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Portions adapted from CANCER 101: A Cancer Education and Training Program for Hispanics by:

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### **ACCION**

# A Colorectal Cancer Education and Training Program for Community Outreach Workers Participant Manual

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This training curriculum for Community Outreach Workers or *Promotoras* was developed with the materials used to train the ACCION *Promotoras* to deliver colorectal cancer education interventions to eligible participants in El Paso County.

Additional information from various cancer organizations was used to enhance the training in order to receive certification from the Texas Department of State Health Services (DSHS). This curriculum was submitted for certification under the Community Health Workers Training and Certification Program and granted certification in 9/2015, and offers (7) Continuing Education hours for community health workers and/or instructors.



\*No portions of this curriculum can be copied or adapted without the written consent of the ACCION Project Director\*

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### **Preface**

¡Bienvenidos / Welcome to ACCION- Against Colorectal Cancer in Our Neighborhoods!

The ACCION program began in 2011 with funding from the Cancer Prevention & Research Institute of Texas (CPRIT) and was specifically designed to decrease the various barriers encountered by El Paso residents to get colorectal cancer (CRC) screening.

#### **ACCION PROGRAM JUSTIFICATION AND OVERVIEW**

Colorectal cancer (CRC) is the second leading cause of cancer deaths in the US and throughout Texas.

Against Colorectal Cancer in Our Neighborhoods (ACCION) is a program designed to reduce the rates of colorectal cancer (CRC) in target communities through education by improving screening rates among uninsured or underinsured 50-75 year old predominantly Hispanic residents that are not up to date with CRC screening. The program requires collaboration with many community organizations to increase screening rates by delivering an evidence-based intervention to address specific barriers. The full program provides education with either video, flip charts and brochures, no cost screening and patient navigation for those who qualify.

#### **Program Goals**

- Increase community awareness and knowledge about colorectal cancer and colorectal cancer screening.
- Increase colorectal cancer screening rates in underinsured and uninsured predominantly Hispanic residents of El Paso County
- 3. **Improve uptake** of diagnosis and treatment services for colorectal cancer to reduce the numbers of advanced cases through patient navigation services.
- 4. **Build a sustainable screening**, diagnosis and treatment network for colorectal cancer screening

We are dedicated to continuing to work together to reduce the burden of cancer. Although the intervention tools were developed for Hispanics (mainly Mexicans/Mexican Americans) due to this group being the majority in El Paso County, this curriculum can be adapted to serve any population. The modules on cancer, colorectal cancer and screening were developed to be applied to any group. We hope that the *ACCION* training will be a useful tool in your community. We look forward to hearing from you as you use it.

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"ACCION: Against Colorectal Cancer in Our Neighborhoods"

...provides an overview of the training, including the overall course objectives

**Group Norms, Training Expectations, Ice-breaker, Pre-test** 

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# Welcome & Overview

#### Contents of Welcome & Overview

- PowerPoint presentation
- Pre-test

#### Length: 45 min

- Introductions and Training Overview
- Group Norms & Training Expectations
- Pre-test

#### **Purpose**

To introduce trainers and participants, orient participants to the overall course objectives and create a safe and comfortable learning environment.

#### **Activities**

- Introductions
- Course Objectives and Training Content overview
- Group Rules & Expectations
- Ice-breaker: Finish the Sentence
- Pre-Test

# Pre-Test

Name:	Date:
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#### **Pre Self-Assessment**

### Module 1: What is Cancer?

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

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

### Module 2: Colorectal Cancer

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

6.	A	D	NS	The main function of the colon is to remove water, salt and nutrients from digested food.
7.	Α	D	NS	Gastroenteritis, Constipation, and Colitis are some common conditions of the colon.
8.	Α	D	NS	Polyps that form in the colon can turn into cancer over time.

9.	А	D	NS	Colorectal Cancer is the 2 <sup>nd</sup> leading cancer killer in the United States
10.	А	D	NS	Colorectal symptoms or warning signs appear early in the progress of the disease.
11.	А	D	NS	Colorectal cancer is only inherited, there are no risk factors for getting this disease
12.	А	D	NS	A healthy diet and regular exercise can reduce one's risk for colorectal cancer
13.	Α	D	NS	There are at least two treatment options for people diagnosed with colorectal cancer

Module 3: Colorectal Cancer Screening

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

Circle your choice - A, D, or NS.

14.	Α	D	NS	In the U.S., screening rates are low among minorities, less educated groups and people who do not have health insurance.
15.	Α	D	NS	There is only one screening test for colorectal cancer.
16.	Α	D	NS	A person should start to get screening for colorectal cancer at the age of 50.
17.	А	D	NS	There are many barriers associated with CRC screening including financial constraints and embarrassment.
18.	Α	D	NS	Colorectal cancer survival can be improved if one participates in screening and early detection.

# Module 1: What is Cancer?

#### Contents of Learning Module

- PowerPoint presentation
- Glossary
- Resources for Learning More
- References

#### Length: 45 min

- · Introduction of session/module overview
- Presentation of module
- Closing

#### 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 Module 1, participants will be able to demonstrate the following:

- · List at least two myths related to cancer
- Describe the process through which normal cells become cancerous
- Describe the difference between benign and malignant tumors
- Describe two types of cancers and where they occur in the body
- · List at least two common cancers in Texas

### 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 purple italics** throughout the module.

### What is Cancer?

#### **Common Misconceptions about Cancer**

Misconceptions or myths about certain health topics make it challenging trying to create appropriate health education and prevention programs in the community. Cancer is no exception, especially due to the many different kinds of cancer that exists and differences in survivorship.

Many Hispanics 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 fatalism and resignation among Hispanics affected by this disease. In addition, some Hispanics view cancer as a death sentence. There is a critical need to educate Hispanics about cancer in order to move beyond myths toward understanding and knowledge. Education about cancer will assist Hispanics in developing focused interventions that will reduce the risk of developing cancer.

It is always important to ask the individual or group you are delivering education to what *they* have heard or what *they believe*. Once acknowledged, a true and factual learning environment can be created and true and accurate information can replace the myths that exist about cancer.

#### 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. Cells are the structural and functional units of all living organisms. They are so small, that they can only be seen through a microscope. Some organisms, such as bacteria, are unicellular, consisting of a single cell. Other organisms, such as humans, are multi-cellular, or have many cells. We have billions of cells in our bodies.

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. Cells have many parts, each with its own function. For example, each cell can take in nutrients, convert them into energy, carry out special functions, and grow or divide, as necessary. Each cell has a nucleus, which serves as the cell's brain, sending directions to the cell to grow, mature, divide, or die. 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:** The process of making new body cells is called cell division or mitosis. 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 death, or *apoptosis*, is disrupted. Apoptosis protects the body by removing genetically damaged cells that could lead to cancer. 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).

#### Benign vs. Malignant Tumors

**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. Cancerous cells in these tumors are abnormal and divide without control or order due to oncogenes. Oncogenes are normal genes that have been changed, or mutated and therefore have affected a cell's ability to control functions such as cell replication and cell death. When the cell cycle (cell division and cell death) proceeds without control, cells can divide without order and accumulate genetic defects that can lead to a cancerous tumor.

Cancer cells 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).

# Types of Cancer<sup>2</sup>

As discussed earlier, 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 or in tissues that line or cover 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, cartilage, fat, muscle, blood vessels, or other *connective tissues* such as nerves, joints, 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 that start in the tissue that forms blood such as the bone marrow. In a person with leukemia, the bone marrow makes abnormal white blood cells.
- Myelomas are cancers that start in plasma cells, which are a type of white blood cell.

#### **Naming Cancers**

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.

# Texas Cancer Facts 3,4

So, now that you know more about cancer, what are the most diagnosed kinds of cancer in the state of Texas?

- Among women, the most common cancer is breast cancer for all women regardless of race/ethnicity. Among Hispanic women breast cancer is also at the top.
- For all women, Lung/Bronchus cancer comes in second, followed by Colorectal Cancer. However, among Hispanic women Colorectal Cancer is the second most common cancer.
- As far as cancer deaths, most women died of Lung/Bronchus cancer followed by Breast and Colorectal cancer. Among Hispanic women, most died of Breast cancer, followed by Lung and then Colorectal Cancer.
- For Hispanic men in Texas, Colorectal Cancer is the second most common cancer following Prostate. As far as cancer deaths, most Hispanic men die from Lung/Bronchus cancer, followed by colorectal cancer.

# **Glossary of Terms**

apoptosis	A type of cell death in which a series of molecular steps in a cell leads to its death. This is the body's normal way of getting rid of unneeded or abnormal cells. The process of apoptosis may be blocked in cancer cells. Also called programmed cell death.
benign	A tumor that is not cancerous. Benign tumors may grow larger, but do not spread to other parts of the body. Also called nonmalignant.
bone marrow	A soft sponge-like material found in the center of most bones. Its principle function is to produce red blood cells (cells that carry oxygen to all parts of the body), white blood cells (cells that help the body fight infections and other diseases), and platelets (cells that help the blood clot to prevent bleeding; also called a thrombocyte).
cancer	A term for diseases in which abnormal cells divide without control or order and can invade nearby tissues. Cancer cells can also spread to other parts of the body through the blood and lymph systems. There are more than 100 different types of cancer. Also called malignancy.
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.
connective tissue	Supporting tissue that surrounds other tissues and organs. Specialized connective tissue includes bone, cartilage, blood and fat.
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.
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.
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.
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.
oncogene	A gene that is a mutated (changed) form of a gene involved in normal cell growth.  Oncogenes may cause the growth of cancer cells. Mutations in genes that become oncogenes can be inherited or caused by being exposed to substances in the environment that cause cancer.
primary site	The place in the body where cancer originates.
tumor	An abnormal mass of tissue that results when cells divide more than they should or do not die when they should. Tumors may be benign (not cancer), or malignant

	(cancer). Also called neoplasm.
white blood cells	A type of blood cell that is made in the bone marrow and found in the blood and lymph tissue. White blood cells are part of the body's immune system. They help the body fight infection and other diseases. Checking for the number of white blood cells in the blood is usually part of a complete blood cell test. Also called leukocyte and WBC.

### References

- 1. National Cancer Institute (1996). Communicating with Hispanic cancer patients: A focus group study. Washington, DC.
- 2. "What Is Cancer?" *National Cancer Institute*. National Institutes of Health, 7 Mar. 2014. Web. 14 Aug. 2014. <a href="http://www.cancer.gov/cancertopics/cancerlibrary/what-is-cancer">http://www.cancer.gov/cancertopics/cancerlibrary/what-is-cancer</a>.
- 3. American Cancer Society; Cancer Facts and Statistics 2014
- 4. American Cancer Society; Cancer Facts and Figures for Hispanics/Latinos 2012-2014

# Module 2: Colorectal Cancer

#### Contents of Learning Module

- PowerPoint presentation
- Glossary
- Resources for Learning More
- References

#### Length: 70 min

- Introduction of session/module overview
- · Presentation of module
- Closing

#### Goals

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

- The different kinds of conditions of the colon
- Description of Colorectal Cancer, including symptoms, risk factors and ways to reduce CRC risk
- Types of treatment

#### **Objectives**

At the completion of Learning Module 2, participants will be able to demonstrate the following:

- List at least two CRC facts
- Name at least three warning signs/symptoms of CRC
- Describe at least three risk factors associated with CRC
- List at least three ways to reduce risk
- Describe at least four states of CRC progression
- Name at least two CRC treatment options

### The Colon

The *colon* is the part of the large *intestine* that runs from the *cecum* to the *rectum* as a long hollow tube. Muscles line the tube and squeeze the contents along.

