Colorectal Cancer: Prevention and Early Detection

ACTION Project: Access to Cancer Training, Information, Outreach, and Navigation
Welcome

• Thank you for letting us speak with you today!
• Cancer affects the whole world. It is important that you know what you can do to prevent/reduce your risk and the risk of your loved ones.
• Today we are speaking about colorectal cancer.
• This Project is funded by the Cancer Prevention Research Institute of Texas (project number PP160048) and is managed by the Center for Community Health Development, School of Public Health, and National Community Health Worker Training Center at Texas A&M. The name of the project is: “ACTION: Access to Cancer Training, Information, Outreach and Navigation.”
• ACTION’s purpose is to engage Community Health Workers (CHWs) and partner organizations to deliver more effective cancer education on prevention, detection, treatment and survivorship.
Welcome!

- ACTION Project: Access to Cancer Training, Information, Outreach and Navigation
Introduction to Topic: Better safe than sorry

- Before talking about colorectal cancer, let's review the anatomy and process of the digestive system and the colon anatomy

The Anatomy of the Digestive System
1. After food is chewed and swallowed, it travels through the esophagus to the stomach where it is broken down and sent to the small intestine.
2. The first part of the digestive system (stomach and small intestine) processes food for energy.
3. The last part (colon and rectum) absorbs fluid to form the stools that then pass from the body.
4. The small intestine joins the large intestine in the right lower abdomen. Most of the large intestine is made up of the colon, a muscular tube about 5 feet long. The colon absorbs water and salt from the food matter and serves as a storage place for waste matter.
Anatomy of the Digestive System

http://www.niddk.nih.gov/health-information/health-topics/Anatomy/your-digestive-system/Pages/anatomy.aspx
Anatomy of the colon

1. The colon and rectum are parts of the digestive system also known as the gastrointestinal system or GI.

2. First section is called the ascending colon. It starts with a small pouch where the small bowel attaches to the colon and extends upward on the right side of the abdomen.

3. Second section is called the transverse colon since it goes across the body from the right to the left side in the upper abdomen.

4. Third section, the descending colon, continues downward on the left side.

5. Last section is known as the sigmoid colon because of its "S" or "sigmoid" shape.

6. The wall of the colon and rectum is made up of several layers.
Anatomy of the Colon

- Large Intestine (Colon)
- Stomach
- Small Intestine
- Rectum
- Anus
- Sigmoid Colon
What is Colorectal Cancer?

• Cancer is a group of diseases that cause cells to reproduce in an abnormal or disorganized manner.
• Cancer occurs when cells in one or more body parts die abnormally.
• Colorectal cancer is a malignant tumor that originates in the cells of the colon or rectum. A malignant tumor is a group of cancer cells that could grow into (invade) surrounding tissues or spread (metastasize) to distant areas of the body.
• These cancers can also be referred to separately as colon cancer or rectal cancer, depending on where they start.
• There are several types of Colorectal Cancer.
• More than 95% of colorectal cancers are a type of cancer known as adenocarcinomas. (When doctors talk about colorectal cancer, this is almost always what they are referring to.)
• Adenomatous polyps look like grapes on the surface of the colon's inner wall. The larger, and the more abnormal they are, the more likely the polyps are to progress to cancer.
• Most polyps and cancers appear on the left side of the colon.
What is colorectal cancer?
What are polyps?

• **Before a cancer develops**, a growth of a tumor usually begins as a non-cancerous *polyp* on the inner lining of the colon or rectum.

• Remember - Tumors can be not cancerous or cancerous.

• A polyp is a **non-cancerous tumor**.

• Some polyps (not all) can change into cancer. The chance of changing into a cancer depends on the kind of polyp.

• Colorectal Cancer is largely preventable through screening and removal of polyps.
What are polyps?
What are the stages of Colorectal Cancer?

- There are different stages – 0-4. The highest level has the highest risk.
- The stage of a colorectal cancer mostly depends on how deeply it spreads into the layers of the colon. (ACS)
- Sometimes, stage is not determined until after patient has surgery to remove the tumor. (National Cancer Institute)

**Stages:**

- **Stage 0** – Found in the innermost lining of the colon or rectum
- **Stage 1** – Tumor growing into the inner wall of colon or rectum but has not spread outside the colon wall
- **Stage 2** – Tumor extends more deeply into or through the wall of colon or rectum
- **Stage 3** – Cancer has spread to nearby lymph nodes (small glands that filter unwanted/waste material throughout the body)
- **Stage 4** – Cancer has spread to other parts of the body
- **Recurrent cancer:** Cancer was treated and has returned
Stages of Development
Who gets Colorectal Cancer?

