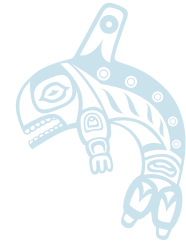




Cancer Screening and Early Detection



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 & Rodriquez, 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 Photodynamic Therapy	Cigarettes Cigars and Pipes Environmental Tobacco Smoke (2nd-hand smoke) Exposure to: <ul style="list-style-type: none"> • Radon • Asbestos • Pollution Lung Disease such as Tuberculosis	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	Diets low in fat and high in fiber Regular exercise Maintaining healthy weight Limit alcohol consumption 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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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.