The colon measures about five feet (1.5 meters) in length. It goes up on the right side of the abdomen (ascending colon), and then across the abdomen (the traverse colon), beneath the stomach and then down (descending colon) on the left side of the abdomen and makes a sharp left turn in the left lower portion (sigmoid colon) to merge with the rectum.

#### What does it do?

- It removes water from digested food and lets the remaining material –solid waste called stool—move through it to the rectum and leave the body through the anus.
- Billions of *bacteria* coat the colon and its contents and live in healthy balance with the body.

#### **Common Conditions of the Colon**

- Gastroenteritis is inflammation of the stomach and intestines, which leads to diarrhea and vomiting. Gastroenteritis is most often due to a bacterial or viral infection. Gastroenteritis that results from a virus is called viral gastroenteritis. Many different viruses cause gastroenteritis, including some rotaviruses, noroviruses, and adenoviruses. Viral gastroenteritis is contagious. Bacterial gastroenteritis is often caused by infection with E. coli and salmonella. Other causes of gastroenteritis include parasite infection, exposure to harmful chemicals in seafood or water, use of certain medications, and irritation from particular foods.
- <u>Diverticulosis</u> is the formation of numerous tiny pockets, or *diverticula*, in the lining of the bowel. Diverticula, which can range from pea-size to much larger, are formed by increased pressure on weakened spots of the intestinal walls by gas, waste, or liquid. Diverticula can form while straining during a *bowel movement*, such as with constipation. They are most common in the lower portion of the large intestine (called the sigmoid colon). Diverticulosis is very common and occurs in 10% of people over age 40 and in 50% of people over age 60. Most people will have no or few symptoms from diverticula. Complications can occur in about 20% of people with diverticulosis. One of these complications is rectal bleeding, called diverticular bleeding, and another is diverticular infection, called diverticulitis.

<u>Constipation</u> occurs when bowel movements become difficult or less frequent.
The normal length of time between bowel movements ranges widely from person to person. Some people have bowel movements three times a day and others, only one or two times a week. Going longer than three days without a bowel movement is too long. After three days, the stool or feces become harder and more difficult to pass.

Things that cause constipation include: Inadequate water intake; Inadequate fiber in the diet, A disruption of regular diet or routine; Traveling, Inadequate activity or exercise or immobility; Eating large amounts of dairy products; Stress; Resisting the urge to have a bowel movement, which is sometimes the result of pain from *hemorrhoids*, and overuse of *laxatives* (stool softeners) which, over time, weaken the bowel muscles.

#### Inflammatory bowel diseases refer to the following:

- Irritabale bowel syndrome or IBS, is a common condition that affects between 25 and 55 million Americans, the majority of whom are women. The condition most often occurs in people in their late teens to early 40s. The condition is a combination of abdominal discomfort or pain and altered bowel habits: either altered frequency (diarrhea or constipation) or altered stool form (thin, hard, or soft and liquid).
- **Colitis** is a general term for inflammation of the colon and can be have many causes and is a word used a lot by people in the community.
- <u>Crohns disease, ulcerative colitis</u> is a serious condition that can include bleeding, pain and diarrhea. To manage this condition, one should have regular medication and doctors visits. Sometimes a patient may need more than one colonoscopy and surgeries.

### Colon Cancer – What is it?

#### **Colon Cancer (Colorectal Cancer – CRC)**

- Colon cancer or CRC are types of cancers or tumors that occur in the colon and
  even in the rectum. They start out as *polyps* which are fleshy growths that occur
  on the lining of the colon or rectum. Untreated colorectal polyps can develop into
  colorectal cancer.
- There are different kinds of polyps in the colon:
  - 1. *Hyperplastic* which are normal, and no colonoscopy may be needed for another ten years if a patients is found to have these during a colonoscopy
  - Adenoma, Tubular adenoma, villous adenoma, tubulovillous adenoma:
     A patient with these types of polyps has a <u>higher risk</u> of developing cancer over time if not removed. A patient that has these removed will usually need a follow up colonoscopy within 3-5 years
- The only way to determine if a polyp is pre-cancerous or cancerous is to have a biopsy.
- There are three ways that cancer spreads in the body¹
  - 1. Tissue: The cancer spreads from where it began by growing into nearby areas
  - 2. Lymph system: The cancer spreads from where it began by getting into the lymph system. The cancer travels through the lymph vessels to other parts of the body.
  - 3. Blood: The cancer spreads from where it began by getting into the blood. The cancer travels through the blood vessels to other parts of the body.

## Warning Signs of CRC & Risk Factors

#### **Warning Signs and Symptoms**

Often there are no warning signs for this deadly disease, so when symptoms do appear, it may be too late. Possible warning signs are:

- -Bleeding from rectum or blood in the stool
- -Diarrhea or constipation for more than a few days
- -Change in bowel habit
- -Feeling of incomplete emptying
- -Change in shape of stool
- -Weight loss, feeling tired all the time
- -Pain

These symptoms may be caused by other conditions as well. You know your body best so if you notice change, then its best to see your doctor.

Warning signs often occur late, so do not wait for pain because it is a very late sign of cancer.

#### **Risk Factors for CRC**

Doctors often cannot explain why one person develops cancer and another does not. But research shows that certain *risk factors* increase the chance that a person will develop cancer.

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, viral agents, and heredity.

The most important risk factor for cancer is growing older. Most cancers occur in people over the age of 65. But people of all ages, including children, can get cancer too. <sup>2</sup>

<u>Lifestyle</u>: 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. Although smoking and alcohol intake rates are lower among Hispanics when compared to non-Hispanic whites, rates of *obesity* are higher among Hispanics<sup>3</sup>.

<u>Hereditary</u>: This refers to <u>genes</u> that control cell growth and death that are passed from parent to child. Some types of cancer (including melanoma and cancer of the breast, colon, ovary, and prostate) 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. But remember most cancer occur in people with no family history of cancer.



#### **Risk Reduction**

Many risk factors can be avoided. According to scientific evidence, about twothirds of all cancers deaths are related to preventable factors including tobacco, overweight or obesity, physical inactivity, and poor nutrition.<sup>4</sup>

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<sup>5</sup>

By practicing healthy habits and teaching them to your family members, you can help reduce your family's risk for cancer. Start making an effort to reduce your risk now by following these suggestions:

■ **Don't use tobacco.** One of the worst things you can do for your body is use tobacco. Not only is smoking a leading cause of cancer and death from cancer, it harms nearly every organ in the body and reduces your overall health. Tobacco use (smoking, chewing tobacco and snuff) causes cancers of the lung, esophagus, larynx (voice box), mouth, throat, kidney, bladder, pancreas, stomach and cervix in addition to other smoking related health problems such as heart disease, stroke and emphysema. <sup>6</sup> Reject tobacco, and if you smoke, consider

seeking help to quit. If you don't smoke, avoid exposure to secondhand smoke. Being around others who smoke may increase your risk for lung cancer.

- Maintain a healthy weight. Being overweight or obese (weighing 20% or more than recommended for normal range) may increase the risk for certain forms of cancer (breast, colon, esophagus, kidney, stomach and uterus). 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. Lifestyle factors that contribute to increased risk for these diseases include not eating enough fruits and vegetables, eating too many foods high in saturated fats (fried foods, fatty cuts of meat) and not getting enough exercise.
- **Be active.** 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.
- 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, water) 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 consumption two drinks per day for males and one drink per day for females may lower the risk of cancers of the breast, colon, esophagus, liver, mouth and throat.

### CRC Stages & Cancer Treatment

#### Stages of CRC: There are five stages of colorectal cancer: 7

- Stage 0: (Carcinoma in Situ) The cancer is very early and is found only in the innermost lining of the colon or rectum
- <u>Stage I</u>: Cancer has formed in the mucosa or innermost layer of the colon wall and has spread to the submucosa or layer of tissue under the mucosa. Cancer may have spread to the muscle layer of the colon wall.
- Stage II: Stage II colon cancer is divided into stage IIA, stage IIB and stage IIC. -
  - Stage IIA: Cancer has spread through the muscle layer of the colon wall to the serosa (outermost layer) of the colon wall.
  - Stage IIB: Cancer has spread through the serosa (outermost layer) of the colon wall but has not spread to nearby organs.
  - Stage IIC: Cancer has spread through the serosa (outermost layer) of the colon wall to nearby organs.
- Stage III: Stage III colon cancer is divided into stage IIIA, IIIB and IIIC.
  - Stage IIIA: Cancer may have spread through the mucosa (innermost layer) of the colon wall to the submucosa (layer of tissue under the mucosa) and may have spread to the muscle layer of the colon wall. Cancer has spread to at least one but not more than three nearby lymph nodes or cancer cells have formed in tissues near the lymph nodes; OR cancer has spread through the mucosa (innermost layer) of the colon wall to the submucosa (layer of tissue under the mucosa). Cancer has spread to at least four but not more than six nearby lymph nodes.
  - Stage IIIB: Cancer has spread through the muscle layer of the colon wall to the serosa (outermost layer) of the colon wall or has spread through the serosa but not to nearby organs. Cancer has spread to at least one but not more than three nearby lymph nodes or cancer cells have formed in tissues near the lymph nodes; OR cancer has spread to the muscle layer of the colon wall or to the serosa (outermost layer) of the colon wall. Cancer has spread to at least four but not more than 6 nearby lymph nodes; OR cancer has spread through the mucosa (innermost layer) of the colon wall to the submucosa (layer of tissue under the mucosa) and may have spread to the muscle layer of the colon wall. Cancer has spread to seven or more nearby lymph nodes.

- Stage IIIC: Cancer has spread through the serosa (outermost layer) of the colon wall but has not spread to nearby organs. Cancer has spread to at least four but not more than six nearby lymph nodes; OR cancer has spread through the muscle layer of the colon wall to the serosa (outermost layer) of the colon wall or has spread through the serosa but has not spread to nearby organs. Cancer has spread to seven or more nearby lymph nodes; OR cancer has spread through the serosa (outermost layer) of the colon wall and has spread to nearby organs. Cancer has spread to one or more nearby lymph nodes or cancer cells have formed in tissues near the lymph nodes.
- Stage IV: Stage IV colon cancer is divided into stage IVA and stage IVB.
  - Stage IVA: Cancer may have spread through the colon wall and may have spread to nearby organs or lymph nodes. Cancer has spread to one organ that is not near the colon, such as the liver, lung, ovary or to a distant lymph node.
  - Stage IVB: Cancer may have spread through the colon wall and may have spread to nearby organs or lymph nodes. Cancer has spread to more than one organ that is not near the colon or into the lining of the abdominal wall.
- Recurrent Cancer This means that the cancer has come back after treatment. The cancer may recur in the colon or rectum or in another part of the body.