• In the United States, colorectal cancer (CRC) is the third most common cancer diagnosed among men and women.
• Colorectal cancer is the second leading cause of death from cancer.
• Your lifetime risk of developing colorectal cancer is about 1 in 20 (5%).
• The risk is slightly lower in women with 1 in 23 (4.4%) than in men with 1 in 21 (4.7%).
• The most recent estimates from the American Cancer Society indicate that the following report on the number of cases of colorectal cancer in the U.S. for 2016:
  – 95,270 new cases of colon cancer.
  – 39,220 new cases of rectal cancer.
  – Expected to cause about 49,190 deaths in 2016.

http://www.cancer.org/cancer/colonandrectumcancer/detailedguide/colorectal-cancer-key-statistics
Who gets colorectal cancer?
Colorectal Cancer in Hispanics

• Colorectal cancer is the second most diagnosed cancer in Hispanic Americans.
• Hispanic Americans are less likely to get screened for colon cancer than either Caucasians or African Americans
• Death rates are higher for Hispanics and African Americans due to disproportionate screenings resulting in diagnosis of colorectal cancer in advanced stages.

Colorectal Cancer in Hispanics

http://www.cdc.gov/minorityhealth/ethicsforum/index.html
Colorectal Cancer in African Americans

- Colorectal cancer incidence and mortality rates highest of all racial groups in the United States
- Third most common cancer for African Americans
- Mortality rates are higher for African Americans due to disproportionate screenings resulting in diagnosis of colorectal cancer in advanced stages.

Colorectal Cancer in African Americans
Colorectal Cancer in Caucasians

- Colorectal cancer has the second highest incidence rate
- Colorectal cancer has the second highest mortality rate

Colorectal Cancer in Caucasians
Who is at risk?

1. **Age:** Although colorectal cancer can strike at any age, 91 percent of new cases and 94 percent of deaths occur in individuals older than 50. The incidence rate of colon cancer is more than 50 times higher in people aged 60 to 79 than in those younger than 40.

2. **Gender:** Excluding skin cancers, colorectal cancer is the third most common cancer diagnosed in men and in women in the United States.

3. **Ethnic background and race:** Minorities, particularly African Americans and Hispanics, are more likely to be diagnosed with colon cancer in advanced stages.

4. **Diet:** There is increasing evidence that obesity is associated with an increased risk of colorectal cancer. A diet made up mostly of foods that are high in fat, especially from animal sources, can increase the risk of colon cancer.

5. **Exercise:** People who are not active have a higher risk of colorectal cancer. Engaging in at least moderate activity for 30 minutes or more on five or more days per week will reduce colon cancer risk.

6. **Smoking and alcohol:** Recent studies show that smokers are 30 to 40 percent more likely than nonsmokers to die of colorectal cancer. Moderate to heavy use of alcohol, or four or more drinks per week, has also been linked to colorectal cancer.

http://www.screenforcoloncancer.org/aboutcrc.asp
Who is at risk?

http://www.oregon.gov/DOC/ADMIN/Pages/diversity_inclusion.aspx
What are additional risk factors?

An individual is considered to be at an increased or high risk of colorectal cancer if they have one of the following

1. **A personal history** of colon cancer or intestinal polyps and diseases such as inflammatory bowel disease. Patients with both inflammatory bowel disease and a specific liver disease (primary sclerosing cholangitis) are at very high risk of colorectal cancer.

2. **Hereditary**: A person who has a specific inherited gene syndrome.

3. **People with a strong family history of colon cancer**. Family history is defined as cancer or polyps found in a parent, brother or sister younger than 60 or two relatives of any age.

4. **It is important to remember** that 85 percent of colorectal cancers occur in people with no family history of colon cancer.

http://www.screenforcoloncancer.org/aboutcrc.asp
What are additional risk factors?
What are the signs and symptoms of colorectal cancer?

- Colorectal cancer is often present in people without symptoms. This is why the detection of colorectal cancer is so important.
- Depend on the location of the cancer

**Signs and Symptoms**
- A change in bowel movements, like diarrhea, constipation or narrowing of the stool, that lasts more than a few days.
- Feeling you need to have a bowel movement that is not relieved by doing so
- Rectal bleeding
- Dark bleeding
- Blood in the stools
- Cramping or stomach pains
- Weakness and fatigue
- Unexplained weight loss

- These symptoms may be caused by other conditions such as hemorrhoids, infection, or irritable bowel syndrome. If you experience any of these symptoms for more than a few days, talk with your doctor about them.
- Colorectal cancer is often present in people without symptoms. This is why the detection of colorectal cancer is so important.
What are the signs and symptoms of colorectal cancer?

What can I do?

**American Cancer Society Recommendations**

– After 50 years of age, both men and women at average risk of colorectal cancer, should undergo a screening

– If you are at high risk or increased risk of colorectal cancer, you should begin screening before age 50 and / or screened more often

**Tests that find polyps and cancer**

– Flexible sigmoidoscopy every five years. *

– Colonoscopy every 10 years.

– Barium enema every 5 years double contrast.

– CT colonography (virtual colonoscopy) every 5 years.

**Tests that mainly find cancer**

– Fecal occult blood test (FOBT) every year

– Fecal immunochemical test (FIT) every year.

– Stool DNA Test (sDNA) every 3 years

**Preventative Measures**

– No Smoking

– Limit alcohol intake

– Healthy diet (less meats, more fruits, green vegetables, and grains)

– Don’t wait until you have symptoms, get regularly screenings.
What can I do?
What are the methods to detect colorectal cancer?

