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preventcancer.org



GUIDE TO

PREVENTABLE

CANCERS

ABOUT THE PREVENT CANCER FOUNDATION

The mission of the Prevent Cancer Foundation is saving lives through cancer prevention and early detection.

Our vision is to *Stop Cancer Before It Starts!*

The Prevent Cancer Foundation is the *only* U.S. nonprofit organization solely devoted to cancer prevention and early detection. The Foundation focuses its resources on cancers that can be prevented through lifestyle changes or early detection, when treatment is more likely to be successful. Since its founding in 1985, the Foundation has invested more than \$130 million in research, education, advocacy and community outreach programs across the nation in support of our mission.

Our work is focused on four areas:

RESEARCH

The Foundation helps increase insight into the disease by funding innovative research that allows us to understand how to prevent cancer or detect early when it can be more successfully treated.

EDUCATION

Our educational programs and materials educate the public about how to prevent cancer and detect it early through healthy lifestyle choices and medical screenings.

ADVOCACY

The Foundation advocates for policies and legislation that advance cancer research and prevention and that support the needs of cancer patients and their families.

COMMUNITY OUTREACH

The Foundation partners with trusted medical and educational organizations and respected members of the community to implement life-saving cancer prevention and early detection programs.

WHY YOU SHOULD CARE:

Each year, more than 1.6 million Americans will be diagnosed with cancer and more than 580,000 will die from the disease. However, research shows that **up to 60 percent of cancer cases and more than 50 percent of cancer deaths are preventable—with the knowledge we have right now.**

As the cost of health care continues to be a looming issue, the high and unsustainable cost of cancer treatment is especially significant. The implications of this issue are staggering, as cancer costs are projected to reach \$158 billion by the year 2020.

Early detection and prevention are more important than ever—and are an effective strategy to lower health care costs.

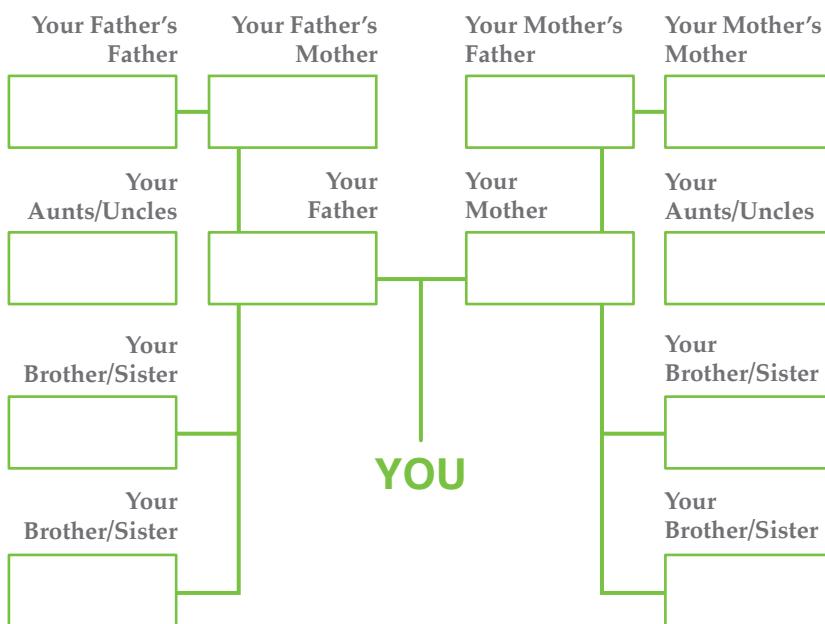


GET THE FACTS.

Get the facts about cancer from reliable sources. To get started, check out the Foundation's online resources at www.preventcancer.org.

KNOW YOUR FAMILY HISTORY.

Most people who get a particular kind of cancer do not have a family history, which is one reason why screening is so important. However, a personal or family history of cancer or certain other diseases may increase your risk.



To help determine your risk, complete this family medical history chart and share it with your family and your health care professional.

- For each blood relative, note in the box any diagnosed cancer or other chronic disease the person had and the age at which each was found.
- Note any surgeries and the dates of the procedures.
- If you can, note the date of birth and date and cause of death for family members who are deceased.

This will help you and your health care professional decide which cancer screenings you may need and when to begin screening.

SIX Ways to Prevent Cancer

DON'T USE TOBACCO.

Smoking has been linked to many types of cancer, including lung, colorectal, breast, throat, cervix, bladder, mouth and esophagus. There are health benefits for quitting at any time; talk to your doctor, family and friends to boost your chances of quitting successfully.

More than 85 percent of all lung cancer is related to smoking. Non-smokers who are exposed to secondhand smoke are also at risk for lung cancer and other respiratory conditions.

STAY ACTIVE AND MAINTAIN A HEALTHY WEIGHT.

