sincerely,

Teresa Guthrie,
Spirit of the EAGLES

Kerri Lopez,
Northwest Portland Area
Indian Health Board

CANCER 101

A Cancer Education and Training Program for American Indians and Alaska Natives

Written by Teresa Guthrie, RN, MN
In consultation with member tribes of the Northwest Portland Area Indian Health Board

Many individuals have made this curriculum possible including tribal representatives who attended Cancer 101 trainings and reviewers serving Indian health programs throughout the Northwest. Together, they have provided invaluable recommendations in the development and use of this document.

Contributors also include staff of the Cancer Information Service - Pacific Region (CIS) and of the Northwest Tribal Cancer Control Project. Contributing CIS staff members are as follows:

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Larry Workman (Quinault Indian Nation)

Collaborators also extend a note of thanks to the following:

Debra S. Everson, RN, MN, for sharing the curriculum and resource guide, Community Health Representative – Cancer and Advocacy Program Resource Guide

Melany Cueva, RN, MA, of the Alaska Native Medical Center for sharing The Path to Understanding Cancer

Member Tribes of the Northwest Portland Area Indian Health Board

Burns Paiute Tribe

Coeur d'Alene Tribe

Confederated Tribes of the Chehalis

Confederated Tribes of the Colville Reservation

Confederated Tribes of the Coos, Lower Umpqua & Siuslaw Indians

Confederated Tribes of the Grand Ronde

Confederated Tribes of the Siletz Indians of Oregon

Confederated Tribes of the Umatilla Indian Reservation

Confederated Tribes of Warm Springs Reservation of Oregon

Coquille Tribe

Cow Creek Band of Umpqua Tribe of Indians

Cowlitz Indian Tribe

Hoh Tribe

Jamestown S'Klallam Tribe

Kalispel Tribe of Indians

Klamath Tribes

Kootenai Tribe

Lower Elwha Klallam Tribe

Lummi Nation

Makah Indian Nation

Muckleshoot Indian Tribe

Nez Perce Tribe

Nisqually Tribe

Nooksack Tribe

Northwest Band of Shoshone Indians

Port Gamble S'Klallam Tribe

Puyallup Tribe of Indians

Quileute Tribe

Quinault Nation

Samish Indian Tribe

Sauk-Suiattle Indian Tribe

Shoalwater Bay Indian Tribe

Shoshone-Bannock Tribes

Skokomish Tribal Nation

Snoqualamie Indian Tribe

Spokane Tribe of Indians

Squaxin Island Tribe

Stillaguamish Tribe

Suquamish Tribe

Swinomish Indian Tribal Community

Tulalip Tribes

Upper Skagit Tribe

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Reviewers

Collaborators extend their gratitude to the distinguished panel of reviewers whose experience and expertise have contributed to the value of these modules.

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Preface

These Cancer 101 modules represent collaboration at its best. Collaborators include the Cancer Information Service of the Pacific Region (CIS) and a subcontract of the Spirit of EAGLES program (both based at the Fred Hutchinson Cancer Research Center) and the Northwest Tribal Cancer Control Project (NTCCP) at the Northwest Portland Area Indian Health Board (NPAIHB). Our common goal is to reduce the cancer burden in tribal communities.

In 2001, Sue Swanson, RN, MS, AOCN, oncology nurse specialist, submitted to NTCCP her original 15-minute Cancer 101 presentation. For the review process, we consulted our colleagues: Sandy Valko, MS, partnership manager at CIS, and Teresa Guthrie, RN, coordinator of the Spirit of EAGLES. Ms. Guthrie had written seven Cancer 101 modules used in train-the-trainer sessions.

Once Ms. Guthrie's first draft was mailed out for review to NPAIHB delegates, tribal health directors, service unit directors, NTCCP's Tribal Cancer Control Contacts. A survey was conducted to determine how the modules might be improved. Twelve individuals completed the five-page survey including a Community Health Representative, a Tribal Health Director, seven Nurses, two physicians, and a billing clerk. We are grateful for these individuals who took the time to review and comment on the document and for the many trainees whose critique has made Cancer 101 more usable.

In consultation with Ms. Valko and Ms. Guthrie, NTCCP also developed training sessions most of which were sponsored by NTCCP. This sponsorship entailed coordination and implementation all training plans, recruitment of tribal participants, compiling training packets, and conducting evaluations. NTCCP also contracted with David and Barbara Watson (Siletz) who designed the lay-out for the modules and PowerPoint presentations. We extend our appreciation to all who attended the training sessions and who, in turn, shared this vital information with their communities.

CANCER 101

Table of Contents

Each learning module is designed for presentation as a 30- to 40- minute education session; or the entire curriculum may be presented as a one-day workshop on cancer education. Learning modules include stated goals and objectives for each topic, pre and post self-assessment, PowerPoint presentation, glossary, references, and resource materials as appropriate.

Learning Module 3
"Cancer Screening and Early Detection"

…discusses the components of early detection and barriers associated with practicing early detection, and describes common symptoms associated with cancer.

Learning Module 4
"Cancer Diagnosis and Staging"

…discusses how cancer is diagnosed and how cancer stage is determined.

Learning Module 5
"Cancer Risk and Risk Reduction"

…focuses on understanding cancer risk factors and learning how to reduce risks associated with cancer.

Learning Module 6
"Basics of Cancer Treatment"

…discusses a variety of methods used in the treatment of cancer and their potential side effects.

Learning Module 7
"Support for Patients and Caregivers"

…addresses some of the psychological and social issues that affect cancer patients and their caregivers and discusses ways to be supportive.

Evaluation

…consists of four documents: Curriculum/Training Evaluation, Health Change Checklist, Trainer Activity Report and Answer Key for the self assessments.

Training Tips

…and tools to use in a variety of cancer education and training opportunities, from individual to large groups.

Resources

…contain a list of national organizations involved in cancer control for AI/AN. You may choose to add resources from your community. There is also a list of resource materials that accompany the curriculum, with ordering information.

Cancer Among American Indians and Alaska Natives

Target Audience:

- *Community members*
- *Staff of Indian health programs, including Community Health Representatives*

Contents of Learning Module:

- *Instructor's Guide with Pre/Post Self-Assessment*
- *PowerPoint presentation*
- *Glossary*
- *References*

Length:

- *Introduction of session/module overview (:05)*
- *Pre self-assessment (:07)*
- *Presentation of module including interactive activity (:30)*
- *Post self-assessment (:05)*
- *Closing (:03)*

Goals

In this session, participants will gain an understanding of the growing health concern of cancer among American Indians and Alaska Natives (AI/AN).

Objectives

At the completion of Learning Module 1, participants will be able to demonstrate the following:

Section 1
Give two reasons why cancer is a growing health concern in today's AI/AN communities.

Section 2
Discuss two facts regarding how data contributes to our understanding about the cancer health concern for AI/AN.

Section 3
Discuss two facts that contribute to poor survival for AI/AN diagnosed with cancer. Describe two factors that are likely to improve cancer survival rates for AI/AN.

Measures of Objective Accomplishment

The presenter will administer a pre self-assessment and a post self-assessment to measure participants' knowledge of the module's objectives. The pre self-assessment measures existing knowledge and the post self-assessment measures what was gained through the learning module.

NOTE

- Each major learning point is clearly identified by **boldface** type throughout the guide and emphasized in the PowerPoint presentation.
- See the glossary (at the end of the module) for words that are in ***bold italics*** throughout the module.

Pre/Post Self-Assessment

Cancer Among American Indians and Alaska Natives

Do you agree (A), disagree (D), with these statements, or are you not sure (NS)? Circle Choice A, D, or NS.

1.	**A**	**D**	**NS**	Life expectancy and lifestyles are two factors that may be associated with the increase of cancer among American Indians and Alaska Natives.
2.	**A**	**D**	**NS**	Cancer is the second leading cause of death among American Indians, and the leading cause of death for Alaska Natives.
3.	**A**	**D**	**NS**	Current data for American Indians and Alaska Natives provides an accurate picture of the cancer problem in Indian country.
4.	**A**	**D**	**NS**	Cancer survival can be improved by participating in screening and early detection.
5.	**A**	**D**	**NS**	Access to health care that is culturally appropriate will reduce barriers to care.

Section 1
Cancer Background

For many years, the disease cancer was not common among American Indians and Alaska Natives (AI/AN). It was thought perhaps that AI/AN had a natural ***immunity*** to this disease. Over time, however, researchers have discovered evidence suggesting that cancer did exist among AI/AN as far back as the turn of century (Burhansstipanov, 1997). **Today, cancer has become more common among AI/AN and is now a growing concern. Many of the factors that contribute to the development of cancer in AI/AN people have yet to be determined, however, changes in life expectancy and lifestyle are thought to play a significant role.**

Increased life expectancy places American Indians and Alaska Natives at greater risk for cancer.

Life expectancy for AI/AN has increased dramatically over the last several decades from less than 50 years in the mid-1940's, to about 71 years (Joe, 2001; Burhansstipanov & Dresser, 1994). Much of this increase can be credited to advances in the treatment of infectious diseases and a decline in infant and maternal ***mortality*** (Michielutte, Sharp, Dignan & Blinson, 1994). These reductions in mortality are largely due to improvements in public health measures such as immunization programs, improvements in sanitation, drinking water and access to primary medical care. **Consequently, many individuals who would have died at an earlier age are now living to be much older. Given that most cancer occurs in individuals over the age of 45 years, the increase of life expectancy for AI/AN places them at increased risk for cancer.**

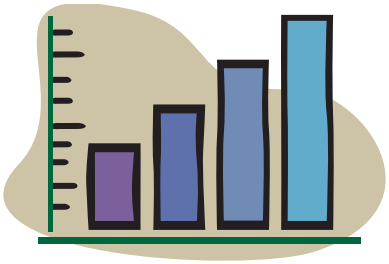
As AI/AN live longer, the type of lifestyle they lead may influence their risk for developing cancer. In the past, traditional lifestyles included many practices that are thought to reduce one's risk for developing cancer. These included daily exercise, a diet rich in fruits, vegetables, and other natural foods, and reserving tobacco for ceremonial use rather than habitual use. In today's world, lifestyles for many AI/AN have been made more convenient by advances in technology. Although many of these advances have led to improvements in the ease of performance of day-to-day activities, they have also led to a decrease in energy expenditures. Thus, today's lifestyles have become more sedentary. Highly processed and convenience food items have replaced a diet once rich in natural foods. An increase in personal use of tobacco that is chewed or smoked has led to increased rates of cancer in AI/AN (Burhansstipanov, 1997; Cobb, 1996). **Research is ongoing and early findings suggest lifestyles that include attention to proper diet (rich in natural foods), limited alcohol use, daily exercise, and the avoidance of known *carcinogens* may reduce one's risk for developing cancer.**

Lifestyle choices are linked to the rise in cancer rates of American Indians and Alaska Natives.

Although researchers have identified increased life expectancy and changing lifestyles as two factors that have influenced the rise in cancer rates among AI/AN, there are other contributing factors to consider. These factors include *heredity*, environmental exposures, *viruses* and *bacteria*. They will be discussed in more detail in Learning Module 5: Cancer Risk Factors and Risk Reduction.

Section 2

What's Known and not Known About Cancer among American Indians and Alaska Natives



In general, much work still needs to be done in order to understand the issue of cancer among AI/AN. Because there is no single database that accurately depicts cancer-related data for AI/AN, multiple databases must be used to gather and assess this information. Typically, national databases such as the U.S. Census population counts, National Center for Health Statistics mortality data, Surveillance, Epidemiology, and End Results program, and the Indian Health Service are used as sources for cancer information. Although ***statistical data*** from these sources is limited, we do know the following:

- Cancer is the second leading cause of death for American Indians over the age of 45 (Department of Health and Human Services, IHS, 1997).
- Cancer is now the leading cause of death for Alaska Natives (Ehrsam, Lanier, Holck, Sandidge, 2001).
- Cancer rates, which were previously reported as being lower in American Indian and Alaska Natives, have been shown to be increasing (Hampton, 1993; Cobb, 1996; Ehrsam et.al, 2001).

We also know that patterns for certain types of cancers vary among American Indians and Alaska Natives. For example, American Indians have an increased ***incidence*** of cancer of the kidney, liver, and gallbladder, and Alaska Natives have excess incidence rates for colon, rectum, stomach, kidney, lung, and cervix uteri when compared to non-Hispanic whites (Mahoney & Michalek, 1999).

The top ten most common types of cancer occurring among American Indian and Alaska Natives include the following: lung/ bronchus, colon, breast (female), prostate, stomach, pancreas, liver, kidney, leukemia, and ovary (Department of Health and Human Services, IHS, 1997).

What we don't know about cancer relates to the "limitations" of existing cancer data among American Indians and Alaska Natives. The term "limitations" refers to how the accuracy of the current data may be influenced by any of the following points:

- Racial misclassification
- Undercounting **(due in large part to racial misclassification)**
- Coding errors (which affects all data and is not specific to AI/AN)
- Inclusion of insufficient numbers of the racial group to formulate conclusions
- Data collection in selected geographic regions that cannot be generalized to Peoples of other areas.

Despite the fact that the statistical data listed previously in this discussion are limited to some degree in their accuracy, findings show that AI/AN throughout the U.S. have very different cancer mortality patterns (Burhansstipanov & Dresser, 1994). To understand more about these cancer patterns and develop effective risk reduction and control programs, accurate data on the health status of AI/AN must be documented.