• Screening can often find colorectal cancer early, when it is most likely to be curable, or it can help prevent it by removing polyps or growths before they turn into cancer.

Laboratory screening tests:

1. **Fecal occult blood test** (FOBT)—this test checks for hidden blood in fecal material (stool). If this test finds blood, a colonoscopy will be needed to look for the source.

2. **The carcinoembryonic antigen** (CEA) helps with the detection of tumor even though it may be present in other diseases, it helps us make a differential diagnosis.

https://labtestsonline.org/understanding/analytes/cea/tab/test/
What are the methods to detect colorectal cancer?
What are the methods to detect colorectal cancer?

Suggested detection tests:

1. **Double-contrast barium enema** (DCBE) is a type of x-ray test. Barium sulfate, which is a chalky liquid, and air are used to outline the inner part of the colon and rectum to look for abnormal areas on x-rays. If suspicious areas are seen on this test, a colonoscopy will be needed to explore them further.

2. **Virtual colonoscopy (CT colonography)**—in this test, special x-ray equipment is used to produce 3-D pictures of the colon and rectum. A computer then assembles these pictures into detailed images that can show polyps and other abnormalities. If suspicious areas are seen on this test, a colonoscopy will be needed to explore them further.

3. **Sigmoidoscopy**—in this test, the doctor examines the rectum and the lower colon using a lighted instrument called a sigmoidoscope. During sigmoidoscopy, precancerous and cancerous growths in the rectum and lower colon can be found and either removed or tested.

4. **Colonoscopy**—in this test, the doctor examines the rectum and the entire colon using a lighted instrument called a colonoscope. During a colonoscopy, precancerous and cancerous growths throughout the colon can be found and either removed or tested. It is the most effective screening test for colon cancer because it allows for the detection and removal of precancerous polyps before they turn into cancer. Beginning at age 50, both men and women should have a screening colonoscopy and then repeat the procedure every 10 years.

5. **Echo-endoscopy** can assess the depth of invasion in the wall of the organ, thus being able to determine with greater certainty whether it is possible to apply endoscopic treatment.

6. **Capsule Endoscopy of the Colon**: A small camera that is swallowed and takes pictures of the entire gastrointestinal tract.
What are the methods to detect colorectal cancer?
Colorectal Cancer Myths

Myth #1: Colorectal cancer cannot be prevented.

Fact: In many cases colorectal cancer can be prevented. Colorectal cancer almost always starts with a small growth called a polyp. If the polyp is found early, doctors can remove it and stop colorectal cancer before it starts. There are many tests to detect polyps and colorectal cancers. Other ways to reduce your risk of getting colorectal cancer:

• Get to and stay at a healthy weight throughout life.
• Be physically active.
• Eat at least 2½ cups of vegetables and fruits each day.
• Choose whole grains over refined grain products.
• Limit the amount of red meat and processed meat you eat.
• If you drink alcohol, limit the amount to 1 drink per day for women, 2 per day for men.
• Don’t use tobacco in any form.

Myth #2: Colorectal cancer is a white man’s disease.

Fact: Colorectal cancer affects both men and women equally, and it affects people of all races. Each year, about 140,000 Americans are diagnosed with colorectal cancer, and more than 50,000 die from it. Age is the number one risk factor for colorectal cancer.

Myth #3: Age doesn’t matter when it comes to getting colorectal cancer.

Truth: More than 90% of all colorectal cancers are found in people who are 50 and older. For this reason, the American Cancer Society recommends you start getting checked for this cancer when you are 50. People who are at a higher risk for colorectal cancer—such as those who have colon or rectal cancer in their families—should begin testing when they are younger.

http://www.cdc.gov/cancer/dpcc/resources/features/colorectalawareness/
http://www.medicalnewstoday.com/releases/63811.php
Myths & Facts

Common Misconceptions
Colorectal Cancer Myths

Myth #4: It’s better not to get tested for colorectal cancer because it’s deadly anyway.

Fact: Colorectal cancer is often highly treatable. If it’s found and treated early (while it’s small and before it has spread), the 5-year survival rate is about 90%. But because many people are not getting tested, only about 4 out of 10 are diagnosed at this early stage when treatment is most likely to be successful.

Myth #5: I don't have any symptoms, so I must not have colorectal cancer.

Fact: One of the most common misconceptions is that symptoms will be evident if a person has colorectal cancer. In fact, the most common symptom is no symptoms at all. More than half of people diagnosed with colon cancer have no symptoms. Symptoms such as a change in stool, rectal bleeding, abdominal pain and unexplained weight loss can all signal colon cancer. But once these symptoms begin to develop, it may be a sign of more advanced disease. Half of people diagnosed after symptoms develop will die from colon cancer.

Myth #6: Colonoscopy is difficult to prepare for.

Fact: Preparing for a colonoscopy involves cleaning the colon with the help of prescription and over-the-counter medications. Typically these are liquid drinks that must be consumed a day or two before the procedure. People should not be afraid of it because they do not want to drink the laxative. There are many options so a person can find something that is tolerable.

http://www.medicalnewstoday.com/releases/63811.php
Colorectal Cancer Myths

Myth #7: Colonoscopy is unpleasant and uncomfortable.
   Fact: It's not as bad as you think. Most people agree the prep is the worst part. During the actual procedure, patients are sedated to eliminate discomfort. The procedure itself takes 15-60 minutes & you can resume normal activities the next day.