#### **Cancer Treatment**

There are a number of different ways to treat cancers. For some Hispanics, treatment may involve a combination of Western medicine and folk medicine, such as curanderos (lay folk healers), prayer, and herbal remedies<sup>8</sup>. While Western medicine uses an approach based on science and is focused on the physical aspect of disease, folk medicine includes the use of treatments such as massage, herbal remedies, and spiritually oriented care<sup>9</sup> to restore a person to a state of wellness that includes the physical, mental, and spiritual dimensions of health<sup>10,11</sup>.

For some Hispanics facing cancer treatment, the use of curanderos and folk medicine may be an important part of becoming well again. The use of folk medicine is reported to be more prevalent in Mexican communities. Since most studies have focused on Mexican Americans, there is not much information on health beliefs among different Hispanic subgroups in the United States<sup>12</sup>. However, among Mexican Americans, folk medicine may often be used instead of Western medicine because it is delivered in a more culturally appropriate way<sup>8</sup>. Some Hispanic patients may move back and forth between Western and folk medicine depending on what services they may/may not be able to access, what they feel they can relate to, and what they believe works the best<sup>13</sup>. Unfortunately, while some Hispanics may use folk medicine, few may share this

information with their healthcare providers due to language barriers, fear of being reproached by their provider, or assumption that their provider may not believe in folk remedies<sup>8</sup>. This presents challenges to effective treatment.

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

Treatment for cancer depends on the type of cancer, the size of the tumor, 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 around 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 herbal teas or hot springs baths, etc. may affect some medications and therapies.<sup>8</sup> Thus, both the 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, Hispanics are most likely to benefit when the plan is focused on a holistic approach to care that may involve a blending of standard and alternative medicine. Such an approach addresses not only the physical illness but also the mental, emotional, and spiritual dimensions of the disease.

The following is a description of common methods used in the treatment of cancer. 14

#### Surgery

Surgery refers to removing the cancerous tumor. Part or all of the organ tissue in the cancer started and a small amount of healthy tissue around the cancer is removed. Nearby lymph nodes may also be removed. 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 or a biopsy. 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.

Similarly, some people worry that exposing cancer to air during surgery will cause the disease to spread. This is not true. Air does not make cancer spread.

#### Chemotherapy

This refers to the use of drugs to kill cancer cells. Most patients receive chemotherapy by mouth or through a vein. 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 (IV) injection 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. They may also 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.

Chemotherapy may also affect cells that line the digestive tract, in which case side effects include poor appetite, nausea and vomiting, diarrhea, or mouth and lip sores. Some chemotherapy drugs also affect fertility. Women may be unable to become pregnant, and men may not be able to father a child.

Although the side effects of chemotherapy can be distressing, most of them are temporary and they can usually be treated or controlled.

#### Biological Therapy (immunotherapy)

Biological therapy is another type of systemic therapy. Biological therapy 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, interferons, interleukins, colony-stimulating factors,* and *vaccines* 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)

Radiation therapy is 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 therapy: external and internal.

- External radiation comes from a machine outside the body that directs radiation at the cancerous cells. Most people go to a hospital or clinic for treatment 5 days a week for several weeks.
- With internal radiation, radioactive material is sealed in a container (capsules, tubes, 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. For example, radiation to your abdomen can cause nausea, vomiting and diarrhea. A common side effect is extreme tiredness and skin changes in the treated area. Most side effects will go away in time.

### **Glossary of Terms**

	<u>*</u>
abdomen	The part of the body between the chest and the pelvis and encloses the stomach, intestines, liver, spleen and pancreas.
Adenoma polyp	A benign tumor that forms in the colon. Although adenomas aren't cancerous, they have the potential to become cancerous.
adenoviruses	A group of viruses that can infect the membranes (tissue linings) of the respiratory tract, eyes, intestines and urinary tract. They are a frequent cause of diarrhea
adjuvant chemotherapy	Refers to drugs given after surgery to help prevent the cancer from recurring.
alternative medicine	Practices used instead of standard treatments. They generally are not recognized by the medical community as standard or conventional medicine approaches. Examples of alternative medicine include dietary supplements, megadose vitamins, herbal preparations, special teas, acupuncture, massage therapy, magnet therapy, spiritual healing, and meditation.
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.
ascending colon	The part of the colon that goes upward on the right side of the abdomen
bacteria	These are one-celled organisms visible only through a microscope. There are many varieties, only some of which cause disease in animals and humans. Most are non-disease causing; and many are useful.
biological	Treatment to try to get the body to fight cancer. It uses materials made by the

therapy	body or made in a laboratory to improve the body's natural response to disease. Also called immunotherapy.
biopsy	The surgical removal of a small piece of tissue for microscopic examination to check for cancer cells.
body mass index (BMI)	A calculation used to measure body fat based on an individual's height and weight.
bowel movement	When body wastes is passed through the rectum and anus. There is no rule for frequency of bowel movements, but the general range is from 3 times a day to 3 times a week.
cecum	The pouch that is considered to be the beginning of the large intestine
chemotherapy	Treatment with drugs that kill 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.
colon	The part of the large intestine that extends from the cecum to the rectum that is responsible for the final stages of the digestive process.
colony- stimulating factors	Substances that stimulate the production of blood cells.
complementary medicine	Practices often used to enhance or complement standard treatment; these include dietary supplements, megadose vitamins, herbal preparations, special teas, acupuncture, massage therapy, magnet therapy, spiritual healing, and meditation.
descending colon	The part of the colon that goes downward on the left side of the abdomen
diarrhea	Stools that are frequent, loose or watery and mostly due to infections of the colon or small intestine
diverticula	Tiny pockets in the lining of the colon that can range from pea size to much larger pouches
Escherichia coli (E. coli)	A group of bacteria that can cause a variety of illnesses in humans, including diarrhea and is spread through contaminated fecal matter from animals that are carrying the bacteria or from people who have an infection but do not wash their hands properly after using the bathroom.

family history	A record of medical information about an individual and their biological family.  Can be used to identify individuals who are at increased risk for developing genetic disorders that run in families.
gene	The functional and physical unit of heredity passed from parent to offspring.  Genes are pieces of DNA, and most genes contain the information for making a specific protein.
hemorrhoids	Swollen veins found on the anus and within the rectum and common symptoms include feeling a lump on your rectum or on your anus, rectal pain and discomfort, rectal itching, leakage of stool and the appearance of a small amount of blood on the stool or toilet paper.
heredity	The transmission of traits from parents to offspring.
Hormone therapy	Treatment of cancer by removing, blocking, or adding hormones.
Hyperplastic polyp	A type of noncancerous (benign) growths found in the colon and are usually small and make up about 10% to 30% of all colorectal polyps.
interferon	A type of biological treatment that interferes with the division of cancer cells and slows the growth of the tumor.
interleukin	One of a group of related proteins made by white blood cells (leukocytes) and other cells in the body. Interleukins regulate immune responses. Interleukins made in the laboratory are used to boost the immune system in cancer therapy.
intestines	The intestines are a long, continuous tube running from the stomach to the anus, and include the small intestine, large intestine and rectum.
inflammation	Redness, swelling, pain, and/or a feeling of heat in an area of the body. This is a protective reaction to injury, disease, or irritation of the tissues.
local treatment	Treatment that affects cells in the tumor and the area close to it.
laxatives	Also called purgatives, are foods, compounds and/or drugs that facilitate or increase bowel movements. They are most often used to treat constipation.
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	Substances produced in a laboratory that can locate cancer cells and bind to

antibodies	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.
noroviruses	Norovirus is a very contagious virus and causes stomach and intestines to get inflamed, which leads to having stomach pain, nausea and diarrhea and vomiting
obesity	If an individual's Body Mass Index (BMI) is 30 or higher, this individual is considered obese.
overweight	If an individual's Body Mass Index (BMI) is between 25 and 29.9 this individual is considered overweight.
polyp	A growth that protrudes from a mucous membrane.
precancerous	A term used to describe a condition that may, or is likely to become, cancer.
radiation therapy	Treatment with high-energy radiation from x-rays, neutrons, and other sources to kill cancer cells and shrink tumors. Radiation may come from a machine outside the body (external-beam radiation therapy), or it may come from radioactive material placed in the body near cancer cells (internal radiation therapy). Also called irradiation and radiotherapy.
rectum	The last portion of the large intestine which is a temporary holding place for the feces during the defecation process.
risk factor	Something that increases the chance of developing a disease. Some examples of risk factors for cancer are age, a family history of certain cancers, use of tobacco products, being exposed to certain chemicals, infection with certain viruses or bacteria, and certain genetic changes.
rotaviruses	A virus that is a leading cause of severe diarrhea and dehydration in young children
salmonella	A type of bacteria that can contaminate food and infect the intestine causing diarrhea and stomach cramps
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.
sigmoid colon	Is a short curving of the colon, just before the rectum

stage	The extent of a cancer in the body. Staging is usually based on the size of the tumor, whether lymph nodes contain cancer, and whether the cancer has spread from the original site to other parts of the body.
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).
stem cell transplantation	A method of replacing immature blood-forming cells in the bone marrow that have been destroyed by drugs, radiation, or disease. Stem cells are injected into the patient and make health blood cells. A stem cell transplant may be autologous (using a patient's own stem cells that were saved before treatment), allogeneic (using stem cells donated by someone who is not an identical twin), or syngeneic (using stems cells donated by an identical twin).
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.
Transverse colon	The part of the colon that runs across the abdomen
Tubular adenoma polyp	A benign tumor that resembles tubes under the microscope. About 80% to 86% of polyps contain this type of tissue. Tubular adenomas are the least likely type of polyp to develop into cancer.
Tubulovillous adenoma polyp	A type of polyp or tumor that grows in the colon and is a combination of tubular and villous tissue. About 8% to 16% of polyps contain this type of tissue and are more likely than tubular adenomas to develop into cancer.
vaccines	A substance or group of substances meant to cause the immune system to respond to a tumor or to microorganisms, such as bacteria or viruses. A http://www.cancer.gov/cancertopics/pdq/treatment/colon/Patient/vaccine can help the body recognize and destroy cancer cells or microorganisms.
Villous adenoma polyp	Types of polyps that grow in the colon and are the least common type, about 3% to 16% of polyps contain this type of tissue. These adenomas are the most likely type of polyp to become cancerous.
virus	An infectious agent that requires a susceptible place to grow and reproduce.