Section 3

Cancer Survival among American Indians and Alaska Natives

As we become more familiar with the health concern of cancer among American Indians and Alaska Natives, the issue of survivability grows in importance. **The data tells us that, overall, AI/AN have the lowest five-year *relative survival rate* for all cancer sites combined of any racial group in the U.S. (Department of Health and Human Services, PHS, NIH, NCI, 1992). Factors that contribute to the low survival of AI/AN are not well understood.** Although more investigation needs to be done, the following factors have been identified as potentially influencing survival:

- Late detection of cancer
- ***Genetic risk factors***
- Poor compliance with recommended treatment
- Presence of other disease conditions
- Lack of timely access to state-of-the-art diagnostic or treatment methods
- Barriers to care such as lack of materials and programs about cancer risk and risk reduction that are culturally relevant, lack of AI/AN health providers, lack of accessible educational and training opportunities, English as a second language, poverty, transportation, and cultural beliefs surrounding cancer.

(Burhansstipanov, 1997)

We know that cancer survival can be improved by increasing participation in screening and early detection services. Early diagnosis of cancer improves the chances that treatment will be more effective and survival will be lengthened. This is particularly true for cancer of the cervix, colon and rectum, and breast. For other types of cancer such as those cancers that affect the lung, no reliable test currently exists, and prevention is the key. The critical role of prevention in lung cancer must be emphasized. The majority of lung cancers are preventable by simply not smoking.

Reducing barriers to care is also likely to improve survival rates by increasing the number of individuals participating in screening and early detection activities. Providing access to health care that is culturally appropriate is critical to improving outcomes. Understanding how belief and value systems influence AI/AN perceptions of health and illness is an important aspect of the health care process. For example, understanding the importance of honoring modesty during screening exams may increase the likelihood that individuals, particularly elders, will continue to participate in these programs. Although more research is needed to improve survival rates for AI/AN diagnosed with cancer, encouraging participation in screening and early detection, and reducing barriers to care may have a positive influence on outcomes.

Glossary of Terms

Bacteria These are one-celled organisms visible only through a microscope. There are many varieties, only some of which cause disease: most are non-disease causing; and many are useful.

Carcinogen This is any type of cancer causing agent.

Genetic Risk Factors Those risk factors that are transmitted at birth through genes (the basic units of heredity).

Heredity The transmission of traits from parents to offspring.

Immunity The resistance of the body to the effects of a harmful agent.

Incidence The number of newly diagnosed cases during a specific time period.

Mortality The number of deaths during a specific time period.

Relative Survival Rate Compares the observed survival for a set of cancer patients to that observed for a group of normal persons of a similar age, race, and sex distribution. It is important to note that relative survival does not provide an estimate of the percent of the cancer population alive five years after diagnosis.

Statistical data The calculation of figures that provides information about the numbers, patterns, similarities and differences among things/individuals.

Virus An infectious agent that requires a susceptible place to grow and reproduce.

For more detailed information about the glossary terms, please refer to the Dictionary on www.cancer.gov OR call the Cancer Information Service at 1-800-4-CANCER (1-800-422-6237)

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Please Note—

✓ Use the Curriculum/Training Evaluation located in the Evaluation section, to get valuable participant feedback.

✓ The Health Change Checklist, located in the Evaluation section, directs the participants new attitudes towards new actions and may be used as a take home exercise.

✓ Please Complete the "Trainer Activity Report" in the Evaluation section of the curriculum. Your feedback allows us to track usage of the curriculum for reporting purposes and ensures you receive any updates to the material.

We look forward to hearing from you. Thank You.

What is Cancer?

Target Audience:

- *Community members*
- *Staff of Indian health programs, including Community Health Representatives*

Contents of Learning Module:

- *Instructor's Guide with Pre/Post Self-Assessment*
- *PowerPoint presentation*
- *Glossary*
- *References*

Length:

- *Introduction of session/module overview (:05)*
- *Pre self-assessment (:07)*
- *Presentation of module including interactive activity (:30)*
- *Optional video: "Cancer in the Great Land" (:17)*
- *Post self-assessment (:05)*
- *Closing (:03)*

Goals

In this session, participants will gain an understanding of the following:

- The meaning of the word "cancer"
- The difference between benign and malignant tumors
- The process by which cancer spreads
- Types of cancer

Objectives

At the completion of Learning Module 1, participants will be able to demonstrate the following:

Section 1
Define cancer by describing the process through which normal cells become cancerous.

Section 2
Describe the difference between benign and malignant tumors.

Section 3
Describe two types of cancers and where they occur in the body.

Measures of Objective Accomplishment

The presenter will administer a pre self-assessment and a post self-assessment to measure participants' knowledge of the module's objectives. The pre self-assessment measures existing knowledge and the post self-assessment measures what was gained through the learning module.

NOTE

- Each major learning point is clearly identified by **boldface** type throughout the guide and emphasized in the PowerPoint presentation.
- See the glossary (at the end of the module) for words that are in ***bold italics*** throughout the module.

Pre/Post Self-Assessment

What is Cancer?

Do you agree (A) or disagree (D) with these statements, or are you not sure (NS)? Circle Choice A, D, or NS.

1.	**A**	**D**	**NS**	Cancer is a disease that occurs when cells grow (divide) in an orderly fashion.
2.	**A**	**D**	**NS**	Malignant tumors do not spread to other parts of the body.
3.	**A**	**D**	**NS**	A tumor is always cancerous.
4.	**A**	**D**	**NS**	Treatment decisions are based on the type of cancer involved.
5.	**A**	**D**	**NS**	The site where cancer begins in the body is called the “primary site”.

Section 1
What is Cancer?

The term "*cancer*" refers to a group of more than 100 different diseases that begin in *cells*, the body's basic unit of life. Although there is no word for cancer in many tribal dialects, many American Indians and Alaska Natives (AI/AN) are aware of its existence. AI/AN have witnessed the devastating effects of this disease either through their own personal experience or that of a family member or friend. For this reason, mention of the word cancer often generates feelings of fear, sadness and isolation among AI/AN affected by this disease. In addition, some AI/AN view cancer as a form of punishment (Kaur, 1996). There is a critical need to educate AI/AN about cancer in order to move beyond myths toward understanding and knowledge. Education about cancer will assist AI/AN in developing focused interventions that will reduce the risk of developing cancer and ultimately lead to a cancer free existence.

Cancer is a disease that develops when cells grow (divide) and form more cells without control or order. All organs of the body are made up of cells. Under normal circumstances, new cell growth and old cell death are kept in balance. In cancer, this balance is disrupted. This disruption can result from uncontrolled cell growth or loss of a cell's ability to self-destruct. This process may be easily understood by first considering "normal cell growth".

Normal cell growth: Take, for example, the skin. The outer layer of normal skin, called the ***epidermis*** is roughly a dozen cells thick. Cells in the bottom row of this layer, called the basal layer, divide just fast enough to replenish cells that are continually being shed from the surface of the skin. Each time one of these basal cells divides, it produces two cells. One remains in the basal layer and retains its capacity to divide. The other travels out of the basal layer and loses the capacity to divide. The number of dividing cells in the basal layer therefore stays the same.

Abnormal cell growth - the beginning of cancerous growth: During the development of skin cancer, the normal balance between cell division and cell loss is disrupted. The basal cells now divide faster than is needed to replenish the cells being shed from the surface of the skin. Each time one of these basal cells divides, the two newly formed cells will often retain the capacity to divide, thereby leading to an increase in the total number of dividing cells.

This gradual increase in the number of dividing cells creates a growing mass of tissue called a "*tumor*". If the rate of cell division is relatively rapid, and no "self-destruct" signals are in place to trigger the cell to die, the tumor will grow quickly in size. If the cells divide more slowly, tumor growth will be slower. But regardless of the growth rate, tumors ultimately increase in size because new cells are being produced in greater numbers than needed. As more and more of these dividing cells accumulate, the normal organization of the tissue gradually becomes disrupted. Tumors can either be benign (non-cancerous) or malignant (cancer).

Section 2
Benign Versus Malignant Tumors

Tumors can be benign or malignant.

Benign tumors are not cancer. They do not spread to other parts of the body and are usually not a threat to life. Benign tumors are often removed because their size may cause a problem or for cosmetic reasons.

Malignant tumors are cancer. Cells in these tumors are abnormal and divide without control or order. They can invade and damage nearby tissue and organs by breaking away from a malignant tumor and entering the bloodstream or the ***lymphatic system*.** This is how cancer spreads from what is called the original or ***primary site*** to form new tumors in other parts of the body. **The process by which cancer spreads from its original or primary site to another part of the body is referred to as *metastasis*.**

When cancer spreads or metastasizes, the new tumor has the same kind of abnormal cells as the primary (original) tumor and is referred to by the same name as the primary tumor. For example, if colon cancer metastasizes (spreads) to the liver, the cancer cells in the liver are colon cancer cells. The disease is called metastatic colon cancer (not liver cancer).

Section 3
Types of Cancer

As discussed in Section 1, there are over 100 different types of cancer and they can originate almost anywhere in the body. **Treatment decisions are based on knowing the type of cancer involved.** In addition to the primary organ site, cancers are described by the types of cells that become malignant. **Knowledge of the terms used to describe the various types of cancers helps us to better understand information about the cancer diagnosis.**

Cancers are divided into five main groups

Carcinomas are cancers that begin in the ***epithelium***, the body's skin and tissues that line the internal organs such as the lung, breast, and colon. Eighty to ninety percent of all cancers are carcinomas.

Sarcomas are cancers that start to grow in bones, fat, muscle, nerve, joint, blood vessel, or deep skin tissues.

Lymphomas are cancers that arise in the ***lymph nodes*** and ***lymphoid tissues*** (tissues of the body's immune system.)

Leukemias are cancers of the ***white blood cells***.

Myelomas are cancers that start in the blood cells found in the ***bone marrow*.**

Scientists use a variety of technical names to distinguish among the many different types of cancers. **In general, these names are created by using different prefixes that stand for the name of the cell type involved**. For example, the prefix "osteo" means bone, so a cancer arising in bone is called osteosarcoma. Similarly, the prefix "adeno" means gland, so a cancer of gland cells is called adenocarcinoma - for example, a breast adenocarcinoma.

For more detailed information about the glossary terms, please refer to the Dictionary on www.cancer.gov OR call the Cancer Information Service at 1-800-4-CANCER (1-800-422-6237)

Glossary of Terms

Benign A tumor that is not cancerous and does not spread to other parts of the body.

Bone Marrow A soft spongelike material found in the cavities of bones, which has as its principle function the manufacture of red blood cells (cells that carry oxygen to the body tissues, white blood cells (cells that protect the body against infection), and platelets (cells that help the blood clot to prevent bleeding).

Cancer A term for a disease that develops when cells divide and form more cells without control or order. There are more than 100 different types of cancer.

Cells Cells are the basic unit in the organization of living substance. Although cells may be widely differentiated and highly specialized in their function, they have the same basic structure; that is they have an outer covering called the membrane, a main substance called the cytoplasm and a control center called a nucleus.

Epidermis This is the outer most layer of skin.

Epithelium A thin layer of tissue that covers organs, glands, and other structures within the body

Lymphatic System The tissues and organs that produce, store, and carry white blood cells that fight infections and other diseases. This system includes the bone marrow, spleen, thymus, lymph nodes, and lymphatic vessels (a network of thin tubes that carry lymph and white blood cells). Lymphatic vessels branch, like blood vessels, into all the tissues of the body.

Lymph Node A rounded mass of lymphatic tissue that is surrounded by a capsule of connective tissue. Lymph nodes filter lymph (lymphatic fluid), and they store lymphocytes (white blood cells). They are located along lymphatic vessels. Also called a lymph gland.

Lymphoid Tissue Referring to lymphocytes, a type of white blood cell. Also refers to tissue in which lymphocytes develop.

Malignant Tumors which are cancerous; they grow wildly and have the potential to spread.

Metastasis The spread of cancer from one part of the body to another. Cells in the metastatic (secondary) tumor are like those in the original (primary) cancer.

Primary Site The place in the body where cancer originates.

Tumor An abnormal swelling or enlargement of cells or tissues; tumors may be benign or malignant.

White Blood Cells These are cells that protect the body against infection.

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Please Note—

✓ Use the Curriculum/Training Evaluation located in the Evaluation section, to get valuable participant feedback.

✓ The Health Change Checklist, located in the Evaluation section, directs the participants new attitudes towards new actions and may be used as a take home exercise.

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We look forward to hearing from you. Thank You.

Cancer Screening and Early Detection

Target Audience:

- *Community members*
- *Staff of Indian health programs, including Community Health Representatives*

Contents of Learning Module:

- *Instructor's Guide with Pre/Post Self-Assessment*
- *PowerPoint presentation*
- *Glossary*
- *References*

Length:

- *Introduction of session/module overview (:05)*
- *Pre self-assessment (:07)*
- *Presentation of module including interactive activity (:30)*
- *Post self-assessment (:05)*
- *Closing (:03)*

Goals

In this session, participants will gain an understanding of the components of early detection, the importance of recognizing some of the barriers associated with practicing early detection, and the symptoms of cancer.