Myth #8: Colonoscopy is the only way to screen for colorectal cancer.
   Fact: There are several screening options for colorectal cancer, including flexible sigmoidoscopy, fecal occult blood test and double-contrast barium enema. But colonoscopy is considered the gold standard. It detects more cancers, examines the entire colon & can be used for screening, diagnosis and removing polyps in one visit.

Myth #9: Colonoscopy is just a screening technique.
   Fact: Colonoscopy is an all-in-one tool. It can find and remove polyps and small cancers all during one procedure. If your colonoscopy reveals a polyp, your doctor will remove it immediately. By removing the polyp at this stage, it prevents it from becoming cancerous. If colonoscopy reveals cancerous lesions, further treatments may be necessary.

Myth #10: A polyp means I have cancer.
   Fact: Polyps are benign growths that have the potential to develop into cancer. Polyps can be easily removed during colonoscopy. Not all polyps are pre-cancerous.

http://www.medicalnewstoday.com/releases/63811.php
Colorectal Cancer Myths

Myth #11: If I have colorectal cancer, it means I am dying.

   Fact: When colon cancer is caught early, it has a 95% survival rate. That's why screening is so important. Once colon cancer has spread to the liver, it's usually deadly, with only a 9% survival rate. But even then, treatments are improving. Radiation oncologists at U-M have developed a method to shrink tumors that spread to the liver, in some cases allowing them to be removed with surgery. This has led to higher survival rates even in the most advanced cases.

Myth #12: Surgery will be disfiguring and recovery painful.

   Fact: New surgical advances allow for minimally invasive procedures that leave only a small scar. Patients undergoing laparoscopic surgery may have an easier recovery than those who have open surgery.

Myth #13: If I have surgery, I'll need a colostomy bag.

   Fact: A colostomy, in which surgeons create an artificial, external method to collect excrement, is rarely done anymore. Surgical techniques have improved so that the cancer can be effectively removed while sparing the rectum. Now, 80% of these cancers may be effectively removed while sparing the anus.

http://www.medicalnewstoday.com/releases/63811.php
http://oncolex.org/Anal-cancer?lg=print
Myths & Facts

http://www.cdc.gov/tobacco/campaign/tips/resources/ads/tips-4-ad-mark-full.pdf
What are the barriers that limit people to get tested for colorectal cancer?

**General**
- Reluctance to talk about colon cancer.
- Embarrassment about having procedures involving tests that require stool samples.
- Health care provider didn't tell them they should get screened.
- Cost
- Lack of access to health care
- No health insurance
- Inadequate communication by health care providers about the importance of screening
- Fear

**Cultural (Specific to Hispanics):**
- Why are Hispanics less likely to get screened?
- “There is a myth in the Hispanic community that colon cancer is a man’s disease.”
- Language barrier
- Can anyone think of any others?
What are the barriers?
Review

• The importance to Hispanics.
• Below are four basic habits that everyone should adopt. These steps are just a call to action – they are key to living longer and healthier. Integrate these steps in your daily life gradually, share with family friends for support amid these changes in life - it's never too late to make simple lifestyle changes that save lives.
• **Recommendations for Prevention:**
  – Eat healthy (fruits, vegetables, grains, & fiber)
  – Be active
  – Don’t smoke and limit your alcohol intake
  – Get screening tests
    • After 50 years of age, both men and women at average risk of colorectal cancer, should undergo a screening
    • If you are at high risk or increased risk of colorectal cancer, you should begin screening before age 50 and / or screened more often
• **Colorectal cancer can be prevented or detected early with screening.**
• Texas has laws guarantee insurance coverage for a wide range of screening for colorectal cancer
Finally...

There are things you can do to reduce your risk of getting colorectal cancer.

https://www.cdc.gov/physicalactivity/
http://www.cdc.gov/diabetes/managing/eatright.html
Questions?

☐ What questions do you have?

☐ Now we are going to talk about treatment for colorectal cancer

TRAINING OBJECTIVE:

Residents will gain knowledge about treatment options for colorectal cancer.
ACTION Project:
Access to Cancer Training, Information, Outreach, and Navigation

Colorectal Cancer:
Treatment Options

http://www.cdc.gov/cancer/breast/basic_info/treatment.htm
You have been diagnosed with Colorectal Cancer. Now what?

- Treatment for colorectal cancer has improved in recent years. There are now over 1 million colorectal cancer survivors in the U.S.
- Because different types of cancer behave differently, patients require specific treatment for cancer.