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# Module 3: Colorectal Cancer Screening

### Contents of Learning Module

- PowerPoint presentation
- Glossary
- References

### Length: 1 hr. 15 min

- Introduction of session/module overview
- Presentation of module
- Individual & Group activities
- Closing

#### Goals

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

 Recognize the importance of screening to reduce deaths associated with colorectal cancer

#### **Objectives**

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

- Describe CRC screening rates in Texas & U.S.
- Describe the CRC Screening Guidelines
- Name at least three CRC screening tests
- Identify at least four barriers to CRC testing / screening
- List at least two reasons why it is important to get screened for CRC

# **CRC** Screening

# The sooner CRC 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.
- Checking for cancer in a person who does not have any symptoms of the disease is called *screening*. CRC screening tests can often find early cancer, even if a person has no symptoms.
- Studies show that screening for colorectal cancer helps decrease the number of deaths from the disease.<sup>1</sup>

### Are people getting screened for CRC?

- Even though CRC could prevent 18,000 deaths per year, screening rates are low among minority groups, people that are less educated and have low socioeconomic standards and that lack health insurance.
- Nationally, CRC screening rates vary, but there are many states with low CRC screening. The state of Texas is among those with the lowest screening rates (57.2-60.1) compared to those with high screening rates (73.0 75.6)<sup>2</sup>
- States with high screening rates include: Massachusetts, New Hampshire, Maine, Rhode Island, Connecticut and Delaware.
- States with low screening rates include: Alaska, Montana, New Mexico, Mississippi, Wyoming, North Dakota.

# CRC Screening Guidelines and Tests<sup>5</sup>

Medical professionals believe that preventing colorectal cancer should be a major reason for getting tested. Finding and removing polyps keeps some people from getting colorectal cancer. Beginning at age 50, both men and women at average risk for developing colorectal cancer should use one of the following screening tests:

- A guaiac-based fecal occult blood test (FOBT) or a fecal immunochemical test (FIT) every year
- A Flexible Sigmoidoscopy every five years

A Colonoscopy every 10 years

The following is a description of CRC screening tests.6

### Fecal Immunochemical Test (FIT)

The fecal immunochemical test (FIT), also called an immunochemical fecal occult blood test (iFOBT), is a newer kind of test that also detects occult (hidden) blood in the stool. This test reacts to part of the *human hemoglobin* protein, which is found in red blood cells.

The FIT is done essentially the same way as the FOBT, but some people may find it easier to use because there are no drug or dietary restrictions (vitamins or foods do not affect the FIT) and sample collection may take less effort. This test is also less likely to react to bleeding from parts of the upper digestive tract, such as the stomach.

Like the FOBT, the FIT may not detect a tumor that is not bleeding, so multiple stool samples should be tested. And if the results are positive for hidden blood, a colonoscopy is required to investigate further. In order to be beneficial the test must be repeated every year.

Collecting the samples: Have all of your supplies ready and in one place. Supplies will include a test kit, test cards, long brushes, waste bags, and a mailing envelope. The kit will give you detailed instructions on how to collect the specimen. The instructions below can be used as a guide, but the instructions on your kit might be a little different. Always follow the instructions on your kit.

### Flexible Sigmoidoscopy

During this test, the doctor looks at part of the colon and rectum with a **sigmoidoscope** – a flexible, lighted tube about the thickness of a finger with a small video camera on the end. It is inserted through the rectum and into the lower part of the colon. Images from the scope are viewed on a display monitor.

Using the sigmoidoscope, your doctor can view the inside of the *rectum* and part of the colon to detect (and possibly remove) any abnormality. Because the sigmoidoscope is only 60 centimeters (about 2 feet) long, the doctor is able to see the entire rectum but less than half of the colon with this procedure.

Before the test: The colon and rectum must be empty and clean so your doctor can view the lining of the sigmoid colon and rectum. Your doctor will give you specific instructions to follow to clean them out. You may be asked to follow a special diet (such as drinking only clear liquids) for a day before the exam. You may also be asked to use *enemas* or to use strong laxatives to clean out your colon before the exam. Be sure to tell your doctor about any medicines you are taking, as you might need to change how you take them before the test.

During the test: A sigmoidoscopy usually takes 10 to 20 minutes. Most people do not need to be sedated for this test, but this may be an option you can discuss with your doctor. Sedation may make the test less uncomfortable, but you will need some time to recover from it, you'll need someone with you to take you home after the test.

You will probably be asked to lie on a table on your left side with your knees positioned near your chest. Your doctor should do a *digital rectal exam*, or DRE (inserting a gloved, lubricated finger into the rectum), before inserting the sigmoidoscope. The sigmoidoscope is lubricated to make it easier to insert into the rectum. The scope may feel cold. The sigmoidoscope may stretch the wall of the colon, which may cause bowel spasms or lower abdominal pain. Air will be placed into the sigmoid colon through the sigmoidoscope so the doctor can see the walls of the colon better. During the procedure, you might feel pressure and slight cramping in your lower abdomen. To ease discomfort and the urge to have a bowel movement, it helps to breathe deeply and slowly through your mouth. You will feel better after the test once the air leaves your colon.

If a small polyp is found during the test your doctor may remove it with a small instrument passed through the scope. The polyp will be sent to a lab to be looked at by a *pathologist*. If a pre-cancerous polyp (an adenoma) or colorectal cancer is found during the test, you will need to have a colonoscopy later to look for polyps or cancer in the rest of the colon.

Possible complications and *side effects*: This test may be uncomfortable because of the air put into the colon, but it should not be painful. Be sure to let your doctor know if you feel pain during the procedure. You might see a small amount of blood in your first bowel movement after the test. Significant bleeding and puncture of the colon are possible complications, but they are very uncommon.

#### Colonoscopy

For this test, the doctor looks at the entire length of the colon and rectum with a *colonoscope*, which is basically a longer version of a sigmoidoscope. It is inserted through the rectum into the colon. The colonoscope has a video camera on the end that is connected to a display monitor so the doctor can see and closely examine the inside of the colon. Special instruments can be passed through the colonoscope to biopsy (sample) or remove any suspicious-looking areas such as polyps, if needed.

Colonoscopy may be done in a hospital outpatient department, in a clinic, or in a doctor's office.

Before the test: Be sure your doctor knows about any medicines you are taking, as you might need to change how you take them before the test. The colon and rectum must be empty and clean so your doctor can see their inner linings during the test. You will need to take laxatives (usually a large volume of a liquid, but sometimes pills, as well) the day before the test and possibly an enema that morning.

Your doctor will give you specific instructions. It is important to read these carefully a few days ahead of time, since you may need to shop for special supplies and get laxatives from a pharmacy. If you are not sure about any of the instructions, call the doctor's office and go over them step by step with the nurse. Many people consider the bowel preparation the worst part of the test, as it usually requires you to be in the bathroom much of the night before the exam.

You might be given other instructions as well. For example, your doctor may tell you to drink only clear liquids (water, apple or cranberry juice, and any gelatin except red or purple) for at least a day before the exam. Plain tea or coffee with sugar is usually okay, but no milk or creamer is allowed. Clear broth, ginger ale, and most soft drinks or sports drinks are usually allowed unless they have red or purple food colorings, which could be mistaken for blood in the colon.

You will probably also be told not to eat or drink anything after midnight the night before your test. If you normally take prescription medicines in the mornings, talk with your doctor or nurse about how to manage them for the day.

You usually need to arrange for someone to drive you home from the test because a **sedative** is used during the test that can leave you groggy and affect your ability to drive. Most doctors require that someone you know drive you home (not a taxi).

During the test: The test itself usually takes about 30 minutes, but it may take longer if a polyp is found and removed. Before the colonoscopy begins, you will be given a sedating medicine (usually through your vein) to make you feel comfortable and sleepy during the procedure. You will probably be awake, but not be aware of what is going on and probably won't remember the procedure afterward. Most people will be fully awake by the time they get home from the test.

During the procedure, you will be asked to lie on your side with your knees flexed and a drape will cover you. Your blood pressure, heart rate, and breathing rate will be monitored during and after the test.

Your doctor should do a digital rectal exam (DRE) before inserting the colonoscope. The colonoscope is lubricated so it can be easily inserted into the rectum. Once in the rectum, the colonoscope is passed all the way to the beginning of the colon, called the cecum. You may feel an urge to have a bowel movement when the colonoscope is inserted or pushed further up the colon. To ease any discomfort it may help to breathe deeply and slowly through your mouth. The colonoscope will deliver air into the colon so that it is easier for the doctor to see the lining of the colon and use the instruments to perform the test. Suction will be used to remove any blood or liquid stools.

The doctor will look at the inner walls of the colon as he or she slowly withdraws the colonoscope. If a small polyp is found, the doctor may remove it. Some small polyps may eventually become cancerous. For this reason, they are usually removed. This is usually done by passing a wire loop through the colonoscope to cut the polyp from the

wall of the colon with an electrical current. The polyp can then be sent to a lab to be checked under a microscope to see if it has any areas that have changed into cancer.

If your doctor sees a larger polyp or tumor or anything else abnormal, a biopsy may be done. For this procedure, a small piece of tissue is taken out through the colonoscopy. The tissue is looked at under a microscope to determine if it is a cancer, a benign (non-cancerous) growth, or a result of inflammation.

Possible side effects and complications: The bowel preparation before the test is unpleasant. The test itself may be uncomfortable, but the sedative usually helps with this, and most people feel normal once the effects of the sedative wear off. Some people may have gas pains or cramping for a while after the test.

In some cases, people may have low blood pressure or changes in heart rhythms due to the sedation during the test, although these are rarely serious.

If a polyp is removed or a biopsy is done during the colonoscopy, you may notice some blood in your stool for a day or 2 after the test. Significant bleeding is slightly more likely with a colonoscopy than with a sigmoidoscopy, but it is still uncommon. In rare cases, continued bleeding might require treatment.

Colonoscopy is a safe procedure, but on rare occasions the colonoscopy can puncture the wall of the colon or rectum. This is called a *perforation*. It can be a serious complication leading to a serious abdominal (belly) infection, and it may require surgical repair. Talk to your doctor about the risk of this complication.

### People at increased or high risk<sup>7</sup>

If you are at an increased or *high risk* of colorectal cancer, you should begin colorectal cancer screening before age 50 and/or be screened more often. The following conditions make your risk higher than average:

- A personal history of colorectal cancer or adenomatous polyps
- A personal history of inflammatory bowel disease (ulcerative colitis or Crohn's disease)
- A strong family history of colorectal cancer or polyps
- A known family history of a hereditary colorectal cancer syndrome such as familial adenomatous polyposis (FAP) or hereditary non-polyposis colon cancer (HNPCC)

# Importance of Colorectal Cancer Screening

Regular colorectal cancer screening/testing is one of the most powerful weapons for preventing colorectal cancer.