Getting at least 30 minutes of physical activity each day can make a big difference in your general health and well-being.

Inactivity and obesity have been linked to breast and colorectal cancer, and there is also some evidence of a link to lung and pancreatic cancer. Add exercise to your routine to reduce stress, increase energy, boost your immune system, control your weight and reduce your risk for cancer.

EAT A VARIETY OF HEALTHY FOODS, ESPECIALLY PLANT-BASED FOODS.

Generally, it's a good idea to eat lots of fruits, vegetables, beans and whole grains, limit red meat and cut out processed meats. Make food choices that help you keep your weight at a healthy level.

GET SCREENED!

Talk to your health care professional about cancer screening. Some tests can help detect cancer early when it's easier to treat, and some can also detect precancerous conditions before they become cancer. While screening does save lives, screening guidelines aren't always "one size fits all."

IF YOU DRINK ALCOHOL, LIMIT THE AMOUNT.

Recent studies have determined that drinking alcohol poses cancer risk (including risk of breast, colorectal, esophageal, liver and oral cancer) but also provides some protection against coronary heart disease. A man should have no more than two drinks a day, a woman no more than one drink a day.

BE SAFE IN THE SUN

Skin Cancer is the most common—and preventable—cancer in the United States, affecting more than one million people each year. Exposure to the sun's ultraviolet radiation causes most skin cancer. Be sure to use adequate sun protection all year round.

Breast Cancer

Annually, over 225,000 women and 2,000 men will be diagnosed with invasive breast cancer (cancer that has spread from where it started in the breast into surrounding healthy tissue) and roughly 40,000 will die of the disease.

If diagnosed early and treated before it spreads, the five-year survival rate for breast cancer is 99 percent.

WHO IS AT RISK?

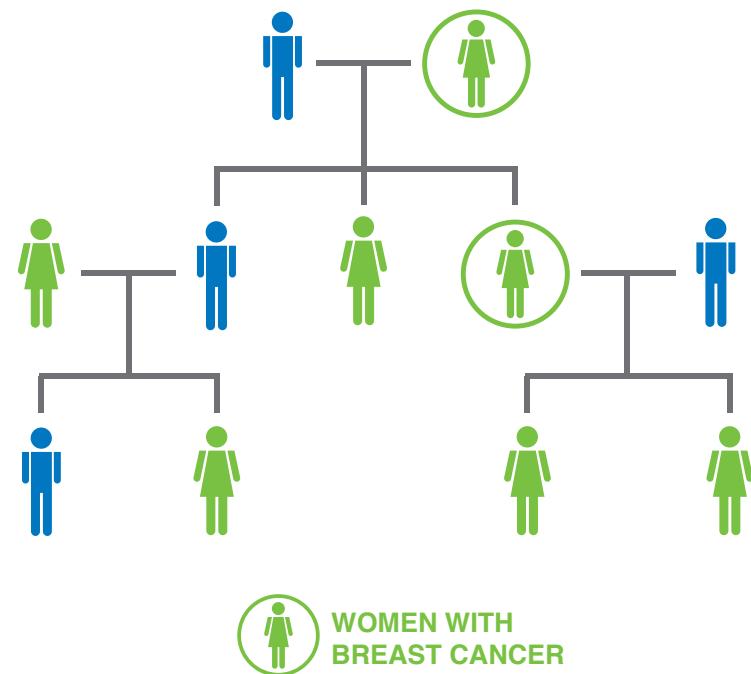
- Women who began their menstrual periods before age 12 or began menopause after age 55.
- Women who are currently using or have recently used birth control pills.
- Women who have never had children, or who have their first child after age 30.
- Women who have used hormone replacement therapy (HRT) with estrogen and progesterone for a long time.
- Women with abnormal genes, such as BRCA-1 or BRCA-2.
- Women with a family history of colorectal cancer.
- Women or men who are overweight or obese.
- Women or men who are not physically active.
- Women and men over 40 (Most breast cancer is diagnosed in women over 40, and, on average, men with breast cancer are diagnosed at age 68).
- Women and men who have had high-dose radiation therapy on their chests.
- Women and men with a family history of breast or ovarian cancer. Risk increases if several close relatives have been diagnosed with breast cancer or if a person's mother was diagnosed before age 50.
- Women and men who have already had cancer in one breast.

HOW CAN I REDUCE MY RISK OR DETECT BREAST CANCER EARLY?

- Breast feeding has many benefits for breast health and may lower a woman's risk.
- Limit alcohol to no more than one drink a day for women and two drinks a day for men.
- Exercise daily for 30 to 60 minutes.
- Maintain a healthy weight.