Get a second opinion

- It’s okay to ask for a second opinion about your diagnosis and treatment plan before beginning any treatment.
- Many insurance companies cover the cost of a second opinion.
- Talk to your doctor about the effects of a delay in trying to get a 2nd opinion.
- Ways to find a doctor for a second opinion:
  - Your doctor may recommend one or more specialists.
  - A local hospital or state medical society, or a medical school can usually provide the names of specialists.
  - Medical and public libraries may have print directories of doctors names listed geographically by specialty.
  - Service Cancer Information at 1-800-4-CANCER, can tell you about nearby treatment centers.
  - Information specialists can also help you online through LiveHelp (http://www.cancer.gov/livehelp).
You have been diagnosed with colorectal cancer. Now what?

http://www.cdc.gov/cancer/flu/treatment.htm
What should you ask your doctor about colorectal cancer?

• Where is my cancer located?
• Has the cancer spread from where it started?
• What stage (extent) is the cancer and what does that mean for me?
• Do we need to do more tests before deciding on treatment?
• How much experience do you have treating this type of cancer?
• Should I get a second opinion?
• What treatment options do I have?
• What do you recommend and why?
• What are the risks or side effects of the treatments you suggest?
• What can I do to reduce the side effects of treatment?
• What should I do to prepare for treatment?
• How long will treatment last?
• What will it involve?
• Where is it administered?
• How will treatment affect my daily activities?
• What are the chances my cancer will recur (come back) with these treatment plans?
• What would we do if the treatment does not work or if the cancer comes back?
• What kind of follow-up care is needed after treatment?
What should you ask your doctor about colorectal cancer?

Factors that influence the prognosis of colorectal cancer and treatment options

When selecting a treatment plan, one of the most important factors is the stage of the cancer.

Other factors to consider include:
• General health status and age
• The type of colorectal cancer
• Tumor size
• Possible side effects of treatment
• The chances of curing the disease
• Aging
• Relief of symptoms
Factors that influence the prognosis of colorectal cancer

http://www.cdc.gov/cancer/colorectal/basic_info/screening/
What are my options? Cancer Types:

- They behave differently
- They grow at different rates
- Respond to different treatments.
- *People with cancer need treatment that is aimed at their particular kind of cancer.*

**GUIDELINES:**

1. Learn all about your cancer
   - Know your options
   - Understand the goals of treatment

2. Learn the risks and benefits of each treatment option.
   - Get a second opinion
   - Get help to manage the cost of cancer treatment.

3. Consult guidelines or other tools that help you make decisions
   - Talk about your decision with people you trust.
   - The role of statistics

**Type of Treatment** depends primarily on the location of the tumor in the colon or rectum or stage and stage of the disease.

What are my options?

http://www.cdc.gov/cancer/colorectal/basic_info/screening/tests.htm
What are my treatment options?

Cancer treatment is either local therapy or systemic therapy:

- **Local therapy:** Surgery and radiation therapy are local therapies that remove or destroy the cancer in or near the colon or rectum. When colorectal cancer has spread to other parts of the body, local therapy may be used to control the disease in those specific areas.

- **Systemic Therapy:** Chemotherapy and biological therapy are systemic therapies. The drugs enter the bloodstream and destroy or control cancer throughout the body.

Colorectal Cancer
- Surgery
- Chemotherapy
- Biological Therapy
- Radiotherapy

Colon Cancer
- Surgery
- Chemotherapy
- Biological Therapy

Rectal Cancer
- Surgery
- Radiotherapy and chemotherapy
- Biological Therapy
- Colostomy

Targeted Therapy:
- Researchers have developed newer drugs that target cancerous cells
What are my treatment options?

https://www.cdc.gov/cancer/colorectal/basic_info/screening/questions.htm
Surgery

Surgery - the most common treatment. When part of the colon or rectum is removed, the surgeon can usually reconnect the healthy parts. However, sometimes it is not possible to reconnect the parts. In this case, the surgeon creates a new path for the stool to exit out of your body (usually temporary).

- **Colonoscopy** - small malignant polyp may be removed from your colon or upper rectum with a colonoscopy
- **Laparoscopy** - Colon cancer that has just begun can be removed with the help of a thin, lighted tube (laparoscopic)
- **Radiofrequency Ablation**: consists in the use of a catheter with small electrodes that destroy cancer cells. Sometimes a catheter is inserted directly through the skin and needs only local anesthesia. At other times, the catheter is inserted through an incision in the abdomen. This is carried out in a hospital under general anesthesia.
- **Cryosurgery**: treatment which uses an instrument to freeze and destroy abnormal tissue, such as carcinoma in situ. This type of treatment is also called cryotherapy.
- **Open surgery** - The surgeon makes a large cut in the abdomen to remove the tumor and part of the healthy colon or rectum.
- **Resection**: If the cancer is a larger size, the doctor performs a partial colectomy (removing the cancer and a small amount of surrounding healthy tissue). Then, the doctor may perform an anastomosis (sewing the healthy parts of the colon). In general, the doctor will also remove lymph nodes near the colon and examine them under a microscope to determine if it is cancer.
- **Resection and colostomy**: if the physician can not sew the two ends of the colon, they create a stoma (opening) in the outer body to allow passage of debris. This procedure is called a colostomy. A bag is placed around the stoma to collect the waste. Sometimes the colostomy is needed only until the lower colon has healed and then it can be reversed. However, if the doctor needs to remove the entire lower colon, the colostomy may be permanent.