The death rate (the number of deaths per 100,000 people per year) from colorectal cancer has been dropping for more than 20 years. There are a number of likely reasons for this. One is that polyps are being found by screening and removed before they can develop into cancers. Screening also allows more colorectal cancers to be found earlier,

when the disease is easier to cure. In addition, treatment for colorectal cancer has improved over the last several years. As a result, there are now more than 1 million survivors of colorectal cancer in the United States.

It can take many years (as many as 10 to 15) for a polyp to develop into colorectal cancer. Regular screening can prevent many cases of colorectal cancer altogether by finding and removing certain types of polyps before they have the chance to turn into cancer. Screening can also result in finding colorectal cancer early, when it is highly curable.

#### **Bottom line:**

- If CRC is found early, just 1 out of 10 people will die within five years.
- If diagnosed in the late stage, 9 out of 10 people will die within five years.

### **Barriers related to Colorectal Cancer Screening**

Just as it is significant to know about the importance of CRC screening, it is also just as important to know and address the barriers some groups face in getting tested. In designing the ACCION program, focus groups, or discussions with the community in EI Paso, found that people identified the following as barriers to screening:

- Embarrassment
- Unpleasantness of tests
- Lack of Transportation (to clinic sites or Dr. Office)
- Lack of Insurance or Financial constraints
- Fear of bad results / Fear of Complications / Fear of Cancer
- Not feeling sick or having no sypmptoms
- Fear of pain / Fear of Prep (referring to colonoscopy)
- Lack of Doctor Recommendation to have a screening test
- The perception that it is a Man's problem or disease, meaning women at lower risk
- Fatalistic beliefs
- Not knowing the importance or benefits of getting screened for CRC
- Anxiety about the tests and not knowing what it is like (often times people mentioned "horror" stories about colonoscopies)

- Concern about the preparation for colonoscopies
- Lack of time to actually do the tests or competing priorities like work, etc.

# **Addressing the Barriers**

What did your group discuss to come up with solutions to these barriers so as to make a better education program in your community?

Embarrassment Solutions:	
Unpleasantness of tests Solutions:	
Lack of Transportation Solutions:	
Lack of Insurance or Financial constraints Solutions:	
Fear of bad results Solutions:	
Not feeling sick Solutions:	

Fear of pain / Fear of Prep Solutions:

Lack of Doctor Recommendation Solutions:
It's a Man's problem Solutions:
Fatalistic beliefs Solutions:
Not knowing the importance of CRC screening Solutions:
Anxiety about the tests Solutions:
Concern about the preparation Solutions:
Lack of time Solutions:

# **Glossary of Terms**

Colonoscope	A long, thin, flexible tube with a camera and a light on the end. This tube is inserted into the rectum to look at the inside of the large intestine. This tool is used during a procedure called a colonoscopy.				
Enema	The introduction of liquid into the rectum to evacuate the bowels, to medicate or to perform medical tests.				
Digital rectal exam (DRE)	A physical examination during which your doctor puts a lubricated, gloved finger of one hand into the rectum and may use the other hand to press on the lower abdomen or pelvic area.				
Familial Adenomatous Polyposis (FAP)	FAP is an inherited colorectal cancer syndrome and accounts for 1 percent of all cases of colorectal cancer. The 'F' stand for familial, meaning it runs in families; 'A' stands for adenomatous, the type of polyps detected in the colon and small intestine that can turn into cancer; and 'P' stands for polyposis, on the condition of having lots of colon polyps.				
Fatalistic Beliefs and Cancer Fatalism	An attitude of resignation in the face of some future event or events which are thought to be inevitable.  Cancer fatalism is the health belief that death is inevitable when cancer is present, has been linked to low cancer screening rates, delays in cancer treatment after diagnosis and reluctance to engage in healthy lifestyle behaviors to reduce cancer risk. In each case, patients with fatalistic health beliefs feel that there is nothing they can do to prevent cancer or avoid death from cancer. The belief is that death is simply their fate.				
Guaiac based fecal occult blood test	The stool guaiac test looks for hidden (occult) blood in a stool sample. It can find blood even if you cannot see it yourself. It is the most commonly called FOBT				
High Risk	Being particularly subject to potential danger or hazard.				
Human hemoglobin protein	Is a colored protein that is found in all red blood cells and is made up of heme (the iron-containing portion) and globin (amino acid chains that form a protein). They carry oxygen from the lungs to the whole body's cells and tissues.				
Pathologist	A specialist in pathology who practices chiefly in the laboratory as a consultant to clinical colleagues.				
Pathology	The medical science that deals with all aspects of disease with focus on				

	the essential nature, causes and development of abnormal conditions as well as with the structural and functional changes that result from disease processes.
Rectum	The last section of the digestive tract, extending from the colon to the anus and is where feces is stored for elimination from the body.
Screening	To test or examine for the presence of disease or infection.
Sedation/sedated	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.
Side effects	Any effect (not intended or unwanted) of a drug, chemical or other medicine that is in addition to its intended effect.
sigmoidoscope	An instrument that incorporates a light for the direct observation of the colon, rectum and sigmoid flexure.

# References

<sup>&</sup>lt;sup>1</sup> Atkin WS, Edwards R, Kralj-Hans I, et al. Once-only flexible sigmoidoscopy screening in prevention of colorectal cancer: a multicentre randomized controlled trial. Lancet. 2010;375:1624–1633.

<sup>&</sup>lt;sup>2,3,4</sup> American Cancer Society, Current Cancer Prevention & Early Detection Facts & Figures 2014 (Tables & Figures)

<sup>&</sup>lt;sup>5</sup> United States Preventive Services guidelines http://www.uspreventiveservicestaskforce.org/uspstf/uspscolo.htm

<sup>&</sup>lt;sup>6</sup> American Cancer Society <a href="http://www.cancer.org/cancer/colonandrectumcancer/moreinformation/colonandrectumcancerear-lydetection/colorectal-cancer-early-detection-acs-recommendations">http://www.cancer.org/cancer/colonandrectumcancer/moreinformation/colonandrectumcancerear-lydetection-acs-recommendations</a>

<sup>&</sup>lt;sup>7</sup> American Cancer Society <a href="http://www.cancer.org/cancer/colonandrectumcancer/detailedguide/colorectal-cancer-risk-factors">http://www.cancer.org/cancer/colonandrectumcancer/detailedguide/colorectal-cancer-risk-factors</a>

# Module 4: ACCION Program

### **Contents of Learning Module**

- PowerPoint presentation
- ACCION Education Tools
- Glossary
- References

### Length: 1 hr. 15 min

- Introduction of session/module overview
- · Presentation of module
- Individual & Group activities
- Closing

#### Goals

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

- The components of a successful CRC education and screening program
- Identify all the Steps in the ACCION CRC education delivery demonstration

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

- Describe at least three eligibility criteria for free CRC screening
- List at least three recruitment site strategies
- Name at least two education interventions
- Describe at least two education tools used by ACCION promotoras

# **ACCION**

# ACCION: Program Justification and Background 1

- Colorectal cancer (CRC) is the second leading cause of cancer deaths in the US and throughout Texas. *El Paso County* has a population of 800,647, which is 81% Hispanic, has a high poverty rate (26.6%), a high proportion of uninsured (36%), low educational attainment and is medically underserved.
- These factors combine to have a significant impact on the *burden* of CRC: between 2002 and 2006 there were 1270 new CRC cases diagnosed and 460 CRC deaths in El Paso County. Incidence and *mortality* rates for CRC among Hispanics in El Paso County are higher than for Hispanics in the rest of Texas. CRC is preventable with screening, and screening reduces deaths from CRC, yet CRC screening rates in El Paso County are one of the lowest in Texas: rates of current screening are 37.7% in El Paso County compared to 53.3 % in Texas among 50-64 year olds.
- Only 51% of El Paso County residents aged 50 and above have ever had a flexible sigmoidoscopy or colonoscopy compared to 56.2% of Texans and 61.8% of the US population.
- The purpose of the ACCION program is to provide evidence based services to the screening eligible population so that ultimately we improve CRC morbidity and mortality in our community.
- Services include colorectal cancer education, including screening methods, Nocost screening to individuals that are eligible, transportation and additional resources that the patient may need.

### **Program Eligibility for Free Screenings**

 To be eligible for free CRC screenings, participants, both men and women had to be between the ages of 50-75 years; have a self-reported Texas address (reside in El Paso County), have no health insurance, due for CRC screening and no recent blood in stool.

#### **Program Overview**

 The ACCION program was designed to 1) Provide Community Outreach and Education to approximately 6,000 individuals in El Paso County either in group or individual settings 2) Provide Screening & Diagnostic Tests through the use of 5,500 FIT tests and 605 colonoscopies and 3) Patient *Navigation* that includes tracking each individual that received a FIT kit and calling them to discuss any barriers in sample collection; with people eligible for colonoscopies, ensuring that the patient did follow through with their scheduled colonoscopies.

## **Program Eligibility Criteria**

 When an ACCION Promotora approaches a member of the community at recruitment sites, he or she will fall into one of these four categories:

<u>Ineligible:</u> meaning that the person is either younger than 50 years of age or older than 75 years of age; they are not residents of Texas or do not live in El Paso County. They may still receive education.

<u>Education Only:</u> People are of age and live in El Paso County, but do not receive free CRC screening because they have insurance or they are up to date with screening, meaning less than one year of having a FIT test or less than ten years of having a colonoscopy.

<u>Navigation</u>: These individuals already have symptoms such as blood in stool or have CRC and can opt to receive navigation services such as finding a primary care provider in case the individual does not have one or other issues with accessing health care.

<u>FIT or Colonoscopy:</u> These individuals have been screened and have met program eligibility requirements and depending on additional high risk CRC assessment on the eligibility form, will either receive a free FIT test or colonoscopy.

#### Recruitment

- Recruitment and outreach performed by ACCION promotoras via a combination of waiting room recruitment, sign in sheets if the person does not have time and can be seen later through an appointment or by referrals by the MDs of the community clinics
- Given that promotoras are from the community that they are providing the service to, ACCION counts upon the knowledge of experience of the promotoras to gain access to non-clinical community sites, such as churches, adult learning centers, food pantries and other places where people go to seek services.

#### **Education**

Promotora only - The promotora will deliver the education using flip charts to
guide the information conveyed. Topics will include the *epidemiology* of CRC,
the CRC screening recommendations, explaining that it is preventable, reviewing
symptoms, reinforcing that it is often *asymptomatic* and sharing common
barriers to screening and strategies to overcome the barriers. The promotora will
demonstrate the use of the FIT test.

- Video Only Identical topics are covered by the educational video which will play through. There will be minimal interaction with the promotora who will only discuss logistics.
- **Promotora and Video** (combined) identical topics will be covered, but are presented in a scenario within a short film. At certain places the video will stop and the promotora will guide a discussion with the participants. During the video, the correct completion of a FIT test is demonstrated.
- Group/Individual The education given by the Promotora would either be delivered at the individual level, meaning a one-on-one session or group level session.

### **Navigation**

• **Two main functions:** Case management and facilitating test completion and treatment follow up if needed.