Objectives

At the completion of Learning Module 3, participants will be able to demonstrate the following:

Section 1
a) Describe the importance of early detection.
b) Describe two screening methods used in the detection of cancer.

Section 2
Describe two barriers that may be associated with practicing early detection.

Section 3
Describe three symptoms of cancer.

Measures of Objective Accomplishment

The presenter will administer a pre self-assessment and a post self-assessment to measure participants' knowledge of the module's objectives. The pre self-assessment measures existing knowledge and the post self-assessment measures what was gained through the learning module.

NOTE

- Each major learning point is clearly identified by **boldface** type throughout the guide and emphasized in the PowerPoint presentation.
- See the glossary (at the end of the module) for words that are in ***bold italics*** throughout the module.

Instructor's Notes

A Note About Cancer Screening

In many cases, the available evidence on the effectiveness of cancer screening is not clear-cut. Experts' opinions about appropriate cancer screening may differ, especially regarding which tests are recommended, at what age, and with what frequency. Also, opinions may change as new evidence becomes available. Printed material may not reflect the latest changes in scientific knowledge. For current screening information, check the following resources:

- NCI Website, www.cancer.gov
- ACS Website, www.cancer.org
- Cancer Information Service at 1-800-4-CANCER
- The ACS at 1-800-ACS-2345

Pre/Post Self-Assessment

Cancer Screening and Early Detection

Do you agree (A) or disagree (D) with these statements, or are you not sure (NS)? Circle Choice A, D, or NS.

1.	**A**	**D**	**NS**	The goal of early detection is to discover and stop a cancerous tumor before it grows and spreads.
2.	**A**	**D**	**NS**	Regular physical exams, medical screening tests, and knowledge of changes in your body may help detect early signs of cancer.
3.	**A**	**D**	**NS**	A person's fears about cancer may be considered a barrier to participating in early detection for cancer.
4.	**A**	**D**	**NS**	There are no early symptoms for cancer.
5.	**A**	**D**	**NS**	A change in some part of the body, such as a lump or thickening in the breast, or a cough that doesn't go away, always indicates cancer.

Section 1

Cancer Screening and Early Detection

The sooner cancer is detected and treated, the better a person's chance for a full recovery. The chances that cancer will be detected early are greatly improved by having regular medical check-ups and being aware of any changes in your body. A doctor can often find early cancer during a physical exam or with routine tests, even if a person has no symptoms.

Checking for cancer in a person who does not have any symptoms of the disease is called *screening*. Some people visit the doctor only when they notice changes like a lump in the breast or unusual bleeding or discharge. However, early cancer may not have any symptoms. That is why screening for some cancers can help, particularly as we get older.

Early detection of cancer is key. The goal of early detection is to discover and stop a cancerous tumor before it grows and spreads (*metastasizes*). For this reason, it is important for individuals to see their doctor on a regular basis for a physical exam. During a routine physical exam, a doctor will look for anything unusual and feel for any lumps or growths. In addition, the doctor may recommend a screening test. This recommendation is based on the individual, the test, and the cancer that the test is intended to detect. For example, the doctor takes into account the person's age, medical history and general health, family history and lifestyle. This information assists the doctor in determining a person's risk for developing cancer.

Medical screening tests are effective tools in the early detection of cancer. A few types of cancers have specific screening tests that aid in detecting cancer early. The following list describes medical screening methods used for common forms of cancer such as breast, cervix, colon, and prostate:

Breast

Screening for breast cancer has been shown to reduce the risk of dying from this disease. A screening *mammogram* is the best tool available to find breast cancer before symptoms appear. A mammogram is a special kind of x-ray image of the breasts. The National Cancer Institute (NCI) recommends that women in their 40's and older should have a mammogram every 1 to 2 years. The American Cancer Society (ACS) recommends that women should have a mammogram every year, starting at age 40. Both organizations recommend regularly scheduled clinical breast exams (breast exam done by a doctor or other healthcare professional). Some women perform monthly breast self-exams (BSE) to check for changes in their breasts. Women in their 40's and older should be aware that a monthly BSE is not a substitute for regularly scheduled mammograms and clinical breast exams**.**

Cervix

The *Pap test* is used to screen for cancer of the cervix. For this test, cells are collected from the cervix. The cells are examined under a microscope to detect cancer or changes that may lead to cancer. Cervical cancer screening should begin about 3 years after a woman begins having sexual intercourse, but no later than at age 21. Women should have a Pap test and pelvic exam at least once every 3 years. More frequent exams are required if the ***human papilloma virus (HPV),*** a risk factor for cervical cancer, is present. The frequency of Pap tests should be discussed on an individual basis with the health care provider. Women ages 65 to 70 who have had 3 normal Pap tests in a row, and no abnormal tests in the last 10 years, may decide, after talking with their health care provider, to stop having Pap tests.

Colorectal

There are several screening tests used for early detection of colon and rectal (colorectal) cancer.* A doctor may recommend one or more of the following tests based on a person's age, family medical history of colorectal cancer, or presence of other risk factors for colorectal cancer:

Barium Enema **-** A series of x-rays of the large intestine taken after an enema containing a barium solution is given. The barium solution outlines the large intestines on the x-rays.

Fecal Occult Blood Test (FOBT) **-** The **FOBT** detects invisible amounts of blood in the stool a possible sign of colon cancer. A dab of a stool specimen is collected on a chemically treated card, which is tested in a laboratory for evidence of blood. If blood is confirmed in the stool, additional tests may be performed to find the source of the bleeding.

Colonoscopy **-** A **colonoscopy** is a test that allows the doctor to view the entire (upper and lower) colon and rectum by inserting a thin, lighted tube (fiber optic instrument) called a colonoscope into the rectal opening. The instrument is not only used for visual purposes, but allows the doctor to take small samples of tissue for examination under a microscope.

Digital Rectal Exam **-** The **digital rectal exam** is an exam in which the doctor inserts a lubricated, gloved finger into the rectum to feel for abnormal areas.

Flexible Sigmoidoscopy **-** A **flexible sigmoidoscopy** is a test that allows the doctor to view the lower colon and rectum by inserting a thin, lighted tube (fiber optic instrument) called a sigmoidoscope into the rectal opening. As with the colonoscope, the doctor can obtain tissue samples if needed.

Regular screening of adults over age 50 would reduce the number of colorectal cancer deaths. Both annual FOBT and regularly scheduled flexible sigmoidoscopy have been shown to decrease deaths from colorectal cancer. For individuals at higher risk for colon cancer, screening may need to start earlier. People should talk with their health care provider about when to begin screening for colorectal

cancer, what tests to have, and how often to schedule appointments.

*Several major organizations, including the U.S. Preventive Services Task Force (a group of experts convened by the U.S. Public Health Service) and the ACS, have developed guidelines for colorectal cancer screening. Although their recommendations vary regarding which screening tests to use and frequency of screening, all of these organizations support screening for colorectal cancer.

Prostate

Recommendations for routine screening for prostate cancer vary. Some doctors and cancer organizations encourage annual screening for prostate cancer for all men over the age of 50; others recommend against routine screening; still others counsel on an individual basis and encourage men to make personal decisions about screening.

A man who has any of the risk factors for prostate cancer may want to ask a doctor whether to begin screening for prostate cancer (even though he does not have any symptoms), what tests to have, and how often to have them. The doctor may suggest either of the tests described below. These tests are used to detect prostate abnormalities, but they cannot show whether abnormalities are cancer or another, less serious condition. The doctor will take the results into account in deciding whether to check the patient further for signs of cancer.

Digital Rectal Exam (described previously in the colorectal section) is used to aid in early detection of prostate cancer. The doctor feels the prostate through the wall of the rectum and checks for any hard or lumpy areas.

Prostate Specific Antigen Test (PSA) - PSA is a protein produced by the cells of the prostate gland. The PSA test measures the level of PSA in the blood. Both benign (non-cancerous) and cancerous tumors can cause PSA levels to rise in the blood.

A Reminder About Cancer Screening

In many cases, the available evidence on the effectiveness of cancer screening is not clear-cut. Experts' opinions about appropriate cancer screening may differ, especially regarding which tests are recommended, at what age, and with what frequency. Also, opinions may change as new evidence becomes available. Printed material may not contain the latest changes in scientific knowledge. For current

screening information, check the following resources: NCI Website, www.cancer.gov, ACS Website, www.cancer.org, the Cancer Information Service at 1-800-4-CANCER, and the ACS at 1-800-ACS-2345.

In addition to regular physical exams and medical screening tests, periodic self-examination may help detect changes in the body that require follow-up with a doctor. A general awareness of one's body (both appearance and how one feels) will often result in sensitivity to any change that may occur. There are two important self-checks that may reveal changes in the body that require follow-up with a doctor. They are the breast self-exam (BSE) and the testicular self-exam (TSE).

Breast Self-Exam (BSE)

Some women perform monthly breast self-exams to look for any changes in their breasts. BSE helps women become familiar with the feel of their own breasts so that changes will be recognized early. Women in their early forties and older should know that monthly BSE is not a substitute for regularly scheduled screening mammograms and clinical breast exams performed by a health professional.

Testicular Self-Exam (TSE)

Testicular cancer is the most common cancer in men ages 20 to 35 years old. Men who are at greater risk for developing testicular cancer are those whose testicles have not descended into the scrotum, and those whose testicles descended after age 6. Testicular self-examination aids or helps men become familiar with the feel of their own testicles (what is normal for their own body). Most testicular cancers are discovered by patients themselves or their partners, either unintentionally or by self-examination.

Note

For a complete reference guide for the major cancer sites (cervical, breast, lung, prostate and colon) please refer to the "Cancer Site Worksheet" at the end of this module.

Section 2

Barriers to Cancer Screening and Early Detection

There are many barriers that affect one's decision to participate in cancer screening and early detection. Some barriers, such as those related to socioeconomic conditions, tend to be more general and are experienced by many populations, for example, access to health care facilities or affordable health insurance coverage. Other barriers, such as cultural beliefs, tend to be more specific to a particular population and play an important role in the decision to participate in cancer screening. For health care providers working with AI/AN, it is important to understand the influence of Native culture on health behavior in order to improve the level of participation of this population in cancer screening and early detection methods. The following list describes some of the cultural beliefs specific to AI/AN that can be a barrier to participating in cancer screening and early detection.

Fear of Cancer

Many AI/AN believe that to talk about cancer may bring a similar misfortune upon oneself (Solomon & Gottlieb, 1999). Understanding the significance of framing health education messages in a "wellness" context may lessen some of the fears and apprehensions associated with discussing cancer.

Lack of Knowledge

For many AI/AN, cancer is a relatively "new" disease. It has only been within the past few decades that cancer has risen to prominence as one of several chronic diseases, including heart disease and diabetes, affecting AI/AN (Hodge, Fredericks & Rodriquez, 1996). Lack of understandable education materials about cancer contributes to a lack of knowledge among AI/AN and may contribute to some misconceptions about this disease (Burhansstipanov, 1997).

Modesty

For many AI/AN, participating in cancer screening may violate their personal feelings of modesty. This may, in part, be due to forced exposure to religious groups at the turn of the century that emphasized modesty. Subsequent generations have been influenced by these beliefs in contrast to the traditional Indian belief that one's body is a blessing of the Creator and not object of shame (Burhansstipanov, 1997).

Communication

AI/AN communication style differs from that used by many Western health care providers. Although communication styles vary among tribes, the following customs are common to many tribes: 1) a slower rate of speech, 2) a respectful "pause" between speakers that allows time for the original speaker to add any other thoughts or ideas prior to the listener responding, and 3) the "circular" or story telling manner of responding to questions versus the direct "linear" response. Use of direct eye contact and violating personal space may also impede communication. (Burhansstipanov, 1997).

Illness Beliefs

Some AI/AN believe cancer may be caused by witching, evil spirits, and elements beyond one's control (Hodge, Fredericks & Rodrequez, 1996). Others believe the disease may have occurred as a result of a childhood event during which contact with the causal agent took place (Burhansstipanov & Dresser, 1994).

Understanding cultural barriers has the potential to save lives and reduce cancer death in the AI/AN population. Use of culturally acceptable and sensitive intervention is of critical importance to overcoming barriers to cancer screening and early detection. Collaboration between health care providers and community members focused on developing meaningful interventions can lead to positive health behavior change and improved cancer related health outcomes.

Section 3

Possible Symptoms of Cancer

There are many different symptoms known to be associated with certain types of cancers. As cancer grows in the body, it causes changes to take place, producing symptoms. The symptoms produced depend on the size of the cancer, the location, and the surrounding organs or structures. As cancer grows, it produces pressure on nearby organs, blood vessels and nerves. For example, a small cancer in a critical organ such as the brain can produce early symptoms as it presses on certain areas of the brain disrupting brain function.

It is important to understand that a symptom is a sign that something is not right in the body and does NOT always indicate cancer. Certain symptoms may be a sign of infection, benign tumor, or another problem. It is important to see the doctor about any symptom or physical change to determine its cause. **One should not wait to feel pain: Early cancer usually does not cause pain. The National Cancer Institute and the American Cancer Society have identified seven common symptoms that could lead to a diagnosis of cancer:**

A change in bowel or bladder function

Diarrhea, constipation, or changes in the size of stool may indicate colon cancer. Pain with urination, blood in the urine, or change in bladder function could be related to bladder or prostate cancer.