**Side effects**: pain, diarrhea, weakness, constipation.

http://www.cancer.gov/types/colorectal/patient/colon-treatment-pdq#section/_135
http://www.cancer.gov/about-cancer/treatment/side-effects/
Surgery

http://www.cdc.gov/features/safesurgery/
Chemotherapy

• Uses drugs to stop the growth of cancer cells by killing the cells or preventing their multiplication. The form in which it is administered depends on the type and stage of cancer. It can be administered in two ways.

1. By mouth or injected into a vein or muscle – the drugs enter the bloodstream and can reach cancer cells throughout the body
2. Placed in the cerebrospinal fluid, an organ, or a body cavity (such as the abdomen) - the drugs mainly affect cancer cells in those areas.

Possible side effects depend on the type of drug, the amount ingested and the amount of time you are treated. Temporary side effects include nausea and vomiting, loss of appetite, hair loss, mouth sores, damage to blood cells, resulting in an increased chance of infection, bleeding or bruising after cuts or injuries, shortness of breath, and fatigue.

Recommendations to patients during chemotherapy:

• Get enough rest.
• If you have been lying a long time, first sit a minute before standing.
• Maintain a balanced and nutritious diet.
• Generally the drugs used for the treatment of cervical cancer do not cause hair loss.
• Use a soft brush for cleaning teeth and do not use mouthwash containing alcohol.
• Drink water several times a day or suck on ice chips.
• Avoid shock cuts.
• Do not floss nor wear tight clothing.
• Wash your hands frequently and stay away from sick people.
• Tell your doctor about any medications you are taking.
Chemotherapy
Biological Therapy

Biological therapy - Some people with colorectal cancer that has spread receive a monoclonal antibody, a type of biological therapy. Monoclonal antibodies bind to cancer cells of the colon or rectum. They interfere with the growth of cancer cells and cancer spread. People receive monoclonal antibodies through a vein at the doctor's office, hospital or clinic. Some people receive chemotherapy at the same time.

• **MONOCLONAL THERAPY** make cancer cells more recognizable by the immune system and therefore more susceptible to destruction by increasing the lethal power of immune system cells,

• **change** the way in which they develop cancer cells, to act more like healthy cells,

• **stop** the process that transforms a normal cell into a cancerous one

• **improve** the body's ability to repair or replace normal cells damaged or destroyed by other types of cancer treatment, such as chemotherapy or radiotherapy

**Side effects:** allergic reactions, rash, fever, abdominal pain, vomiting, diarrhea, blood pressure changes, bleeding or breathing problems. These usually become milder after the first treatment.

Biological Therapy

http://www.onlinecancerguide.com/blog/ovarian-cancer/biological-therapy-for-cancer/
Radiotherapy

- Uses high-energy rays to kill cancer cells.
- Affects the cancer cells only in the treated area.
- Sometimes patients receive two types of radiation.

1) **External radiation:** The external radiation is used most often in people with cancer of the colon or rectum. Treatments are given five days a week for several weeks. Each treatment lasts only a few minutes and is similar to an X-ray when you have a broken bone.
   - The radiation comes from a machine. The most common type of machine used for radiation therapy is called a linear accelerator. Most patients go to the hospital or clinic for treatment 5 days a week for several weeks.

2) **Internal Radiation** - Radiation comes out of radioactive material placed in thin tubes directly into or near the tumor.
   - Internal radiation - implant radiation or radiation comes from radioactive material placed in thin tubes put directly into or near the tumor. The patient stays in the hospital and the implants generally remain in place for several days. Ordinarily, the implants are removed before the patient goes home.

Radiotherapy
Targeted Therapy

• These targeted drugs work differently from chemotherapy drugs.
  – Target certain parts of the cancer cells involved in the growth, progression, and spread of cancer while leaving most healthy cells alone

• Some targeted cancer therapies have been approved by the Food and Drug Administration (FDA) and others are still being studied/tested.
Targeted Therapy

http://cisncancer.org/research/how_cancer_is_studied/clinical/ct_targeted_therapy.html
Do other types of colorectal cancer treatments exist?

- **A treatment clinical trial** is a research study meant to help improve current treatments or obtain information on new treatments for cancer patients.
- When clinical trials show that a new treatment is better than the standard treatment, the new treatment may become the standard treatment.
- Many of today's standard treatments for cancer are based on earlier clinical trials.
- Some clinical trials only include patients who have not yet received treatment. Other trials test treatments for patients whose cancer has not improved.
- There are also clinical trials that test new ways to stop cancer from recurring (coming back) or reduce the side effects of cancer treatment.
- Patients who participate in clinical trials also help improve the way cancer will be treated in the future.
- Although clinical trials do not lead to effective new treatments, they often answer important questions and help move research forward. The NCI Web site includes a section on clinical trials at [http://www.cancer.gov/clinicaltrials](http://www.cancer.gov/clinicaltrials).

- **Alternative therapies may include**: vitamins, herbs, special diets, Acupuncture, Massage Therapy, Meditation.
- Some CAM approaches have been found to be safe and effective **WITH** physician knowledge and consent.