<u>Case management</u>: The navigator uses a comprehensive resource book that includes information about all the qualifying programs that El Paso residents are potentially eligible for at the City, County, state and federal level. In addition the resource book includes resources available through not for profit community based organizations. They will also help with finding financial assistance, transportation, child care and health care coverage if needed. They will assist participants in finding a primary care provider if they do not have one. The navigator will facilitate the transition to treatment for anyone diagnosed with CRC and will track the patient through this process. The navigator will serve as a community resource, utilizing the exhaustive RGCF Cancer Care Resource Directory which lists available cancer relevant resources such as support groups, financial assistance, providers and clinics, help with transportation, child care and the Green House library (a comprehensive cancer related library). The navigator will document all patient contacts and related activities in the database.

<u>Facilitation of Screening/diagnosis/treatment:</u> The second major role of the navigator is to increase the *uptake* of all indicated tests and procedures. If the FIT test is not received after 10 days, the navigator will call the patient to remind them and will also elicit barriers to completion and will help the participant to address these barriers. A second reminder call will be made if the Fit test is not mailed after a further 10 days. Finally a reminder letter will be sent.

For the participants eligible for colonoscopy, the navigator will call them to complete a colonoscopy order and to explain the process for colonoscopy. The navigator will call the patient to remind them of the visit, review any prep needed and troubleshoot any barriers to attendance.

### **Community and Collaborating Partners in El Paso County**

 With the exception of the community medical clinics, the majority of organizations that have opened their doors to the ACCION program have been through relationships that the promotoras have established.

#### **Education Tools**

• <u>Video (DVD) & Flip Chart/Storyboard:</u> The educational materials have been developed based on the Health Belief Model using an intervention mapping approach. All important benefits and barriers were identified and included based on a literature review and on focus groups in the community. The intervention script for the video and the flip charts for the promotoras were designed to include all this information, all information is available in English and Spanish and has been culturally tailored.

<u>Note for FlipChart:</u> The flipchart was designed to display the educational information to the recipient on white background, while at the same time providing the promotora with the script, discussion prompts and additional discussion questions on the blue background.

- Immunochemical Fecal Occult Blood Test (FIT): In collaboration with the University Medical Center of El Paso Laboratory, the FITs used by the ACCION program are the Hemoccult ® Brand. Each FIT packet contains: 1) Three stool collection cards, 2) Three wooden application sticks, 3) Three collection tissues and a 4) Mailing Pouch. The FIT packet also includes instructions on how to collect samples and the ACCION program provides the information in Spanish.
- <u>Education Session Form</u>: This form documents: 1) The location and address of where the session is being delivered, 2) The kind of *intervention* (video alone, Promotora alone or combined) delivered and if it was individual or group, 3) The feedback from participants receiving the education.

#### **Additional Resources**

- <u>ACCION leaflet</u>: A Spanish and English leaflet was developed based on the intervention script and flip charts.
- ACCION Program Flyer: A Spanish and English flyer that uses "Did you know" approach on CRC facts, describes what participants will learn about CRC and program eligibility to receive free CRC screening tests. Describes the amount of time needed to check for eligibility and education session and provides ACCION contact line and website. Promotoras use flyers at health fairs, church events and outreach sweeps and provide their contact information on a sticker that has name and telephone number.

- <u>Letter for Physician</u>: A Spanish and English document that is given to participants so they in turn can give to their *PCP* (if they have one) to request CRC screening.
- <u>Doctor & Insurance List (Community Resource List)</u>: Provides contact information (address, phone number, hours) on local community clinics, university clinics and information on medical insurance.
- <u>Sign-In Sheet</u>: Documents the participant's name (address phone number, if applicable) and gives a record as to how many people received your CRC education

# Intervention Delivery

### **How to Prepare for an Education Session**

There can be three ways to deliver an education session:

- 1) Promotora and Flip Chart/Storyboard
- 2) Video Only
- 3) Promotora and Video (combined)

# Promotora and Flip Chart/Storyboard Education Session

- For this education session you will need the following:
  - 1) A Sign-In Sheet
  - 2) ACCCION Flipchart / Storyboard
  - 3) FIT packet
  - 4) Education Session Form
  - 5) Program flyers and leaflets
  - 6) Community Resource List

# **ACCION Video Only Education Session**

- For this education session you will need the following:
- 1) A Sign-In Sheet
- 2) ACCCION Video and Laptop / Charger
- 3) FIT packet
- 4) Education Session Form
- 5) Program flyers and leaflets
- 6) Community Resource List

### **Promotora and ACCION Video Education Session**

- For this education session you will need the following:
  - 1) A Sign-In Sheet
  - 2) ACCCION Video and Laptop / Charger
  - 3) FIT packet
  - 4) Education Session Form
  - 5) Program flyers and leaflets
  - 6) Community Resource List

# Steps for Education Delivery

You will now observe a 25 minute demonstration of an ACCION Colorectal Cancer education session for the "Promotora and Flipchart Intervention."

## Steps for Promotora and Flipchart /Storyboard

STEP 1. Welcome and greet the participants that will receive your education

"Thank you for taking the time to participate in our Colorectal Cancer Education program. I am \_\_\_\_\_ and I want to start by asking your name and then if you can please print your name on the sign-in sheet for reporting purposes."

## STEP 2. Complete Sections 1-5 Education Session Form

The Education Session Form is to be completed for each education session. Only one form is to be filled out whether you are doing an individual or group session. Before the session begins, fill in the date and your name on the top right hand corner. Complete Sections 1-5 on the top of the Education Session Form.

During the session, refer to the "Promotora Alone" section and follow the instructions. For each section with a question (For example, "What types of questions kept coming up during the session"), just write down a word or two to explain. Please write clearly because it is important to note the types of questions that participants are asking so as to understand what the community does and does not understand about colorectal cancer.

### STEP 3. Introduce Flipchart /Storyboard

Say something like, "We are ready to begin the education session and I will be using this flipchart to talk to you about colorectal cancer. Please feel to ask questions at anytime during our talk."

- Remember that the blue background faces the Promotora and the white background faces the participant.
- Use the script and questions on flipchart to cover the major points of the education session which are:
  - 1) What is Colorectal Cancer
  - 2) Risk factors
  - 3) Warning Signs
  - 4) The Importance of CRC Screening
  - 5) The Three Screening Tests
  - 6) Demonstrating how to do the FIT test

- Remember to not just "read" the script to the participant—maintain eye contact and body language to keep individual/group engaged in the education session.
- Remember to check in with your individual or group to see if they have questions or if they understand the material.
- Continue with the flipchart education until you are finished and have answered all the participant's questions or concerns that they may have.

# STEP 4. Give ACCION leaflet, flyer, Community Resource List and Physician letter to participant(s).

Say, "Here is some information that might help you, your family and friends. The leaflet has information about colorectal cancer and screening. The flyer has contact information about our program in case people you know would like to receive this education, and a community resource list. There is also a letter to help you discuss CRC screening with your doctor. Do you have any questions?"

### **STEP 5. Closing Words**

After all final questions are answered, say:

"Thank you for taking the time to learn more about colorectal cancer and the different screening tests. I hope you can help me by letting others know about this education service."

# **STEP 6. Complete Education Session Form**

• Fill in remaining portions in the Promotora Alone section

# **Glossary of Terms**

ACCION Program	Stands for Against Colorectal Cancer in Our Neighborhoods and is a community wide collaboration that provides free education about colorectal cancer and free CRC screening for eligible residents in El Paso County.					
Asymptomatic	Refers to when a person has a disease, but experiences no symptoms					
Burden of disease	The impact of a health problem as measured by cost, mortality, morbidity and other factors such as quality of life					
Education tools	Refers to materials used in providing education to the community					
El Paso County	It is the westernmost county in Texas that borders Mexico (Chihuahua), Doña Ana County and Otero (New Mexico), and Hudspeth County (Texas).					
Epidemiology	A science that studies the causes, patterns and effects of health and disease conditions in defined populations.					
Evidence based practices	Refers to programs that are designed using research or practices that show evidence or proof that it has changed a certain behavior in a population.					
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.					
Ineligible	Any individual that does not qualify for a service. In ACCION, people that did not qualify to receive services due to state residency, age or having medical insurance or Medicaid / Medicare.					
Intervention (health)	Refers to education or other efforts to promote healthy behaviors and reduce disease.					
Morbidity	Refers to the amount of disease found in a particular group. This usually is measured by the number of cases in a community and how much their lives are affected.					
Mortality	A term also used for death rate, or the number of deaths in a certain group of people in a certain period of time. Mortality may be reported for people who have a certain disease, live in one area of the country, or who are of a certain gender, age, or ethnic group.					
Navigation	Helps patients to overcome barriers in accessing and using the health care system. In ACCION, this service provided by the Navigator is meant to assist the patient by addressing barriers with the patient completing the FIT test or the colonoscopy, in addition to other services or needs the patient					

	might express.
PCP	An abbreviation for Primary Care Provider/Physician
Recruitment sites	Refers to places (clinical and community) where the desired or potentially eligible participants go to seek services.
Uptake	In ACCION, refers to participants completing their tests (FIT or Colonoscopy).

# References

<sup>&</sup>lt;sup>1</sup> Bureau USC. Census 2010 Data, El Paso County. <a href="http://2010.census.gov/2010census/data/">http://2010.census.gov/2010census/data/</a>. Accessed 2/21/2011.

# Module 5: CRC Teach-Backs

# **Contents of Learning Module**

- PowerPoint presentation
- Glossary
- References

Length: 1 hr. 5 min

- Introduction of session/module overview
- · Presentation of module and teach-backs
- Closing

#### Goals

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

 The delivery of an ACCION colorectal cancer education session

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

- Identify the importance of giving and receiving feedback
- Give CRC education sessions by practicing "teach-backs" using ACCION education tools
- Practice giving and receiving feedback

# Giving and Receiving Feedback

Question – Why do you think giving and receiving feedback is important?				

# Effective feedback given in a supportive manner helps individuals build their skills and ultimately improves the delivery of education interventions.

- Feedback is a gift that promotoras (community health workers) and their peers give each other so they can improve their skills and knowledge. The hope then is for community health workers to deliver high-quality CRC education in the community.
- Feedback from your peers and individuals/groups receiving your education session provides you with information that you can use to strengthen your education delivery skills
- Feedback from your peers and individuals/groups receiving your education session supports your client's efforts to develop their knowledge of Colorectal Cancer, especially the importance of early detection.
- Feedback from your peers and individuals/groups receiving your education session improves and strengthens your listening, observation and communication skills

### **Tips for Corrective (constructive) Feedback**

- Focus your comments on the presenter's (in this case it would be the Promotora
  or community health worker) behavior rather than on him or her as an individual.
  For example, you should focus on what the presenter does and not what he or
  she is wearing.
- Always point out something specific the presenter did well. For example, "I really liked how you used the FIT kit to explain the sample collection process." Also, it is important to start out with what the presenter did well instead of negative aspects you observed.
- After positive feedback, you can point out something(s) the presenter could improve upon. For example, "When you did not make eye contact with the

learner, the learner looked confused. You might want to look up from time to time to gauge the learner's interest."