A sore that does not heal

Skin cancers may bleed and resemble sores that do not heal. Sores in the mouth that do not heal may indicate oral cancer, especially if the person is a smoker, chews tobacco, or frequently uses alcohol. Sores on the penis and vagina should also be evaluated by a doctor.

Unusual bleeding or discharge

Blood in the sputum (spit or saliva) may indicate lung cancer. Blood in the stool may indicate cancer of the colon or rectum. Abnormal bleeding not related to menstrual periods may indicate cancer of the cervix, vagina, or uterus. Blood in the urine may indicate kidney or bladder cancer. Bloody discharge from the nipple may indicate breast cancer.

Thickening or lump in breast or other parts of the body

Many cancers can be felt through the skin, particularly in the breast, testicle, lymph nodes (glands), and the soft tissues of the body. Any lump or thickening should be reported to your doctor.

Indigestion or difficulty swallowing

These symptoms may indicate cancer of the esophagus, stomach, or pharynx (throat).

Recent change in wart or mole

A change in color, loss of definite borders, or an increase in size should be reported to the doctor without delay. The skin lesion may be a melanoma, which, if diagnosed early, can be treated successfully.

A nagging cough or hoarseness

A persistent cough that does not go away may be a sign of lung cancer. Hoarseness can be a sign of cancer of the larynx (voice box) or thyroid.

In addition to the seven common symptoms listed above, there are a few general symptoms that may be associated with cancer. They are unexplained weight loss, fever, fatigue, and pain. These symptoms should be evaluated by a doctor to determine their cause, particularly if they have been present for a period of time (such as several weeks).

Cancer Site	Possible Signs and Symptoms	Common Sites of Metastasis	Common Treatments	Risk Factors	Behaviors to Reduce Risk	Screening & Early Detection Methods
Cervical Cancer	Abnormal bleeding such as bleeding between menstrual periods and/or after sex intercourse Unusual discharge	Bladder Rectum Lymph Nodes Lungs	Surgery Radiation Therapy Chemotherapy	Smoking Early first intercourse Multiple sexual partners Sexually transmitted viruses HPV (causal) Women whose mothers used synthetic estrogen diethylstilbestrol (DES) during pregnancy	Limit number of sexual partners Safe sex practices Early treatment for STDs Early detection and treatment of precancerous tissue Stop smoking	PAP smear/test Biopsy
Breast Cancer	A lump or thickening in or near the breast or underarm area A change in the shape or size of the breast Nipple discharge or tenderness A change in the way the skin of the breast, areola, or nipple looks or feels	Lymph nodes Bone Liver Lungs Brain	Surgery Radiation Therapy Chemotherapy Hormonal Therapy Biological Therapy	Family History Certain breast changes; such as atypical hyperplasia or LCIS Genetic Factors Menopause hormone therapy Late childbearing Breast Density Radiation Therapy Alcohol Over age 60	Regular exercise Some evidence suggests a link between diet and breast cancer Maintain a healthy weight Limit alcohol consumption Consult with health provider regarding menopausal hormone use	Mammography Clinical breast exam Self-exam Biopsy

Cancer Site	Possible Signs and Symptoms	Common Sites of Metastasis	Common Treatments	Risk Factors	Behaviors to Reduce Risk	Screening & Early Detection Methods
Lung Cancer	Cough that doesn't go away and gets worse with time. Weightloss Constant Chest Pain Coughing up Blood Shortness of Breath	Brain Bone Lymph nodes Liver	Surgery Radiation Therapy Chemotherapy Photodymanic Therapy	Cigarettes Cigars and Pipes Enviromental Tobacco Smoke (2nd-hand smoke) Exposure to: • Radon • Asbestos • Pollution Lung Disease such as Turberculosis	Don't Smoke Asbestos workers should use protective equipment. Avoid radon exposure	There are currently no screening methods for early detection

Cancer Site	Possible Signs and Symptoms	Common Sites of Metastasis	Common Treatments	Risk Factors	Behaviors to Reduce Risk	Screening & Early Detection Methods
Prostrate Cancer	Difficulty urinating Need to urinate frequently, especially at night Blood in urine or semen Difficulty in having an erection Painful ejaculation Frequent pain or stiffness in the lower back, hips or upper thighs	Lymph nodes Bones Bladder Rectum	Watchful Waiting Surgery Radiation Therapy Hormonal Therapy	Age (over 55 yrs) Family history Race (more common in African American men) Diet and dietary factors	Diets high in fruits and vegetables may decrease the risk	Digital rectal exam Bloodtest for PSA (prostrate specific antigen)
Colon Cancer	A change in bowel habits Diarrhea, constipation, feeling that the bowel does not empty completely Blood in stool Stools that are narrower than usual General abdominal discomfort Weight loss with no known reason Vomiting and constant tiredness	Lymph nodes Liver Lungs	Surgery Chemotherapy Radiation Therapy Biological Therapy Clinical Trials	Age (over 55 yrs) Diet— seems to be associated with diets that are high in fat and calories and low in fiber. Polyps—some types of polyps increase risk Personal medical history Family medical history Ulcerative colitis	Diest low in fat and high in fiber Regular exercise Maintaining healthy weight Limit alcohol comsumption Polyp Removal	Fecal Occult Blood Test Digital Rectal Exam Sigmoidoscopy Colonoscopy Polypectomy X-rays Biopsy

Glossary of Terms

Barium Enema This is a series of x-rays of the large intestine taken after an enema containing a barium solution is given. The barium solution outlines the large intestines on the x-rays.

Colonoscopy A test used to screen for cancer of the colon. A thin, lighted tube (fiber optic instrument) is inserted into the rectum to examine the rectum and entire colon.

Discharge Secretions typically coming from an opening in the body such as the vagina.

Digital Rectal Exam An exam used to help screen for cancers of the rectum and prostate. The physician uses a lubricated gloved finger to feel for abnormalities of the rectum and prostate.

Early Warning Signals Signs or symptoms that are known to be associated with certain types of cancers.

Fecal Occult Blood Test (FOBT) Used to screen for cancer of the colon. A small amount of stool is collected on a chemically treated card, which is then tested in a laboratory for blood. If blood is detected, additional testing may be needed to determine the source of the bleeding.

Flexible Sigmoidoscopy A test that allows the doctor to view the lower colon and rectum by inserting a thin, lighted tube (fiber optic instrument) called a sigmoidoscope into the rectal opening. As with the colonoscope, the doctor can obtain tissue samples if needed.

Human Papillomavirus (HPV) Viruses that generally cause warts. Some papillomaviruses are sexually transmitted. Some of these sexually transmitted viruses cause wartlike growths on the genitals. Some human papillomaviruses (HPV's) cause abnormal changes in cells of the cervix that can lead to the development of cancer.

Localized Within the same part of the body.

Mammogram An x-ray used to screen for cancer of the breast.

Menstrual/Menstruation A woman's monthly cycle during which the uterus sheds its lining causing a discharge of blood and tissue from the vagina.

Metastasize When cancer spreads from one part of the body to another.

Pap Test A test used to screen for cancer of the cervix and other abnormalities. Cells from the cervix are examined under a microscope to detect changes that may lead to cancer.

Prostate Specific Antigen Test (PSA) PSA is a protein produced by the cells of the prostate gland. The PSA test measures the level of PSA in the blood.

Screening Checking for cancer in a person who does not have any symptoms of the disease.

For more detailed information about the glossary terms, please refer to the Dictionary on www.cancer.gov OR call the Cancer Information Service at 1-800-4-CANCER (1-800-422-6237)

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We look forward to hearing from you. Thank You.

Cancer Diagnosis and Staging

Target Audience:

- *Community members*
- *Staff of Indian health programs, including Community Health Representatives*

Contents of Learning Module:

- *Instructor's Guide with Pre/Post Self-Assessment*
- *PowerPoint presentation*
- *Glossary*
- *References*

Length:

- *Introduction of session/module overview (:05)*
- *Pre-self-assessment (:07)*
- *Presentation of module including interactive activity (:30)*
- *Post-self-assessment (:05)*
- *Closing (:03)*

Goals

In this session, participants will gain an understanding of how cancer is diagnosed and how the extent or stage of cancer is determined.

Objectives

At the completion of Learning Module 4, participants will be able to demonstrate the following:

Section 1
a) Describe what is meant by the term "biopsy."
b) Describe how tumors may behave differently from one another (e.g. well differentiated versus poorly differentiated).

Section 2
a) Give two examples of the stages of cancer and their meaning.
b) Give two reasons why staging is important.

Measures of Objective Accomplishment

The presenter will administer a pre self-assessment and a post self-assessment to measure participants' knowledge of the module's objectives. The pre self-assessment measures existing knowledge and the post self-assessment measures what was gained through the learning module.

NOTE

- Each major learning point is clearly identified by **boldface** type throughout the guide and emphasized in the PowerPoint presentation.
- See the glossary (at the end of the module) for words that are in ***bold italics*** throughout the module.

Pre/Post Self-Assessment

Cancer Diagnosis and Staging

Do you agree (A) or disagree (D) with these statements, or are you not sure (NS)? Circle Choice A, D, or NS.

1.	**A**	**D**	**NS**	A biopsy helps the doctor determine whether or not a tumor is benign (non-cancerous) or malignant cancerous).
2.	**A**	**D**	**NS**	Microscopic examination of the tumor is an important part of the cancer diagnosis.
3.	**A**	**D**	**NS**	Cancer in situ is an early cancer that has not yet spread to neighboring tissue and has a very poor outcome.
4.	**A**	**D**	**NS**	A cancer that is localized (has not spread to other areas of the body) has a good chance for control or cure.
5.	**A**	**D**	**NS**	The “staging” of cancer (determining the extent of disease) is an important part of determining treatment, disease outcome, and how the patient will respond to treatment.

Section 1

Cancer Diagnosis and Staging

To diagnose the presence of cancer, a doctor must look at a sample of the affected tissue under a microscope. So when an individual experiences any of the warning signals for cancer or the results of their screening tests indicate the possible existence of cancer, a doctor will want to perform a ***biopsy*****. A biopsy is the surgical removal of a small piece of tissue for *microscopic examination*. Microscopic examination will tell the doctor whether a tumor is actually present and if so, whether it is malignant (cancerous) or benign (non-cancerous).**

There are three ways tissue can be removed for biopsy: ***endoscopy*****,** ***needle biopsy***, or ***surgical biopsy***.

Endoscopy

By using a thin lighted tube, the doctor is able to look at areas inside the body and see what's going on, take pictures, and remove tissue or cells for examination, if necessary.

Needle Biopsy

The doctor takes a small tissue sample by inserting a needle into the abnormal (suspicious) area.

Surgical Biopsy

There are two types of surgical biopsies. An **excisional biopsy** is performed when the doctor removes the entire tumor, often with some surrounding normal tissue. An **incisional biopsy** is performed when the doctor removes just a portion of the tumor. If cancer is found to be present, the entire tumor may be removed immediately or during another operation.

Once the doctor has removed the tumor and determined the presence of cancer, he will want to determine the "aggressiveness" of the cancer or how fast the cancer is growing. To do this, the doctor will look at the tumor under the microscope to determine how alike or different the tumor cells are from one another**.** Under the microscope, some tumor cells look very much like the normal tissue they came from. If they do, they are called ***well differentiated*****.** Other tumors may only slightly resemble the normal tissue that they came from or they may not resemble any specific tissues. These tumor cells are called ***poorly differentiated*** or ***undifferentiated tumor cells*****.** Generally speaking, tumors that are undifferentiated or poorly differentiated tend to be more aggressive in their behavior. They grow faster, spread earlier, and have poorer outcomes than well differentiated tumors.

In summary, the biopsy has provided the doctor with the following important information:

- **Whether or not the tumor is benign (non-cancerous) or malignant (cancer).**
- **The "type" of cancer (e.g. carcinoma versus sarcoma). See Module 2, Section 3: Types of Cancer.**
- **The "aggressiveness" or behavior of the tumor (e.g. well differentiated versus poorly differentiated).**

Section 2
Staging of Cancer

Once the diagnosis of cancer has been made, the doctor will want to learn the stage, or extent, of the disease. This process is referred to as "***staging***" and tells the doctor how far the cancer has spread in the body. Treatment decisions are based on the results of staging. The four common stages of cancer are:

In situ

Early cancer that has not spread to neighboring tissue.

Local

Cancer is found only in the organ where it started to grow.

Regional

Cancer has spread to the surrounding tissues or lymph nodes.

Distant

Cancer has spread to other organs and systems of the body.

Staging is an important part of making a good diagnosis. Cancer ***in situ***, cancer of an early stage with no invasion to surrounding tissue, carries a very good prognosis for complete cure. When cancer is more extensive (involving larger areas) but still has not spread to other sites, it is considered to be ***localized.*** Localized cancers also have a good chance for control or cure.

Cancers that have begun to spread are classified according to the manner and extent of spread: by direct extension, by involvement of the lymph nodes, and by evidence of distant metastasis or spread. Though each type of cancer has its own progression of disease and the medical community has various methods of staging classification, staging can be generally described as follows:

Stage 1 A cancerous tumor is found to be limited to the organ of origin.

Stage 2 The cancer has spread to the surrounding tissues and possibly to the local lymph nodes.