Are there other types of treatments for colorectal cancer?

http://www.cancer.gov/about-cancer/treatment/clinical-trials
https://www.washington.edu/wholeu/2014/01/21/vitamins
What happens after colorectal cancer treatment?

• For some people treatment can completely destroy the cancer
• But for others the cancer does not disappear completely. These persons may get regular treatments with chemotherapy, radiation therapy, or other therapies to try to help keep the cancer in check.

Aftercare:
• Even when treatment ends, your doctors will still want to be very attentive to you. It is very important to keep all follow-up appointments. During these visits, your doctors will ask questions about any problems you have and may do exams and lab tests, x-rays and scans to check for signs of cancer or treatment side effects. Almost all cancer treatments have side effects. Some can last from a few weeks to months, but others can last the rest of your life. This is the time to ask any questions to your health care team about any changes or problems you notice and discuss any concerns you may have.
• To some extent, the frequency of follow up visits and tests will depend on the stage of your cancer and the likelihood of recurrence.
• It is important to keep health insurance. Tests and doctor visits cost a lot, and although no one wants to think of their cancer coming back, this could happen.
What happens after colorectal cancer treatment?

https://www.cdc.gov/tobacco/basic_information/health_effects/
Questions?

- What questions do you have?
- Now we are going to talk about colorectal cancer survivorship
Colorectal Cancer Survivorship

ACTION Project:
Access to Cancer Training, Information, Outreach and Navigation

https://www.cdc.gov/cancer/survivorship/
Cancer changes your life...

- The diagnosis of cancer changes your life
- But change depends on the person.......the patient accepting their disease and their self-esteem and monitoring of treatment

**Definition of a Cancer Survivor**

- An individual from the moment he was diagnosed with cancer and the changes he made to have a better balance in their life.
- Also considered as survivors are family, friends, and caregivers who have been affected by the diagnosis.

Cancer changes your life...

http://www.cdc.gov/cancer/survivorship/index.htm
Prognosis

Depends on:

- The level or stage of cancer
- The type and location of cancer
- How fast the cancer may grow/spread
- The age and general health of the patient
- How the patient responds to treatment
- The likelihood of the cancer coming back.
- If the cancer has just been diagnosed or has returned.

The 5 year survival rate refers to the percentage of patients who live at least five years after being diagnosed with cancer. (Many of these patients live much longer than 5 years after diagnosis.)

- Survival is significantly better when colorectal cancer is diagnosed while still localized.
- There are approximately one million colorectal cancer survivors in the U.S.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Colon Cancer 5 Year Survival Rate</th>
<th>Rectal Cancer 5 Year Survival Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>&gt;96%</td>
<td>&gt;96%</td>
</tr>
<tr>
<td>I</td>
<td>92%</td>
<td>87%</td>
</tr>
<tr>
<td>II</td>
<td>63-87%</td>
<td>49-80%</td>
</tr>
<tr>
<td>III</td>
<td>53-89%</td>
<td>58-84%</td>
</tr>
<tr>
<td>IV</td>
<td>11%</td>
<td>12%</td>
</tr>
</tbody>
</table>
Prognosis
Side effects that colorectal cancer survivors face

- Low blood count
- Tiredness / less energy
- Weakness
- Diarrhea
- Pain
- Nausea / Vomiting
- Loss of appetite
- Loss of hair
- The skin of the treated area may become red, dry, and tender
- Sudden bowel movement or blood in stool
- Urinary discomfort (making it difficult to stop the flow of urine from the bladder)
What are the side effects of colorectal cancer?
Follow Up Care

Medical Visits
• 3-4 months during the first 2-3 years after treatment and 1-2 times a year after that.
• May vary according to the type of treatment the patient received and the patient's general health.

During medical visits, the doctor may:
• Look for side effects of treatment.
• Check if the cancer has come back or spread.
• Review clinical history.
• Recommend a physical exam.
• Run Follow-up tests.

Medical care may also include
• Pain Management
• Support Groups
• Therapy (Occupational; vocational; physical)

Follow Up Care

http://www.cdc.gov/cancer/dcpc/resources/features/cancersurvivorship/
https://www.cdc.gov/cancer/survivorship/
Life After Treatment

After Treatment
• The patient needs to develop a care plan that includes
  1. Regular physical examinations
  2. Tests
  3. Monitor your recovery for the coming months and years

• There are care plans for cancer survivors
• Example: LIVESTRONG has individualized plans

[Links to resources]
Recurrence

• It's hard not to stop worrying about the cancer returning. This can be stressful and emotional.

• **Stressful?** Not knowing where to go for medical help and having the feeling of worry, is a constant tension.

• **Emotional?** Making drastic changes in their lives and facing the challenge of knowing how.

• **Cancer recurrence** is defined as the return of cancer after treatment and after a period of time during which no cancer can be detected. (Time is not clearly defined.) The same type of cancer may come back in where it first started or in another part of the body.