• It is important to think of corrective feedback as a means to help someone increase their knowledge or improve their skills, not as a personal attack on an individual.

### **Tips for Receiving Feedback**

- Just like there is a way to give good feedback, there are good ways to receive feedback.
- Listen first and "try on" the feedback and don't interrupt the person giving feedback to try and justify or explain why you said or did something.
- Thank the person (including the learner receiving your CRC education) for giving you feedback. At this time, it would be okay to ask clarifying questions in case you did not understand the feedback. For example, "Thanks for your comments, can you please explain to me what you meant by saying 'you should tone it down a bit."
- Avoid explanations of "why I did that" unless asked.

## <u>Teach – Back Preparation</u>

15 minutes to prepare and deliver 8 minute session using Flip Chart

### Prep Check List: What will you need to deliver your teach back?


# Feedback Skills Observation

### **Self-Assessment**

• The feedback process will start with a self-assessment. After the CRC teachback, the presenters will share <u>one</u> thing that they felt was effective about their education presentation/session.

Example: "I think I gave complete and clear directions on how to do the FIT test."

• Before getting feedback from your peers, what is <u>one</u> thing you might do differently if you were conducting the same education session tomorrow?

What I would do differently:	
Feedback from my peers: This is what I heard that	at will help me:

# **Facilitation Skills Observation Form**\*

For each item described below, rate the presenter as **Yes** or **No** by placing a check in the appropriate column. In the comments column, record specific comments to be shared with the presenter in the feedback session.

Item	Yes	No	Comments
Questioning			
Uses open-ended questions to			
encourage participation; asks			
probing questions			
Paraphrasing			
Restates learners' thoughts;			
shows that the facilitator is			
listening			
Non-judgmental			
Remains neutral and non-			
judgmental; validates everyone's			
experiences and opinions;			
respects learners' cultural back-			
grounds and perspectives			
<b>Body Language &amp; Voice</b>			
Uses body posture, gestures,	1		
facial expressions and vocal	1		
qualities that are natural and			
reinforce subject matter.			
Articulate			
Makes clear and easy to			
remember remarks; gives clear			
directions; presents one idea at a			
time; summarizes			
Supporting Materials			
Uses visuals and other tools to			
reinforce learning			
Factual Accuracy			
Knowledgeable about CRC,			
admits when he/she doesn't			
know the answer to a question			
and refers to other resources.			
Discussion Management			
Stays on track; focuses attention			
and pacing; keeps the group on	1		
the topic; links to previous	1		
comments and bridges to future	1		
topics; manages silences.			
	1		
Personal Effectiveness			
Makes eye contact with	1		
participants; calls participants by	1		
name; uses humor; recognizes			

progress; appears poised in front		
of group.		
Inclusive		
Encourages learners to share		
experiences and contribute to the		
group/ or individual learning		
process.		

<sup>\*</sup>Adapted from the American Red Cross, Basic HIV/AIDS Program: Fundamentals Guide for Training Instructors. Falls Church, VA: American Red Cross; 1997

# Module 6:Building CRC Education Program

### Contents of Learning Module

- PowerPoint presentation
- Community Resource List worksheets

#### Length: 40 minutes

- · Introduction of session/module overview
- Presentation of module and individual/group work
- Closing

#### **Important Note:**

The trainer will refer to the ACCION
Program in this module to give examples of what was done in the program. Your job here is to learn how the ACCION program built a colorectal cancer education program. Please use as a model, but you are not expected to deliver the ACCION program exactly like how it was done in El Paso or call your colorectal cancer prevention activities by the name of "ACCION." We are sharing our story in the hopes that our strategies can work in your community.

#### Goals

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

 Identify important criteria when developing a local resource list and potential educational delivery sites.

At the completion of Module 6, participants will be able to demonstrate the following:

- Describe the role of a Promotora (Community Health Worker) in delivering CRC education
- List at least three community clinics/medical centers for use in the Community Resource List
- Identify at least five community partners/ collaborators for delivering CRC education in your community

# Role of Promotora

## **Delivering Colorectal Cancer Education in the Community**

What do you think is the role of the Promotora (Community Health Worker) in delivering Colorectal Cancer education to the community?

# In the ACCION program, promotoras keep these goals in mind:

- What are my goals when educating the community?
  - 1) Explain what Colorectal Cancer (CRC) is
  - 2) Find out what the participant(s) knows about CRC
  - 3) Discuss the importance of CRC screening
  - 4) Discuss any concerns participant(s) have about CRC screening
  - 5) Review FIT test and 'demonstrate' how to do it

#### In addition, promotoras focus on these key points:

- Getting screened for colorectal cancer is important to live longer
- Colorectal cancer is easier to cure if it is found in time
- It is important for men and women aged 50-75 to get screened
- Often there are no early warning signs associated with colorectal cancer
- Discuss with the participants of the education session "why don't people get screened?"

It is important to focus on the goals and key points of your CRC education program because they will aid you in getting support from your community and buy-in from organizations that can serve as 'gate-openers' to the group(s) you are trying to target.

### **Community Resources**

The next couple of pages are for you to begin to think about health resources in your community as well as community collaborators that can help with CRC education efforts.

Use the ACCION Resource List as a model to create your own specialized list. Also find a blank template entitled "Community Partners for CRC Education," that is based on the successful recruitment sites of the ACCION program.

# Community Resource List

COMMUNITY CLINICS				
Name, Address, Phone Number	Name, Address, Phone Number			
Name, Address, Phone Number	Name, Address, Phone Number			
UNIVERSIT	TY CLINICS			
Name: Address: Hours:	Name:Address: Hours:			
Name:Address:	Name:Address:			
Name:Address: Hours:	Name: Address: Hours:			
Name:Address:Hours:	Name: Address: Hours:			
MEDICAL	CENTERS			
Name: Address: Phone:	Name: Address: Phone:			
Name: Address: Phone:	Name: Address: Phone:			
Name: Address: Phone:	Name:Address:Phone:			

# Community Partners for CRC Education

Faith based Institutions	<u>Schools</u>	Community Based Organizations	Food Pantries	<u>Other</u>

Religious Institutions	<u>Schools</u>	Community Clinics	Food Pantries	<u>Other</u>

Additional Notes			

# Module 7:Action Plan

### Length: 35 minutes

- Introduction of session/module overview
- Individual/Small Group Work to develop action plan
- Closing

#### **Important Note**

Use the work you did in Module 6 to help you identify target populations and communities for your Action Plan.

#### Goals

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

 Identify a goal for CRC education and identify barriers and solutions for the barriers to achieve goal

At the completion of Module 7, participants will be able to demonstrate the following:

 Develop an Action Plan to implement Colorectal Cancer education in your community

# Action Plan

# **Action Planning Worksheet**

List your goals for integrating this training experience into your community education work. Identify a goal for implementing into your work and proceed with your action plan, following the steps outlined below.

GOAL:	
	(state the goal simply in your own words)
List three pos	sible barriers to reaching your goal:
1	
2	
3	
-	sible ways to remove these barriers (one for each barrier)
2	
3	
	xt steps" toward reaching your goal.
3	
By when do	you think you will accomplish your goal?
Ву	(month) I will have started to work on Step #1 to reach my goal
Ву	(month) I will have started to work on Step #2 to reach my goal.
Ву	(month) I will have started to work on Step #3 to reach my goal.
	And Finally,
Ву	(month) I will have accomplished my goal.

Good luck with your work!

	Post-Test	
Name:	Date:	

# Post Self-Assessment

# Module 1: What is Cancer?

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

1.	A	D	NS	Cancer is a disease that occurs when cells grow, or divide, in an orderly fashion.
2.	Α	D	NS	Malignant tumors do not spread to other parts of the body.
3.	Α	D	NS	A tumor is always cancerous.
4.	А	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".

# Module 2: Colorectal Cancer

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

6.	Α	D	NS	The main function of the colon is to remove water, salt and nutrients from digested food
7.	A	D	NS	Gastroenteritis, Constipation, and Colitis are some common conditions of the colon.
8.	А	D	NS	Polyps that form in the colon can turn into cancer over time.

9.	Α	D	NS	Colorectal Cancer is the 2 <sup>nd</sup> leading cancer killer in the United States
10.	A	D	NS	Colorectal symptoms or warning signs appear early in the progress of the disease.
11.	A	D	NS	Colorectal cancer is only inherited, there are no risk factors for getting this disease
12.	A	D	NS	A healthy diet and regular exercise can reduce one's risk for colorectal cancer
13.	Α	D	NS	There are at least two treatment options for people diagnosed with colorectal cancer

# Module 3: Colorectal Cancer Screening

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

Circle your choice - A, D, or NS.

14.	Α	D	NS	In the U.S., screening rates are low among minorities, less educated groups and people who do not have health insurance.
15.	Α	D	NS	There is only one screening test for colorectal cancer.
16.	Α	D	NS	A person should start to get screening for colorectal cancer at the age of 50.
17.	Α	D	NS	There are many barriers associated with CRC screening including financial constraints and embarrassment.
18.	Α	D	NS	Colorectal cancer survival can be improved if one participates in screening and early detection.