Stage 3 There is extensive growth of the primary tumor and possible other organ involvement.

Stage 4 The cancer has spread far into the other organs and systems of the body away from the original tumor site.

Each cancer grows differently. The stage of cancer at the time of diagnosis means different things for different cancers. For example, lymph node involvement does not necessarily mean the same thing in every kind of cancer. Thus, the information about the extent of the cancer must be considered in light of the tissue diagnosis obtained from the biopsy.

Staging is performed using a number of methods such as ***imaging studies (ultrasound, magnetic resonance imaging*** (MRI), and ***computed tomography*** (CT or CAT scan), x- rays, various blood tests, ***bone marrow biopsy***, and even special surgery.

In summary, the staging of cancer is important for three reasons:

1) Staging determines the extent of the disease;

2) Treatment is determined by the stage of the specific cancer;

3) Staging helps determine the patient's prognosis.

Glossary of Terms

Biopsy The surgical removal of a small piece of tissue for microscopic examination to check for cancer cells.

Bone Marrow Biopsy A procedure in which a needle is inserted into either the breast or pelvic bone to remove a small amount of liquid bone marrow (blood forming cells) for examination under a microscope.

Computed Tomography An x-ray test using a computer to produce a detailed *(CT or CAT scan)* picture of a cross-section of the body.

Endoscopy This is a type of biopsy by which the doctor uses a thin lighted tube, to look at areas inside the body to see what's going on, take pictures, and remove tissue or cells for examination, if necessary.

Imaging Tests Special tests that give detailed images of a person's body including x-rays, *ultrasound, magnetic resonance imaging (MRI),* and *computed tomography (CT or CAT scan).*

In Situ Early cancer that has not spread to neighboring tissue.

Localized Within the same part of the body.

Magnetic Resonance Imaging (MRI) A procedure using a magnet linked to a computer to create pictures of areas inside of the body.

Microscopic Examination Use of a microscopic to visualize cells.

Needle Biopsy Type of biopsy by which the doctor inserts a needle into an abnormal (suspicious) area to remove a small tissue sample for diagnosis.

Poorly Differentiated or Undifferentiated Tumor Cells Tumor cells that may only slightly resemble the normal tissue that they came from; this type of tumor may tend to be more aggressive in their behavior, spread faster, and have a poorer outcome.

Staging Describes how far the cancer has spread from the original site to other parts of the body (i.e. in situ, local, regional, or distant).

Surgical Biopsy There are two types of surgical biopsies. An **excisional biopsy** is performed when the doctor removes the entire tumor, often with some surrounding normal tissue. An **incisional biopsy** is performed when the doctor removes just a portion of the tumor.

Ultrasound An exam in which sound waves are bounced off tissues and the echoes are converted into a picture.

Well Differentiated Tumor Cells Cells that look and function similar to normal cells of the same type.

For more detailed information about the glossary terms, please refer to the Dictionary on www.cancer.gov OR call the Cancer Information Service at 1-800-4-CANCER (1-800-422-6237)

References

Kleinsmith, L. J., Kerrigan, D., Spangler, S. (2001). Understanding cancer. [CD-ROM]. National Cancer Institute.

National Cancer Institute (2000). What you need to know about cancer. (NIH Publication No. 00-1566).

Please Note—

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✓ The Health Change Checklist, located in the Evaluation section, directs the participants new attitudes towards new actions and may be used as a take home exercise.

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We look forward to hearing from you. Thank You.

Cancer Risk Factors and Risk Reduction

Target Audience:

- *Community members*
- *Staff of Indian health programs, including Community Health Representatives*

Contents of Learning Module:

- *Instructor's Guide with Pre/Post Self-Assessment*
- *PowerPoint presentation*
- *Glossary*
- *References*

Length:

- *Introduction of session/module overview (:05)*
- *Pre self-assessment (:07)*
- *Presentation of module including interactive activity (:30)*
- *Post self-assessment (:05)*
- *Closing (:03)*

Goals

In this session, participants will gain an understanding of cancer risk factors and how to reduce risks associated with cancer.

Objectives

At the completion of Learning Module 5, participants will be able to demonstrate the following:

Section 1
a) Describe the meaning of "risk factor."
b) Describe two risk factors that influence the development of cancer.

Section 2
Describe two ways to take personal action to reduce risk for cancer.

Measures of Objective Accomplishment

The presenter will administer a pre self-assessment and a post self-assessment to measure participants' knowledge of the module's objectives. The pre self-assessment measures existing knowledge and the post self-assessment measures what was gained through the learning module.

NOTE

- Each major learning point is clearly identified by **boldface** type throughout the guide and emphasized in the PowerPoint presentation.
- See the glossary (at the end of the module) for words that are in ***bold italics*** throughout the module.

Pre/Post Self-Assessment

Cancer Risk and Risk Reduction

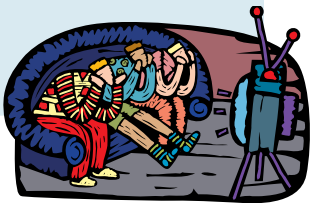
Do you agree (A) or disagree (D) with these statements, or are you not sure (NS)? Circle Choice A, D, or NS.

1.	**A**	**D**	**NS**	Everyone is at risk for developing cancer in his or her lifetime.
2.	**A**	**D**	**NS**	Risk factors that increase our chance for developing cancer include the type of lifestyle we lead and the environment we live in.
3.	**A**	**D**	**NS**	There is little we can do personally to reduce our risk for cancer.
4.	**A**	**D**	**NS**	Environmental exposures account for most of the cancer diagnosed in American Indian and Alaska Native communities.
5.	**A**	**D**	**NS**	Eating a high fat, low fiber diet will help prevent cancer.

Section 1
What is a Risk Factor

Risk factors **are conditions that increase the chance that cancer might occur. The conditions that influence the development of cancer are related to lifestyle, environment, and heredity.** Although research is ongoing, there is a lack of specific ***data*** for cancer risk factors among American Indians and Alaska Natives (AI/AN). A century ago, cancer was thought to be a rare disease among AI/AN. However, changes in lifestyle and environment have placed many AI/AN at increased risk for cancer.

Lifestyle: Some types of cancer are related to lifestyle (how we live and the choices we make). What we eat and drink, how much we exercise, and whether or not we smoke influences our risk for developing cancer. For many AI/AN, the shift from a traditional way of living to a more Western lifestyle (more processed foods, less exercise) has had a dramatic effect on health. In the past, AI/AN lifestyles included many of the practices thought to reduce cancer risk such as a diet rich in natural foods and daily exercise. A shift from ceremonial use of tobacco to regular use has had a devastating effect on the health of many AI/AN. Smoking rates among the Northern Plains Indians and Native Alaskans have increased dramatically over the last few decades along with a rising incidence of lung cancer (Cobb, 1996).



Environment: Some types of cancer are related to where we work and live. For example, exposure to ***carcinogens*** **(cancer-causing agents)** such as asbestos, uranium, nickel, radon, cadmium, vinyl chloride and benzene in the workplace may increase a person's risk for developing cancer. Carcinogens have also been identified in the air, water and soil. For example, pesticides that are known carcinogens have been found in sources of food and drinking water. Although several pesticides have been shown to cause cancer in animals, the relationship with human exposure remains under study. Even

though the environment has undergone many changes considered to be unhealthy, some researchers suggest that environmental exposure (which may account for only 1 to 5%) is not the major source of cancer in the AI/AN population (Cobb, 1996).

***Heredity*: This refers to genes that control cell growth and death that are passed from parent to child.** Some types of cancer (including melanoma and cancer of the breast, ovary, prostate, and colon) tend to occur more often in some families than in the rest of the population. This may be due to an alteration in the genes that increases a person's chance to develop cancer. It is often unclear whether a pattern of cancer in a family is primarily due to heredity, factors in the family's environment or lifestyle, or just a matter of chance.

Certain forms of cancer disproportionately affect AI/AN when compared to the whole U.S. population. These cancers include stomach, gallbladder, kidney, cervix, and liver cancers (Kaur, 1999; Cobb, 1996; Baquet, 1996). Although more research needs to be done to determine the cause of the excess ***incidence*** and ***mortality*** associated with these cancers, some researchers believe that heredity, environment, lifestyle and infection may play a role.

Note

For a list of risk factors for specific cancer sites, please refer to the "Cancer Site Worksheet" at the end of Module 3.

Section 2
Risk Reduction

According to scientific evidence, approximately one-third of all cancers diagnosed in 2000 were expected to be related to nutrition and other lifestyle factors and could have been prevented (American Cancer Society, 2000). The lifestyle we lead today has an influence on our health as we age. It takes many years for a single cancer cell to develop into a cancer that is detectable and requires treatment. So when an individual is diagnosed with cancer at age 50, the stimulus for that cancer may have occurred many years before. **Although some cancers are unavoidable such as those linked to heredity, the burden of many cancers can be reduced through education, taking personal action to reduce cancer risk, and participating in routine screening for early detection.**

*Reducing Cancer Risk**

Maintain a healthy weight - Being overweight (weighing 20% or more than recommended for normal range) may increase the risk for certain forms of cancer (colon, rectum, uterus, and breast). Balancing the amount of food we eat with daily exercise will help us maintain a healthy weight and reduce our risk of cancer. Maintaining a healthy weight also reduces risk for other chronic diseases such as diabetes and heart disease.

Get at least 30 minutes of physical activity each day - This can be as simple as a brisk walk 15 minutes twice a day. Any amount of physical activity is better than none. Being physically active lowers the risk for colon cancer and may lower the risk of breast cancer.

Don't Smoke - Smoking accounts for at least 87 % of all cancers of the lung (Cobb, 1996). If you smoke, consider seeking help to quit (See Cancer 101 Resources for a list of resources that provide assistance in smoking cessation). In addition to cancer of the lung, smoking has been linked to cancers of the throat, pancreas, kidney, bladder, cervix, prostate, colon, and rectum.

Eat a healthy diet - A healthy diet is one that includes generous amounts of foods that are high in fiber, vitamins, and minerals, and low in fat. This means eating more fruits and vegetables, whole-grain breads and cereals, and avoiding high fat meat and dairy products. Eating a healthy diet may lower the risk of cancers of the prostate, breast, lung, colon, rectum, stomach, and pancreas.

Limit alcohol consumption - Heavy drinking increases the risk for cancer. People who smoke and drink heavily have a particularly high risk for certain types of cancer. Choosing non-alcoholic beverages (juices, sodas) at parties, avoiding occasions centered around alcohol, and seeking professional help to limit alcohol (if needed) will help reduce the risk for cancer. Limiting alcohol to one beverage per day may lower the risk of cancer of the breast, colon, rectum, mouth, throat, and esophagus.

Protect yourself from the sun - ***Ultraviolet radiation (UV)*** from the sun causes premature aging of the skin and skin damage that can lead to skin cancer. To avoid skin damage from the sun, limit your midday sun exposure (from 10 a.m. to 4 p.m.). Wearing protective clothing (long sleeves, long pants, and broad brimmed hat) and use of sunscreen with a sunscreen protection factor (SPF) of 15 or higher is advised.

Protect yourself and your partner from sexually transmitted diseases - Some sexually transmitted diseases are linked to cancers of the cervix, vagina, anus, and liver. For example, women infected with the ***human papilloma virus (HPV)*** are at greater risk for developing cervical cancer. Certain forms of ***Hepatitis (B and C)*** have been linked to cancer of the liver. If you are sexually active, follow safe sexual practices to protect yourself and your partner.

*Adapted from the Center for Cancer Prevention, Harvard School of Public Health.

Glossary of Terms

Carcinogens Cancer causing agents.

Data Collection of observations.

Genes Basic unit of heredity.

Hepatitis B A virus that causes hepatitis (an inflammation of the liver). It is carried and passed to others through blood or sexual contact.

Hepatitis C A virus that causes hepatitis (an inflammation of the liver). It is carried and passed to others through blood or sexual contact.

Heredity Refers to genetic traits passed from parent to offspring.

Human Papillomavirus Viruses that generally cause warts. Some papillomaviruses are sexually transmitted. Some of these sexually transmitted viruses cause wartlike growths on the genitals. Some human papillomaviruses (HPV's) cause abnormal changes in cells of the cervix that can lead to the development of cancer.

Incidence The number of new events or cases of disease that develop in a population of individuals at risk during a specified period of time.

Mortality An expression of the incidence of death in a particular population during a period of time.

Risk factors Conditions related to lifestyle, environment, and/or heredity that increase the chance that cancer might occur.

Ultraviolet Radiation (UV) Invisible rays that are part of the energy that comes from the sun. UV radiation that reaches the earth's surface is made up of two types of rays, called UVA and UVB. Both types are thought to increase risk for cancers of the skin.

For more detailed information about the glossary terms, please refer to the Dictionary on www.cancer.gov OR call the Cancer Information Service at 1-800-4-CANCER (1-800-422-6237)

References

American Cancer Society, (2000). Cancer Facts & Figures 2000.

Baquet, C. R. (1996). Native Americans' cancer rates in comparison with other peoples of color. Cancer Supplement, 78(7), 1538-1544.

Cobb, N. (1996). Environmental causes of cancer among Native Americans. Cancer Supplement, 78(7), 1603-1606.