• The chances of recurrence of colorectal cancer is drastically reduced if detected early, with screening, such as a colonoscopy.

http://www.cancer.net/survivorship/dealing-cancer-recurrence
Recurrence
Adapting to living with cancer that will not go away can be stressful

- In some cases, the cancer does not disappear completely and regular treatment is needed to keep the cancer under control
- Some patients may feel alone and lost without the support of the health team.
- Emotional changes after treatment
- Not seeing them can cause anxiety and sadness.
- Returning to the family role is not easy
- The ones who are performing the roles usually does not want to stop doing them.
- Emotions change again ...
- The feelings of sadness, anger, and fear return
Adapting to living with cancer that will not go away can be stressful.
Survivorship Tips

Lifestyle Changes:
• Eat healthy
• Exercise
• Rest
• Don’t Smoke
• Avoid excess alcohol intake

Physical Activity/ Staying active
• People with cancer stay well when active.
• For exercise or any physical activity be sure to talk to your doctor before starting.
• Activities such as walking, yoga, swimming, and others can keep you strong and increase energy.
• Exercise may reduce nausea and pain and make treatment easier to handle.
• Exercise can also help relieve stress. Whatever physical activity you choose, be sure to talk with your doctor before beginning.

Survivorship Tips

http://www.cdc.gov/healthyweight/losing_weight/eating_habits.html
https://www.cdc.gov/physicalactivity/
Foods to Fight Cancer

**Take care of yourself when it comes to eating well**

- No food can reduce your risk of cancer but the right combination of foods can help make a difference.
- Protein is essential to maintain strength
- Have a high fiber diet and limit consumption of foods high in saturated fats.
- Fruits and vegetables are rich in cancer-fighting nutrients; the more color, more nutrient content.
- These foods may help reduce the risk another way; they help to achieve and maintain a healthy body weight. Carrying extra pounds increases the risk of multiple cancers, including colon, esophagus and kidney cancers.
- Folate is an important vitamin B that can help protect against cancer. The fortified breakfast cereals and wheat grain products are good sources of folic acid. The same goes for orange juice, cantaloupe, strawberries, asparagus, eggs, liver of chicken, beans, sunflower seeds and green leafy vegetables like lettuce, spinach or romaine lettuce.
- According to the American Cancer Society, the best way to get the folate is not a pill, but by eating plenty of fruits, vegetables and fortified grain products.
- Cutting the consumption of processed meats such as bologna, ham and sausages can help reduce the risk of colorectal and stomach cancer. In addition, consumption of meats that have been preserved with salt or smoked increases their exposure to agents that can potentially cause cancer.
- Although the evidence is still uncertain, tea, especially green, can be a strong cancer fighter.
- If you are overweight consider weight loss by reducing calories and increase physical activity
- Your doctor, a registered dietitian, or other provider can suggest ways to cope with side effects.

https://ods.od.nih.gov/factsheets/Folate-HealthProfessional/
Foods to Fight Cancer
Services for Colorectal Cancer Survivors

- Couples Therapy
- Faith or Spiritual Counseling
- Family Support Programs
- Genetic counseling
- Home care services
- Individual Counseling
- Long-term monitoring of clinics
- Nutritionists and dietitians
- Occupational Therapists
- Oncology Social Workers
- Information and Support
- Pain Clinic
- Physiotherapists
- Give up smoking
- Speech Therapy
- Stress management program.
- Survivors Support Group
- Wellness Program for Survivors
- Vocational rehabilitation specialists

Services for Colorectal Cancer Survivors

https://www.cdc.gov/cancer/survivorship/index.htm
Sources of Support

• It’s not easy living with cancer. You may have daily worries
  – Work
  – Family
  – Hospital stays
  – Daily activities
  – Medical Costs
  – Treatments
  – Side effects

Some people that may be able to help you:
• Doctors
• Nurses
• Other members of your medical team
• Counselor or clergy member
• Social worker
• Family and friends
• Support groups can also help patients or their families.

Other Resources
– 1-800-4-CANCER and LiveHelp
  http://www.cancer.gov/help
– Organizations that provide services to people with cancer and their families
– Información sobre la orientación financiera para los sobrevivientes de cáncer y sus familias
Sources of Support

https://www.cdc.gov/cancer/survivorship/basic_info/caregivers/index.htm
Prepare for any future outcome

• Get Support

• Keep your health insurance

• Keep regular visits with your doctor

• Get the tests your doctor recommends

• Keep copies of your cancer treatment, records and tests

Prepare for any future outcome

http://www.cdc.gov/travel-training/local/PreTravelConsultationandBestPractices/page23480.html
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- http://www.asge.org/assets/0/120/122/74390/14e10d5a-54f0-4af0-9086-3fdd7fe37c51.pdf
- http://www.cancer.org/treatment/treatmentsandsideeffects/treatmenttypes/targetedtherapy/targeted-therapy-what-is
"Courage does not always roar. Sometimes courage is the quiet voice at the end of the day saying, 'I will try again tomorrow.'”

Mary Anne Radmacher

http://www.cdc.gov/cancer/dcpc/resources/colorectalawareness/
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- http://www.cancer.net/survivorship/dealing-cancer-recurrence
- http://my.clevelandclinic.org/health/diseases_conditions/hic_Gallbladder_Cancer
- https://ods.od.nih.gov/factsheets/Folate-HealthProfessional/
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