# Evaluation

1.	As a result of a	ttending this training, m	y knowledge of cancer	has:
$\bigcirc$ S	Stayed the same	○Slightly increased	Moderately increased	Greatly increased
<b>2.</b> ⊝S	As a result of a stayed the same	ttending this training, m	y knowledge of colorection () Moderately increased	tal cancer has:  Greatly increased
3.	As a result of a has:	ttending this training, m	y knowledge of colorec	tal cancer screening
⊝S	Stayed the same	Slightly increased	Moderately increased	Greatly increased
4.	As a result of a education prog	•	y knowledge of an effec	tive colorectal cancer
⊜S	Stayed the same	○Slightly increased	Moderately increased	Greatly increased
	a 25 minute co	lorectal cancer educatio	ow confident are you on n session to your comm	nunity?
()N	lot confident	Somewhat confident	Moderately confident	
6.		ttending this training, h	ow likely is it that you w unity?	ill begin colorectal
$\bigcirc$ N	lot Likely	○Somewhat likely	Clikely	○Very Likely
7. _N	in your commu	_	information and materia	als from this training
8.	<ul><li>a. Provide com</li><li>b. Patient educ</li><li>c. Peer educat</li></ul>	ion	rials?	
9. ()	•	ate using this information  Mostly Women		
10.	How likely is it	that you would recomm	end this training to othe	ers?
$\bigcirc$ N	lot Likely	○Somewhat likely	CLikely	○Very Likely

# **Resources for Learning More**

### **Populations**

American Cancer Society (ACS) – Cancer Facts & Statistics: These books provide data on the number of cancer cases, cancer deaths, and cancer survivorship. There is one specifically for Hispanics/Latinos.

http://www.cancer.org/Research/CancerFactsFigures/index

Centers for Disease Control & Prevention (CDC) – Cancer FastStats: This web page provides links to cancer data (such as number of cancer cases and cancer deaths) as well as data about cancer care (ambulatory care, hospital inpatient care, home health care, hospice care, and nursing home care.) <a href="http://www.cdc.gov/nchs/fastats/cancer.htm">http://www.cdc.gov/nchs/fastats/cancer.htm</a>

Institute of Medicine – The Unequal Burden of Cancer: An Assessment of NIH Research and Programs for Minorities and the Underserved (1999): This link provides the Executive Summary for this report. The report explains that people who are poor, lack health insurance, or do not have access to high-quality cancer care, are more likely to be diagnosed with and die from cancer.

http://books.nap.edu/openbook.php?record\_id=6377&page=1

Intercultural Cancer Council – Cancer Fact Sheets: This link provides a number of fact sheets that outline the burden of cancer among different populations – including Hispanics/Latinos. <a href="http://iccnetwork.org/cancerfacts/">http://iccnetwork.org/cancerfacts/</a>

**National Cancer Institute – Understanding Cancer Statistics:** This link contains information on understanding cancer statistics. http://www.cancer.gov/aboutnci/servingpeople/cancer-statistics

*U.S. National Library of Medicine – Information by Population Groups:* This link provides information on health topics relevant to different population groups. http://www.nlm.nih.gov/medlineplus/populationgroups.html

#### Men

Agency for Healthcare Research and Quality – Healthy Men: This web page provides information for men on how to take an active role in their health care. http://www.ahrq.gov/healthymen/

**CDC – Cancer and Men:** This link provides information for men on reducing cancer risk and getting the right cancer screening tests at every stage of their lives. <a href="http://www.cdc.gov/Features/CancerAndMen/">http://www.cdc.gov/Features/CancerAndMen/</a>

Centers for Disease Control & Prevention (CDC) – Men's Health: This web page provides information for men on daily steps they can take to prevent disease and injury and stay well. http://www.cdc.gov/Features/HealthyMen/

**CDC – Top 10 Cancers Among Men:** This link provides information on the 10 most commonly diagnosed cancer among men in the U.S. http://www.cdc.gov/Features/dsMenTop10Cancers/ National Library of Medicine (NLM) – Men's Health (including health check-up information): This web page provides health information for men. http://www.nlm.nih.gov/medlineplus/menshealth.html

### <u>Women</u>

**CDC – Cancer and Women:** This link provides information for women on reducing cancer risk and getting the right cancer screening tests at every stage of their lives. http://www.cdc.gov/Features/WomenAndCancer/

**CDC – Top 10 Cancers Among Women:** This link provides information on the 10 most commonly diagnosed cancer among women in the U.S. <a href="http://www.cdc.gov/cancer/dcpc/data/women.htm">http://www.cdc.gov/cancer/dcpc/data/women.htm</a>

**NLM – Women's Health:** This web page provides health information for women. http://www.nlm.nih.gov/medlineplus/womenshealth.html

The Office on Women's Health – Women's Health & Mortality Chartbook: This is an easy-to-read statistical resource on women's health in each of the states, the District of Columbia, Guam, Puerto Rico, and the U.S. Virgin Islands. <a href="http://www.healthstatus2020.com/chartbook/ChartBookData\_search.asp">http://www.healthstatus2020.com/chartbook/ChartBookData\_search.asp</a>

### **Family**

Centers for Disease Control & Prevention (CDC) Vital Signs – Diseases, Genetics, and Family History: This web page provides links to general information about diseases, genetics and family history.

http://www.cdc.gov/genomics/resources/diseases/index.htm

**CDC – Family Health History Awareness:** This link provides general information about family history and health.

http://www.cdc.gov/genomics/resources/diseases/family.htm

National Library of Medicine – Genetics Home Reference: Your Guide to Understanding Genetic Conditions – Handbook Help Me Understand Genetics: This handbook presents basic information about cells and genetics in clear language and provides links to online resources. <a href="http://ghr.nlm.nih.gov/handbook">http://ghr.nlm.nih.gov/handbook</a>

*U.S. Department of Health & Human Services – Surgeon General's Family Health History Initiative:* This web-based tool helps users organize family history information and then print it out for presentation to their family doctor. In addition, the tool helps users save their family history information to their own computer and even share family history information with other family members. <a href="http://www.hhs.gov/familyhistory/">http://www.hhs.gov/familyhistory/</a>

# Stages and Treatment

National Cancer Institute (NCI) – Cancer Information Summaries: Adult Treatment (PDQ®): The Physician Data Query (PDQ®) is NCI's comprehensive cancer database. It contains summaries on a wide range of cancer topics. This page links to an alphabetical list of PDQ® adult cancer treatment summaries. These summaries provide site specific information on diagnosis and staging. http://cancer.gov/cancertopics/pdg/adulttreatment

**NCI – Fact Sheet: Cancer Staging:** This fact sheet explains the process of grouping cancer cases in categories (stages) based on the size of the tumor and the extent of the cancer in the body. <a href="http://www.cancer.gov/cancertopics/factsheet/Detection/staging">http://www.cancer.gov/cancertopics/factsheet/Detection/staging</a>

**NCI – Fact Sheet: Computed Tomography:** A fact sheet that describes the CT scan procedure and technology and its uses in diagnosis and treatment. http://www.cancer.gov/cancertopics/factsheet/detection/CT

**NCI – Fact Sheet: Pathology Reports:** A fact sheet that describes the type of information that may be found in a pathology report, the document that contains results of the visual and microscopic examination of tissue removed during a biopsy or surgery. <a href="http://www.cancer.gov/cancertopics/factsheet/detection/pathology-reports">http://www.cancer.gov/cancertopics/factsheet/detection/pathology-reports</a>

**NCI – Fact Sheet: Tumor Grade:** A fact sheet that discusses tumor grade and its role in prognosis. Explains concepts like normal cell biology and cell differentiation. <a href="http://www.cancer.gov/cancertopics/factsheet/Detection/tumor-grade">http://www.cancer.gov/cancertopics/factsheet/Detection/tumor-grade</a>

**NCI – Fact Sheet: Tumor Markers: Questions and Answers:** A fact sheet that explains tumor markers and answers questions about use in screening. <a href="http://www.cancer.gov/cancertopics/factsheet/detection/tumor-markers">http://www.cancer.gov/cancertopics/factsheet/detection/tumor-markers</a>

**NCI – What is cancer?:** Introductory information with a definition of cancer, a brief explanation of the origins of cancer in cells, basic cancer statistics, and links to other NCI cancer-related resources. <a href="http://www.cancer.gov/cancertopics/cancerlibrary/what-is-cancer">http://www.cancer.gov/cancertopics/cancerlibrary/what-is-cancer</a>

**NCI – Complementary and Alternative Medicine: CAM News and Resources:** This web page provides news, web sites, and clinical trials related to CAM topics. <a href="http://www.cancer.gov/cancertopics/cam/news">http://www.cancer.gov/cancertopics/cam/news</a>

**NCI – Office of Cancer Complementary and Alternative Medicine:** This web page provides CAM health information for patients. http://www.cancer.gov/cam/health\_patients.html

**NCI – Chemotherapy and You: Support for People with Cancer:** This book is a guide that patients can refer to throughout chemotherapy treatment. It includes facts about chemotherapy and its side effects and also highlights ways a patient can care for him/her self before, during, and after treatment. http://www.cancer.gov/cancertopics/coping/chemotherapy-and-you

**NCI – Chemotherapy Side Effects Fact Sheets:** This series of chemotherapy side effects sheets has medical advice and practical tips to help a patient during chemotherapy. <a href="http://www.cancer.gov/cancertopics/coping/chemo-side-effects">http://www.cancer.gov/cancertopics/coping/chemo-side-effects</a>

**NCI – Radiation Therapy and You: Support for People with Cancer:** This book is a guide that patients can refer to throughout radiation therapy. It has facts about radiation therapy and side effects and describes how he/she can care for him/her self during and after treatment. http://www.cancer.gov/cancertopics/coping/radiation-therapy-and-you

**NCI – Radiation Therapy Side Effects Fact Sheets:** This series of radiation therapy side effects sheets has medical advice and practical tips to help a patient during radiation therapy. <a href="http://www.cancer.gov/cancertopics/coping/radiation-side-effects">http://www.cancer.gov/cancertopics/coping/radiation-side-effects</a>

### **Cancer Prevention & Risks**

**CDC Vital Signs – Adult Obesity:** This web page provides important data on the serious health topic of obesity. <a href="http://www.cdc.gov/vitalsigns/AdultObesity/index.html">http://www.cdc.gov/vitalsigns/AdultObesity/index.html</a>

**CDC Vital Signs – Tobacco Use:** This web page provides important data on the serious health topic of tobacco use. http://www.cdc.gov/vitalsigns/TobaccoUse/Smoking/index.html

Inside Cancer – Multimedia Guide to Cancer Biology: This self-paced multimedia tutorial provides information the hallmarks of cancer, causes and prevention, diagnosis and treatment. http://www.insidecancer.org/index.html

**National Cancer Institute (NCI) – Cancer Causes and Risk Factors:** Information about behaviors, exposures, and other factors that can influence the risk of cancer. http://www.cancer.gov/cancertopics/causes

**NCI – Cancer Prevention Information:** Cancer prevention information from the National Cancer Institute, including prevention information for specific cancers. http://www.cancer.gov/cancertopics/prevention

**NCI – President's Cancer Panel: Environmental Factors in Cancer (2008-2009 Report):** This report summarizes the Panel's the Panel's recommendations, which delineate concrete actions that governments, industry, the research, health care, and advocacy communities, and individuals can take to reduce cancer risk related to environmental contaminants, excess radiation, and other harmful exposures. <a href="http://deainfo.nci.nih.gov/advisory/pcp/annualReports/index.htm">http://deainfo.nci.nih.gov/advisory/pcp/annualReports/index.htm</a>

**NCI - Understanding Cancer Series: Cancer:** This self-paced graphic-rich tutorial can be used for educational use by teachers, medical professionals, and the interested public. Can be downloaded in PDF and PowerPoint format. http://www.cancer.gov/cancertopics/understandingcancer/cancer

**NCI – Understanding Cancer: Cancer and the Environment:** This self-paced graphic-rich tutorial can be used for educational use by teachers, medical professionals, and the interested public. Can be downloaded in PDF and PowerPoint format. <a href="http://www.cancer.gov/cancertopics/understandingcancer/environment">http://www.cancer.gov/cancertopics/understandingcancer/environment</a>

**NCI – What You Need To Know About™ Cancer:** This booklet is part of a series on many types of cancer. The booklet tells about possible risks, symptoms, diagnosis, and treatment and includes a list of questions to ask the doctor. http://www.cancer.gov/cancertopics/wyntk/cancer