Harvard School of Public Health (2000). Center for Cancer Prevention. Seven ways to prevent cancer [On-line]. www.hsph.harvard.edu/cancer

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We look forward to hearing from you. Thank You.

Basics of Cancer Treatment

Target Audience:

- *Community members*
- *Staff of Indian health programs, including Community Health Representatives*

Contents of Learning Module:

- *Instructor's Guide with Pre/Post Self-Assessment*
- *PowerPoint presentation*
- *Glossary*
- *References*

Length:

- *Introduction of session/module overview (:05)*
- *Pre self-assessment (:07)*
- *Presentation of module including interactive activity (:30)*
- *Optional video: AI/AN Clinical Trials and Native People—A Gift for Our Children (24)*
- *Post self-assessment (:05)*
- *Closing (:03)*

Goals

In this session, participants will gain a basic understanding of common cancer treatments, and their potential side effects.

Objectives

At the completion of Learning Module 4, participants will be able to demonstrate the following:

Section 1

a) Discuss the Western and traditional approach to cancer treatment and why both are important to use in the fight against cancer.
b) Discuss the difference between local and systemic treatment for cancer.
c) Describe the reason side effects commonly occur with cancer treatment.

Section 2

a) Describe at least two side effects that can occur as a result of cancer treatment.

Measures of Objective Accomplishment

The presenter will administer a pre self-assessment and post self-assessment to measure participants' knowledge of the module's objectives. The pre self-assessment measures existing knowledge and the post self-assessment measures what was gained through the learning module.

NOTE

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- See the glossary (at the end of the module) for words that are in ***bold italics*** throughout the module.

Pre/Post Self-Assessment

Cancer Treatments

Do you agree (A) or disagree (D) with these statements, or are you not sure (NS)? Circle Choice A, D, or NS.

1.	**A**	**D**	**NS**	Cancer treatment may consist of several methods such as surgery, chemotherapy, radiation therapy, hormonal therapy, and biological therapies.
2.	**A**	**D**	**NS**	Side effects of cancer treatment are the same for all people.
3.	**A**	**D**	**NS**	Biological therapies tend to cause flu-like symptoms.
4.	**A**	**D**	**NS**	The purpose of clinical trials is to find better ways to treat cancer.
5.	**A**	**D**	**NS**	Systemic treatments travel through the bloodstream, reaching cancer cells all over the body.

Section 1
How We Become Well Again

There are a number of different ways to treat cancers. **For many AI/AN diagnosed with cancer, treatment often involves a blend of both Western and traditional medicine.** While Western medicine uses an approach based on science and is focused on the physical aspect of disease, traditional medicine emphasizes the use of sacred rituals and healing ceremonies to restore a person to a state of wellness that includes the physical, emotional, mental and spiritual dimensions of health. Both methods are necessary in the fight against cancer.

For many AI/AN facing cancer treatment, the use of traditional healers and traditional medicine is also an important part of becoming well again. Traditional healers who work with AI/AN generally establish a long-term relationship with the person affected by the disease. This relationship often extends beyond the affected individual to include the family. **The healer uses a variety of skills that are culturally acquired to design a treatment plan that will focus on the "whole person".** Traditional healers working with AI/AN undergoing treatment for cancer provide the spiritual and emotional support necessary to aid the individual in their fight against cancer (Burhannstipanov (1997). **The goal of treatment is centered on using the power of the mind, the body, the spirit, and the natural environment in the healing process to restore harmony and balance (Kim & Kwok, 1998).**

The Western medical approach to cancer involves a team of doctors (***surgeons***, *medical oncologists*, ***radiation oncologists***, and others) who specialize in the treatment of people with cancer. The team of doctors develop a treatment plan to fit each person's situation based on their cancer diagnosis. The treatment plan may include ***surgery, chemotherapy, radiation therapy, hormone therapy or biological therapies, or participation in a clinical trial***.

Treatment for cancer depends on the type of cancer, the size, location and stage of the disease, the person's general health, and other factors. Treatment for cancer can be either local or systemic. ***Local treatments*** affect cancer cells in the tumor and the area near it. ***Systemic treatments*** travel through the bloodstream, reaching cancer cells all over the body. Surgery and radiation therapy are types of local treatment. Chemotherapy, hormone therapy, and biological therapy are examples of systemic treatment.

Because cancer treatment damages healthy cells and tissues in addition to cancer cells, it often causes *side effects*. Side effects of cancer treatment depend mainly on the type and extent of the treatment. Also, the effects may not be the same for each person, and they may change for a person from one treatment to the next. Patients undergoing treatment for cancer are closely monitored by the specialists (medical oncologists and others) involved in their care. This team of specialists provides education on side effects that may occur during and after treatment, and ways to manage or lessen the effects. **When traditional medicine is combined with Western medicine in the treatment of cancer, sharing information about treatment is important. The use of traditional practices such as sweat baths or hot springs baths, etc. may affect some medications and therapies.** Thus, both medical specialist and healer should be aware that the patient is using both approaches.

The goals of treatment vary according to the situation. A particular treatment might be recommended because it offers the best chance of a cure. When cure is not possible, treatment may improve the quality of life by relieving pain, pressure and other symptoms of cancer. **Whatever treatment plan is used, AI/AN are most likely to benefit when the plan is focused on a holistic approach to care that may involve a blending of Western and traditional medicine. Such an approach addresses not only the physical illness but also the mental, emotional, and spiritual dimensions of the disease.**

Section 2
Treatment Methods

The following is a description of common methods used in the treatment of cancer in Western medicine:

Surgery

Refers to removing the cancerous tumor and possibly the removal of surrounding tissue and lymph nodes near the tumor. *Surgery* is most effective when the cancer is still confined to its original site and when the tumor can be completely removed. Sometimes surgery is done on an outpatient basis (in and out the same day), or the patient may stay overnight in the hospital. This decision depends mainly on the type of surgery and the type of ***anesthesia***. The side effects of surgery depend on many factors, including the size and location of the tumor, the type of operation, and the patient's general health. The discomfort that may occur after surgery can be controlled with medicine. Patients may also feel tired or weak for a while after surgery. The length of time it takes to recover from an operation varies among patients.

Some patients have concerns that cancer will spread during surgery. This is a very rare occurrence. Surgeons use special techniques and take many precautions to prevent cancer from spreading during surgery. For example, if tissue samples must be removed from more than one site, they use different instruments for each one. Also, a margin of normal tissue is often removed along with the tumor. Such efforts reduce the chance that cancer cells will spread into healthy tissue.

Chemotherapy

Refers to the use of drugs to kill cancer cells. It is a systemic treatment, meaning that the drugs flow through the bloodstream to nearly every part of the body. *Chemotherapy* primarily works by

attacking cells that divide and grow rapidly, such as cancer cells. The doctor may use one drug or a combination of drugs.

Chemotherapy is used most often when there is a possibility that cancer cells may be located somewhere other than the primary tumor. It may be the only kind of treatment a patient needs, or it may be combined with other forms of treatment. ***Neoadjuvant chemotherapy*** refers to drugs given before surgery to shrink a tumor; ***adjuvant chemotherapy*** refers to drugs given after surgery to help prevent the **cancer** from recurring. **Chemotherapy also may be used (alone or along with other forms of treatment) to relieve symptoms of the disease.**

Chemotherapy is usually given in "cycles." A cycle includes a treatment period (one or more days when treatment is given) followed by a recovery period (several days or weeks), then the cycle repeats. Most anticancer drugs are given by intravenous injection (IV) into a vein; some are injected into a muscle or under the skin; and some are given by mouth. For some types of cancer, doctors are studying whether it helps to put anticancer drugs directly into the affected area.

Often, patients who need many doses of intravenous chemotherapy receive the drugs through a catheter (a thin, flexible tube) that stays in place until treatment is over. Usually a patient has chemotherapy as an outpatient (at the hospital, at the doctor's office, or at home). However, depending on which drugs are given, the dose, how they are given, and the patient's general health, a short hospital stay may be needed.

The side effects of chemotherapy depend mainly on the drugs and the doses the patient receives. As with other types of treatment, side effects vary from person to person. Generally, anticancer drugs affect cells that divide rapidly. In addition to cancer cells, these include blood cells, which fight infection, help the blood to clot, and carry oxygen to all parts of the body. When blood cells are affected, patients are more likely to get infections, may bruise or bleed easily, and may feel unusually weak and very tired. Rapidly dividing cells in hair roots and cells that line the digestive tract may also be affected.

As a result, side effects may include loss of hair, poor appetite, nausea and vomiting, diarrhea, or mouth and lip sores.

Biological Therapy (immunotherapy)

Helps the body's natural ability (immune system) to fight disease or protects the body from some of the side effects of cancer treatment. ***Monoclonal antibodies, interferon, interleukin-2*****, and** ***colony-stimulating factors*** are some types of biological therapies. The side effects caused by biological therapy vary with the specific treatment. In general, these treatments tend to cause flu-like symptoms, such as chills, fever, muscle aches, weakness, loss of appetite, nausea, vomiting, and diarrhea. Patients also may bleed or bruise easily, get a skin rash, or have swelling. These problems can be severe, but they go away after the treatment stops.

Radiation Therapy (radiotherapy)

The use of high-energy rays to kill cancer cells or stop them from growing and dividing. For some types of cancer, radiation might be used instead of surgery as the primary treatment. In other cases, radiation might be given after surgery to destroy any cancer cells that remain in the area. **There are two forms of radiation: external and internal.** External radiation comes from a machine outside the body. With internal radiation, radioactive material is sealed in a container (needles, wires, seeds, etc.) and placed directly in or near the tumor. **Radiation is a local treatment; it can only affect cancer cells in that area.**

The side effects of radiation depend on the amount of radiation given (the dose), the part of the body that is treated, and the individual patient's response. A common side effect is extreme tiredness and skin changes in the treated area. Most side effects will go away in time.

Hormone Therapy

Used against certain cancers that depend on hormones for their growth. Some types of cancer (such as most breast and prostate cancers) depend upon hormones (natural substances produced in the body) to grow. This treatment may involve using drugs that stop the production of hormones, or that change the way the hormones work in the body. Another type of hormone therapy is to remove organs (such

as the ovaries or testicles) that make the hormones. **Hormone therapy is a systemic treatment; it affects cancer cells throughout the body**.

Depending on which hormone is targeted, hormone therapy can cause a variety of side effects. Some of the side effects include feeling tired, fluid retention, weight gain, hot flashes, nausea and vomiting, and changes in appetite. Hormone therapy in women may lead to a loss or increase in fertility. Men may experience ***impotence*** or a loss of fertility. Patients may want to discuss these and other side effects with their doctor.

Clinical Trials

Research studies that evaluate promising new therapies and answer scientific questions. The purpose of these research studies is to find better ways to treat cancer and help cancer patients. They include studies of ways to prevent, detect, diagnose, and treat cancer; studies of the psychological effects of the disease; and studies of ways to improve comfort and quality of life.

Clinical trials offer important treatment options for many people with cancer and may be a part of a person's treatment plan for cancer. Patients who take part in clinical trials may have the first chance to benefit from new approaches. They also make contributions to knowledge and progress against cancer. As with any other treatment, there are risks involved with taking part in a clinical trial, but researchers are very careful to protect the patients who enroll in research studies.

Glossary of Terms

Adjuvant Chemotherapy Refers to drugs given after surgery to help prevent the cancer from recurring.

Anesthesia Loss of feeling or awareness. Local anesthetics cause a loss of feeling in a part of the body. General anesthetics put the person to sleep.

Biological Therapy Treatment to try to get the body to fight cancer. It uses materials made by the body or made in a laboratory to improve the body's natural response to disease.

Chemotherapy Treatment with drugs that kill the cancer cells.

Clinical trials Research studies that evaluate promising new therapies and answer scientific questions about ways to prevent, detect, diagnose, and treat cancer; the psychological effects of the disease; and ways to improve comfort and quality of life.

Colony-stimulating factors Substances that stimulate the production of blood cells.

Hormone Therapy Treatment of cancer by removing, blocking, or adding hormones.

Hormones Chemicals produced by glands in the body and circulated in the bloodstream. Hormones control the actions of certain cells or organs.

Impotence Inability to have an erection and/or ejaculate semen.

Interferon A type of biological treatment that interferes with the division of cancer cells and slows the growth of the tumor.

Interleukin-2 A type of biological treatment that stimulates the growth of certain disease-fighting blood cells in the immune system.

Local therapy Treatment that affects cells in the tumor and the area close to it.

Medical Oncologist A doctor who specializes in diagnosing and treating cancer using chemotherapy, hormone therapy and biologic therapy. A medical oncologist often serves as the person's main caretaker and coordinates treatment provided by the other specialists.

Monoclonal antibodies Substances produced in a laboratory that can locate cancer cells and bind to them wherever they are in the body. Monoclonal antibodies can be used alone or they can be used to deliver drugs, toxins, or radioactive material directly to the tumor.

Neoadjuvant Chemotherapy Refers to drugs given before surgery to shrink a tumor.

Radiation Oncologist A doctor who specializes in using radiation to treat cancer.

Radiation Therapy Treatment with high-energy radiation from x-rays, neutrons, and other sources to kill cancer cells and shrink tumors.

Side effects Problems that occur when treatment affects healthy cells. Common side effects of cancer treatment are fatigue, nausea, vomiting, decreased blood cell counts, hair loss, and mouth sores.

Surgeon A doctor who specializes in surgery - removing or repairing a part of the body.

Surgery Treatment to remove or repair a part of the body.

Systemic Treatment Treatment that uses substances that travel through the bloodstream, reaching and affecting cells all over the body.

For more detailed information about the glossary terms, please refer to the Dictionary on www.cancer.gov OR call the Cancer Information Service at 1-800-4-CANCER (1-800-422-6237)

References

Burhansstipanov, L. (1997). Cancer among elder Native Americans. Native Elder Health Care Resource Center.

Kim, C. & Kwok, Y. S. (1998). Navajo use of native healers. Archives of Internal Medicine, 158(20), 2245-2249.

Kleinsmith, L. J., Kerrigan, D., Spangler, S. (2001). Understanding cancer. [CD-ROM]. National Cancer Institute.

National Cancer Institute (2000). What you need to know about cancer. (NIH Publication No. 00-1566).

Please Note—

✓ Use the Curriculum/Training Evaluation located in the Evaluation section, to get valuable participant feedback.

✓ The Health Change Checklist, located in the Evaluation section, directs the participants new attitudes towards new actions and may be used as a take home exercise.

✓ Please Complete the "Trainer Activity Report" in the Evaluation section of the curriculum. Your feedback allows us to track usage of the curriculum for reporting purposes and ensures you receive any updates to the material.

We look forward to hearing from you. Thank You.

Support for Patients and Caregivers

Target Audience:

- *Community members*
- *Staff of Indian health programs, including Community Health Representatives*

Contents of Learning Module:

- *Instructor's Guide with Pre/Post Self-Assessment*
- *PowerPoint presentation*
- *Glossary*
- *References*

Length:

- *Introduction of session/module overview (:05)*
- *Pre self-assessment (:07)*
- *Presentation of module including interactive activity (:30)*
- *Post self-assessment (:05)*
- *Closing (:03)*

Goals

In this session, participants will gain an understanding of the psychological and social issues that affect cancer patients and their caregivers.

Objectives

At the completion of Learning Module 5, participants will be able to demonstrate the following:

Section 1

a) Describe two emotions a cancer patient might experience after diagnosis.
b) Describe two ways to provide support to a patient facing cancer.
c) Describe two ways that make caregiving less stressful.

Section 2

a) Give two examples of how cancer survivors bring a sense of balance back into their lives after cancer treatment.

Measures of Objective Accomplishment

The presenter will administer a pre self-assessment and a post self-assessment to measure participants' knowledge of the module's objectives. The pre self-assessment measures existing knowledge and the post self-assessment measures what was gained through the learning module.

NOTE

- Each major learning point is clearly identified by **boldface** type throughout the guide and emphasized in the PowerPoint presentation.
- See the glossary (at the end of the module) for words that are in ***bold italics*** throughout the module.

Pre/Post Self-Assessment

Support for Patients and Caregivers

Do you agree (A) or disagree (D) with these statements, or are you not sure (NS)? Circle Choice A, D, or NS.

1.	**A**	**D**	**NS**	Feelings of denial, anger, stress, and anxiety are common for a person who has just been diagnosed with cancer.
2.	**A**	**D**	**NS**	Cancer is a disease that is best faced alone.
3.	**A**	**D**	**NS**	Sharing stories of survival is an important part of the healing process.
4.	**A**	**D**	**NS**	People who provide care for cancer patients may need periodic breaks to maintain their own emotional and physical health.
5.	**A**	**D**	**NS**	Systemic treatments travel through the bloodstream, reaching cancer cells all over the body.

Section 1

Coping with the Cancer Diagnosis How to be Supportive

Coping with Feelings after the Diagnosis

The first few weeks after the diagnosis are often the most emotional time of the entire cancer experience. Feelings change rapidly from day to day or even hour to hour. A person may feel denial, anger, stress, and anxiety. At times people with cancer and the people closest to them may also feel depressed, guilty, or lonely. People who have faced cancer say that these intense feelings don't last long. After a time of adjustment to the diagnosis, most people are able to move on and look forward to healing. It is important to remember that more and more people are surviving cancer and living many years beyond their diagnosis.

Tips for Helping Someone Face a Cancer Diagnosis

Don't avoid me. Be the friend, the loved one you've always been.

Treat me like you always have. Be there for me as you've always been.

Touch me. A simple squeeze of my hand can tell me you still care.

Take care of my children for me. I need a little time to be alone with my loved one.
My children may also need a little vacation from my illness.

Weep with me when I weep. Laugh with me when I laugh. Don't be afraid to share this with me.

Help my family. I am sick, but they may be suffering. Offer to stay with me to give my loved ones a break. Invite them out. Take them for outings.

Let's talk about it. Find out if I need to talk about my illness by asking me: "Do you feel like talking about it?"

Don't feel we always have to talk. We can sit silently together.

Don't tell me not to worry.

Bring me a positive attitude. It's catching!

Hope is important to me. Help me plan for the future.

(Adapted from Taking Time, NIH publication #98-2059, April 1999)

Sources of Support

No one needs to face cancer alone. Many people can help provide a cancer patient with emotional, spiritual, and practical support. They include family members, friends, other cancer patients, community members, and health providers. For many American Indians and Alaska Natives (AI/AN) traditional healers are also an important part of supportive care. Traditional healers may conduct ceremonies for patients and their loved ones. These ceremonies may help individuals express their feelings and increase the bonds of support between those affected by the diagnosis. Many AI/AN are also active in formal religious organizations. These organizations may serve as a source of support for both the patient and the family. In addition to offering special prayers for recovery, some churches may provide services such as meal preparation and house cleaning.

People facing cancer who receive support during their illness may find that they are often better able to cope with their problems. Many speak of how the support of other people cheered them and improved their outlook on life. Those who help also benefit. Having the chance to help with practical things can help put others at ease, and make them feel good about being able to do something meaningful.

Suggestions to make caregiving less stressful

People who provide care may need periodic breaks from caring for their loved one to take care of themselves both emotionally and physically. Offering caregivers regular relief from daily responsibilities can help them avoid overwork and burnout. Caregivers need to be realistic about their limits. Ease into helping and don't try to do everything at once. This will lessen the chance of becoming overworked and stressed. Attending a support group and talking to other caregivers can be helpful. Sharing emotions by trusting and talking to family and friends and making time for yourself is also important. Finding volunteers, community resources, or relatives to help can lessen the likelihood of becoming overwhelmed.

Section 2

Life after Cancer Treatment— On the Path to Recovery

Facing a cancer diagnosis and surviving cancer treatment may be the greatest challenge a person will face in their lifetime. It is an important time during which many individuals work through their own personal feelings about death and how they may want to live the rest of their life. Some cancer survivors use the time after treatment to evaluate the way they have been living and make changes to live a healthier, less stressful lifestyle.

Attaining and maintaining balance becomes an important part of recovery. Some people may find it easy to bring a sense of balance back into their lives by returning to work and getting back into a routine. Choosing activities that provide a sense of purpose may also be helpful. Having fun and spending time with family and friends is important. It is important to remember that energy levels may be low after treatment, and recognizing physical limitations will prevent becoming overly tired. Getting enough rest is important for keeping physical and emotional defenses strong.

Some people say that putting their lives in order makes them less fearful of cancer returning. Setting a daily schedule, being a participant in health care decisions, keeping appointments, and making lifestyle changes are among the things a cancer survivor can control.

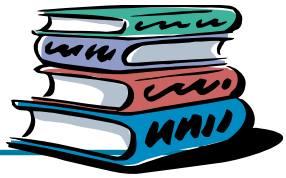
Some cancer survivors become active in their community after recovery from treatment. Getting involved in cancer-related activities is like a two-way street. When survivors help others, they also help themselves.

Some Benefits of Getting Involved in Cancer-related Activities

- More acceptance and less fear of cancer.
- Meeting other people who share the same kind of experiences.
- Making a positive difference in other people's lives.
- Teaching others about cancer.
- Discovering a new life path following the cancer experience.

(Adapted from the Facing Forward Series: Life After Cancer Treatment, NIH Publication No. 02-2424, April 2002; and Ways You Can Make a Difference in Cancer, NIH Publication No. 02-5088, June 2002)

Instructor's Notes



Resources for Cancer Survivors and their Families

A comprehensive listing of resources that address general survivorship issues, (i.e., employment, financial concerns, assistance obtaining medications, health insurance), and survivorship issues related to specific cancers, are located in the two Facing Forward Series books (NCI) that are included with this curriculum.

References

National Cancer Institute (2002). Facing Forward Series: Life after cancer treatment (NIH Publication No. 022424).

National Cancer Institute (2002). Facing Forward Series: Ways you can make a difference in cancer (NIH Publication No. 02-5088).

National Cancer Institute (1999). Taking Time – Support for people with cancer and the people who care about them (NIH Publication No. 98-2059).

Please Note—

✓ Use the Curriculum/Training Evaluation located in the Evaluation section, to get valuable participant feedback.

✓ The Health Change Checklist, located in the Evaluation section, directs the participants new attitudes towards new actions and may be used as a take home exercise.

✓ Please Complete the "Trainer Activity Report" in the Evaluation section of the curriculum. Your feedback allows us to track usage of the curriculum for reporting purposes and ensures you receive any updates to the material.

We look forward to hearing from you. Thank You.

Evaluation Contents

Answer Key
Pre- and Post- Self-Assessment Questions

Module 1	Module 2	Module 3
1. True 2. True 3. False 4. True 5. True	1. False 2. False 3. False 4. True 5. True	1. True 2. True 3. True 4. False 5. False
Module 4	**Module 5**	**Module 6**
1. True 2. True 3. False 4. True 5. True	1. True 2. True 3. False 4. False 5. False	1. True 2. False 3. True 4. True 5. True
Module 7		
1. True 2. False 3. True 4. True 5. False		

TO: Teresa Guthrie, RN, MN Date: _____

Fax: 206-667-7792 Number of Pages: _____

Please fax this form *to Teresa Guthrie (Phone: 206-667-7593) after using Cancer 101 for training/education. If you are mailing completed evaluation forms, please send with this worksheet. The address is located on reverse side of this page.*

Dear Trainer: We need your help! As a Cancer 101 user, you are part of a very important educational initiative to educate American Indian and Alaska Native people about cancer. A strong feedback loop between our office and the users of the Cancer 101 curriculum is critical to the ongoing success of the program. This feedback loop will provide you with the opportunity to let us know how you are using the materials, how the curriculum can be strengthened to more closely meet your needs, and how we can provide you with the assistance and support you may want with your program planning. Your suggestions will enable us to modify the curriculum to suit the needs of your audiences, and to provide you with additional resource materials and/or training assistance. Thank you very much for your participation in Cancer 101!!

Trainer Activity Report

After using Cancer 101 for training/education, please fax this form to Teresa Guthrie at: 206-667-7792

Trainer _____ Tribe _____

Date of training/activity _____ Training location _____

Number of participants _____

Type of Activity

- ❑ Tribal staff training
- ❑ Patient/family education session
- ❑ Community Health Representative Training
- ❑ Group Presentation _____ support group
  - _____ women's group
  - _____ men's group
  - _____ student group
  - _____ other (please indicate group)

Materials Used for My Activity

❑ Module 1	❑ powerpoint slides	❑ pre/post self-assessment
❑ Module 2	❑ powerpoint slides	❑ pre/post self-assessment
❑ Module 3	❑ powerpoint slides	❑ pre/post self-assessment
❑ Module 4	❑ powerpoint slides	❑ pre/post self-assessment
❑ Module 5	❑ powerpoint slides	❑ pre/post self-assessment
❑ Module 6	❑ powerpoint slides	❑ pre/post self-assessment
❑ Module 7	❑ powerpoint slides	❑ pre/post self-assessment

❑ Workshop Evaluation ❑ Health Changes Intent

If you did not use the pre/post self-assessment, why didn't you, or did you use them in some other way, i.e. as a discussion guide?

Would you like additional assistance with planning/implementing training sessions or other educational activities? Please contact Teresa Guthrie for assistance (Phone: 206-667-7593).

Would you like to be notified of any updates or changes to the Cancer 101 curriculum material? For example, updates to cancer screening guidelines.

❑ Yes. Please include me on a mailing list. ❑ No. I do not wish to receive the updates.

Note: It will strengthen our evaluation of the Cancer 101 curriculum if you can send us copies of the completed pre/post assessments, workshop evaluation, and health changes intent. This is optional. Please mail to Teresa Guthrie at the address below.

Please fax this form to Teresa Guthrie at FAX: 206-667-7792 (Phone: 206-667-7593) after using Cancer 101 for training/education. If you are mailing completed evaluation forms, please send with this worksheet to:

Teresa Guthrie, RN, MN
Cancer Information Service – Pacific Region
Fred Hutchinson Cancer Research Center
1100 Fairview Ave. N., J2 400
P.O. Box 19024
Seattle, WA 98109-1024

THANK YOU!!

Health Change Checklist
Next Steps After Training!

After this workshop using the Cancer 101 Curriculum, some health changes I intend to make are:

- ❑ Share information about cancer issues in AI/AN communities with my family, community, and others.
- ❑ Share what I've learned about cancer and information about some of the treatments for cancer.
- ❑ Share information about support services available for people who are dealing with cancer.
- ❑ Offer my support to people who are dealing with cancer.
- ❑ Get regular physical exams which include screening for cancer.
- ❑ Pay attention to changes in my body that last more than two weeks (such as a lump in the breast or a cough that doesn't go away), and seek medical attention.
- ❑ Increase the amount of physical activity I get each day.
- ❑ Make changes to a healthier diet that includes a variety of fruits and vegetables and is lower in fat.
- ❑ Stop smoking and reserve the use of tobacco for traditional purposes.
- ❑ Limit alcohol consumption.
- ❑ Protect myself from sun exposure.
- ❑ Protect myself and my partner from sexually transmitted diseases.
- ❑ Other health changes I would like to make:

Workshop Evaluation

Directions: please take a few minutes to complete this evaluation. Your responses allow us (1) to evaluate the overall usefulness of the learning modules, and (2) to make any changes that you might recommend. Please circle the number corresponding to your answer and write any questions or comments below each question.

Module 1	***Cancer Among American Indians and Alaska Natives***	Strongly Disagree	Disagree	Don't Know/ Not Sure	Agree	Strongly Agree
A	Module 1 will add to my community's knowledge about **cancer as a health concern among American Indians and Alaska Natives.**	1	2	3	4	5
B	Module 1 will add to my community's knowledge about **how data contributes to your knowledge of cancer for American Indians and Alaska natives.**	1	2	3	4	5
C	Module 1 will add to my community's knowledge about **the poor survival for American Indians and Alaska Natives diagnosed with cancer and what could improve survival rates.**	1	2	3	4	5

Comments/Questions/What you would like to know about **cancer among American Indians and Alaska Natives** (Use additional paper or the space at the end of the evaluation, if needed.)

Module 2	What is Cancer?	Strongly Disagree	Disagree	Don't Know/ Not Sure	Agree	Strongly Agree
D	Module 2 will add to my community's knowledge about **how cancer develops?**	1	2	3	4	5
E	Module 2 will add to my community's knowledge about **how data contributes to my knowledge of cancer for American Indians and Alaska Natives.**	1	2	3	4	5
F	Module 2 will add to my community's knowledge about **two types of tumors: benign and malignant.**	1	2	3	4	5

Comments/Questions/What you would like to know about **cancer among American Indians and Alaska Natives** (Use additional paper or the space at the end of the evaluation, if needed.)

Module 3	Cancer Screening and Early Detection	Strongly Disagree	Disagree	Don't Know/ Not Sure	Agree	Strongly Agree
G	Module 3 will add to my community's knowledge about **the importance of early detection practices.**	1	2	3	4	5
H	Module 3 will add to my community's knowledge about **barriers that may be associated with practicing early detection.**	1	2	3	4	5

Comments/Questions/What you would like to know about **cancer among American Indians and Alaska Natives** (Use additional paper or the space at the end of the evaluation, if needed.)

Module 4	***Cancer Diagnosis and Staging***	Strongly Disagree	Disagree	Don't Know/ Not Sure	Agree	Strongly Agree
I	Module 4 will add to my comm unity's knowledge about **how cancer is diagnosed.**	1	2	3	4	5
J	Module 4 will add to my community's knowledge about **how the stages of cancer are determined.**	1	2	3	4	5
K	Module 4 will add to my community's knowledge about **specific terms such as biopsy, differentiation and staging.**	1	2	3	4	5

Comments/Questions/What you would like to know about **cancer among American Indians and Alaska Natives** (Use additional paper or the space at the end of the evaluation, if needed.)

Module 5	***Cancer Risk Factors and Risk Reduction***	Strongly Disagree	Disagree	Don't Know/ Not Sure	Agree	Strongly Agree
L	Module 5 will add to my comm unity's knowledge about **cancer risk factors.**	1	2	3	4	5
M	Module 5 will add to my community's knowledge about **ways to take personal action to reduce risk for cancer.**	1	2	3	4	5

Comments/Questions/What you would like to know about **cancer among American Indians and Alaska Natives** (Use additional paper or the space at the end of the evaluation, if needed.)

Module 6	*Basics of Cancer Treatment*	Strongly Disagree	Disagree	Don't Know/ Not Sure	Agree	Strongly Agree
N	Module 6 will add to my community's knowledge about **how cancer is treated and the potential side effects of cancer treatment.**	1	2	3	4	5
O	Module 6 will add to my community's knowledge about **traditional and Western approaches to cancer treatment.**	1	2	3	4	5

Comments/Questions/What you would like to know about **cancer among American Indians and Alaska Natives** (Use additional paper or the space at the end of the evaluation, if needed.)

Module 7	*Support for Patients and Caregivers*	Strongly Disagree	Disagree	Don't Know/ Not Sure	Agree	Strongly Agree
P	Module 7 will add to my community's knowledge about **providing support for family (and community) caregivers for loved ones who have been diagnosed with cancer.**	1	2	3	4	5
Q	Module 7 will add to my community's knowledge about **how to bring a sense of balance back into their lives after cancer treatment.**	1	2	3	4	5

Comments/Questions/What you would like to know about **cancer among American Indians and Alaska Natives** (Use additional paper or the space at the end of the evaluation, if needed.)

	Needs Met				*Needs Unmet*
1. The training met the overall objectives. Comments:	1	2	3	4	5
2. The training met my needs. Comments:	1	2	3	4	5
3. There was enough time for discussion. Comments:	1	2	3	4	5
4. There was enough time for reflection. Comments:	1	2	3	4	5
5. The hand out materials were helpful. Comments:	1	2	3	4	5

6. What aspects of this training do you think will be **most** helpful when you plan your own trainings?

7. What aspects of this training were **least** helpful?

8. What are your plans for use of the materials when you get back to your community?

9. Would you like any additional assistance with planning/implementing training session (resource materials or technical assistance)?

10. Was the training meeting room comfortable?

11. How were the meals and refreshments?

Thank you for participating in the Cancer 101 training.
We look forward to working with you in the future!

OPTIONAL

Please check any/all that apply.

Your position/occupation:
_____Tribal Chair
_____NPAIHB Delegate
_____Tribal Health Director
_____Community Health Representative
_____Tribal Health Care Professional
_____Tribal Cancer Control Contact
_____Other (please specify)_____

Comments/ Suggestions

Training Tips

We learn and remember more when we feel comfortable with the learning process. As a trainer, you can create a comfortable place for learning to take place. Learning about cancer can be difficult for many people.

Some Issues that Hinder Learning

- Fear of discovering that one has a high risk of cancer;
- Fear of exposing one's lack of knowledge to others;
- Fear of remembering painful memories of loved ones lost to cancer;

Other issues can include differences in learning styles and cultural beliefs and perspectives. At the beginning of your training, you can reassure the participants that these feelings are normal and will be carefully considered during the training session.

Below are some basic trainer qualities and communication skills that may help you. For more information about training, please use NCI's Trainer's Guide for Cancer Education that is included with the curriculum.

Some Qualities of Effective Trainers

- Understands the impact that her/his own behavior can have on the learners;
- Encourages learners;
- Patience and respect for the needs of the learners;
- Gives information in a clear manner and allows plenty of time for questions/ discussion;
- Uses audio-visual aids (flipchart, videos, slides, etc) to keep learners engaged;
- Culturally sensitive and open to different ways of thinking about things;
- Aadapts the training to meet the needs of the learners;
- Responds to sensitive and confidential issues appropriately;

Communication Skills

Voice

- Breathe from your stomach.
- Speak so that everyone can hear you.
- Use expression in your voice.
- Emphasize key words so that the audience understands the main points of the lesson.

Eye Contact

- Look around the entire room.
- Look to specific individuals throughout the room.
- For large audiences, look to general areas to establish contact.

Posture

- Use a relaxed posture.
- Walk around and use the entire area during your presentation.
- If sitting, rest your arms comfortably in front of you; don't slouch forward.

Gestures

- Use gestures that feel natural to you.
- Keep your hands empty so you don't distract the audience by clicking a pen, etc.

Pacing

- Speak at a comfortable pace.
- Do not use "um," "O.K." or "uh huh" to fill the place of silence.
- Use pauses or a faster speaking pace to emphasize key points.

Adapted from: Trainer's Guide for Cancer Education, National Cancer Institute; Training Design and Delivery: A Capacity-Building Workshop for CIS Trainers, National Cancer Institute; and Effective Training Techniques, Fred Hutchinson Cancer Research Center.

References

Trainer's Guide for Cancer Education: Designed for lay people and health professionals who provide cancer education in a variety of settings. Includes sections on adult learning, planning, implementation, and appendices of tools to use in trainings. National Cancer Institute (2001), NIH Publication No. 02-5052.

Suggested Resources

- **Spirit of EAGLES - American Indian/Alaska Native Leadership Initiative on Cancer (SoE):** The Spirit of EAGLES is one of 18 special populations initiatives funded by the National Cancer Institute (NCI) to design and implement cancer control program in minority and underserved communities. SoE staff are located at the Mayo Cancer Center, and NCI's Cancer Information Service, North Central and Pacific Region offices.
  Phone: 507-266-3064; Email: leadershipinitiative@mayo.edu
  Website: http://www.mayo.edu/leadershipinitiative

- **Native C.I.R.C.L.E. – the American Indian/Alaska Native Cancer Information Resource Center and Learning Exchange:** A resource center providing cancer-related materials to healthcare professionals and lay people involved in the education, care, and treatment of AI/AN.
  Phone: 1-877-372-1617; Email: nativecircle@mayo.edu
  Website: http://www.mayo.edu/nativecircle

- **The Native WEB – Women Enjoying the Benefit:** Provides onsite training to nurses for the early detection of breast and cervical cancer.
  Phone: 507-284-4575; Email: nativeweb@mayo.edu

- **The Unbroken Circle – Advancing Cancer Care and Services for American Indians and Alaska Natives:** National, non-profit organization serving Native populations impacted by cancer. Co-Executive Directors are Khari LaMarca and Alisa Gilbert. Phone: 1-800-315-8848; Website: http://www.theunbrokencircle.org

- **National Cancer Institute**
  Cancer Information Service, 1-800-4-CANCER (1-800-422-6237), is a free public service that provides information/education about cancer to patients, their families, health professionals and the general public.

- **www.cancer.gov**
  The National Cancer Institute's (NCI) web site, cancer.gov, is a comprehensive online resource that enables users to quickly find accurate and up-to-date information on all types of cancer, clinical trials (research studies), research programs, funding opportunities, cancer statistics, and the Institute itself.

- **Surveillance, Epidemiology, and End Results (SEER) Program**
  The SEER program of the National Cancer Institute is an authoritative source of information on cancer incidence and survival in the United States. Currently, SEER collects and publishes cancer incidence and survival data from 11 population-based cancer registries and three supplemental registries covering approximately 14 percent of the US population.

List of Resources
Included with Cancer 101 Curriculum

National Cancer Institute

Call 1-800-4-CANCER or search http:cancer.gov to order the following materials:

- Facing Forward Series: Ways You Can Make a Difference in Cancer
- Facing Forward Series: Life After Cancer Treatment
- Trainer's Guide for Cancer Education
- What You Need To Know About Series
    - Cancer
    - Breast Cancer
    - Cervix
    - Colon and Rectum
    - Lung
    - Prostate

- Taking Time: Support for People With Cancer and the People Who Care About Them
- Chemotherapy and You
- Radiation Therapy and You
- Eating Hints for Cancer Patients
- Taking Part in Clinical Trials: What Cancer Patients Need to Know
- Taking Part in Clinical Trials: Cancer Prevention Studies-What Participants Need to Know
- Why do you Smoke?
- Clearing the Air: How to Quit Smoking…..and Quit for Keeps
- Cancer Information Service brochure

The following materials have been adapted for AI/AN from National Cancer Institute publications. Contact Native C.I.R.C.L.E. at 877-372-1617 (toll-free) or E-mail: nativecircle@mayo.edu to order the following materials:

- The Journey Forward: A Guide for Cancer Survivors
- Important Things for You to Know About Cancer
- Pocket Glossary of Cancer Language
- Video: Cancer In The Great Land
- Video: AI/AN Clinical Trials and Native People-A Gift For Our Children
- Native C.I.R.C.L.E. brochure

CANCER 101
Curriculum Order Form

1. Date: _____

2. Name: _____

3. Address: _____

_____

4. Phone: _____

5. Fax: _____

6. Email: _____

7. Tribal Affiliation: _____

8. What audience are you planning to train? _____

9. What is the Purpose of the training? _____

FAX your order form at least two weeks before your training to Teresa Guthrie.
Fax— 206-667-7792 Phone—206-667-7593

10. Would you like to be notified of any updates or changes to the **Cancer 101** curriculum material? For example, updates to cancer screening guidelines.
    - ❑ Yes. Please include me on a mailing list.
    - ❑ No. I do not wish to receive the updates.

11. **Important Note:** The Cancer 101 Curriculum binder includes a PowerPoint diskette of the slides or presentations. Please check the box below if you will need the diskette.
    - ❑ I would like to receive the PowerPoint presentation on diskette.

THANK YOU!

Northwest Portland Area
Indian Health Board

CANCER 101

A Cancer Education
& Training Program
for American Indians
and Alaska Natives

Spirit of EAGLES
AI/AN Leadership Initiative on Cancer