- If you smoke, talk to your doctor about getting help to quit.
- In your 20s and 30s, have a clinical breast exam (CBE) by a health care professional at least once every three years.
- Beginning at age 40, have an annual CBE.
- At age 40, begin annual screening after discussing with your health care professional the benefits and risks of screening tests.
- If you are at high risk, talk with your health care professional about beginning annual screening mammograms at a younger age and also having an MRI (magnetic resonance imaging).
- If you have a family history of breast, ovarian or colorectal cancer, talk with your health care professional about genetic testing.
- At menopause, talk with your health care professional about whether you should have hormone replacement therapy.

Risk factors increase if several close relatives have been diagnosed with breast cancer or if a person's mother was diagnosed before age 50.



Breast Cancer

(CONTINUED)

WHAT ARE THE SYMPTOMS?

If you notice any of the following symptoms, talk with your health care professional:

- A lump, hard knot or thickening in the breast
- A lump under your arm
- A change in the size or shape of a breast
- Nipple pain, tenderness or discharge, including bleeding
- Itchiness, scales, soreness or rash on nipple
- A nipple turning inward or inverted
- A change in skin color and texture (dimpling, puckering or redness)
- A breast that feels warm or swollen

Be in tune with your body and take note of any changes.

14% OF ALL CANCER DEATHS ARE FROM BREAST CANCER.



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WHAT ARE THE TREATMENT OPTIONS?

Treatment depends on the type and stage of the breast cancer.

- The most common treatment is surgery to remove the cancer itself (lumpectomy) combined with radiation. In some cases, removal of the breast (mastectomy) is needed.
- Chemotherapy, radiation therapy, hormone therapy or targeted therapy may be used alone or in combination before or after surgery.

Cervical Cancer

Every year, nearly 12,000 women will be diagnosed with invasive cervical cancer, (cancer that has spread from the surface of the cervix to tissue deeper in the cervix, or other body parts) and over 4,000 will die of the disease. Today, lives are saved because of regular screening with a Pap test (also called a Pap smear).

WHO IS AT RISK?

- Women who have the human papillomavirus (HPV), a common sexually transmitted virus that causes cervical cancer.
- Women who began having sex at an early age.
- Women who have multiple sex partners.
- Women who don't have regular Pap tests.
- Women who smoke.
- Women who have used birth control pills for a long time.
- Women with weakened immune systems, such as women who have human immunodeficiency virus (HIV).
- Women who are overweight or obese.
- Women who have a close relative, such as a sister or mother, who has had cervical cancer.
- Women who were exposed to diethylstilbestrol (DES) before birth.

HOW CAN I REDUCE MY RISK OR DETECT CERVICAL CANCER EARLY?

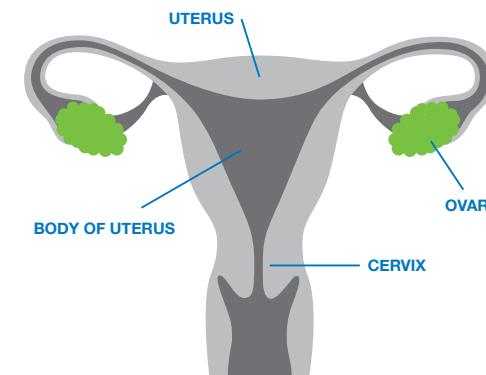
- Talk with your health care professional about the HPV vaccines.
- Practice safer sex.
- Avoid smoking and second-hand smoke.
- Begin regular cervical cancer screenings at age 21. Women in their twenties should have a Pap test every three years.
- From age 35-65, the preferred way to screen is with a Pap test combined with an HPV test every 5 years, or a Pap test every 3 years.
- If you are at high risk of cervical cancer because of a suppressed immune system (for example, from HIV infection, organ transplant or long-term steroid use) or because you were exposed to DES in utero, you may need to be screened more often. Follow the recommendations of your health care professional.
- Beginning at age 65, talk with your health care professional about whether you still need a Pap test.

Cervical cancer usually does not show symptoms until later stages. Pelvic exams and Pap tests are key to early detection.

HPV VACCINE

The HPV vaccines protect against the types of HPV that are most likely to cause cancer. They are most effective if a person is vaccinated before becoming sexually active.

The vaccine is recommended for girls who are age 11 to 12. Boys may also get the vaccine. Like others, girls and young women who are vaccinated still need to get screened according to guidelines starting at age 21. Read more about other types of cancer that are caused by the HPV virus on page 27.



WHAT ARE THE SYMPTOMS?

Precancerous conditions in the cervix usually don't cause symptoms and are not detected unless a woman has a pelvic exam and a Pap test. A woman should talk with her health care professional right away if she has any of the following symptoms:

- Increased or unusual discharge from the vagina
- Blood spots or light bleeding at times other than a normal period
- Menstrual bleeding that lasts longer and is heavier than usual
- Bleeding or pain during or after sex
- Bleeding after menopause

WHAT ARE THE TREATMENT OPTIONS?

Cervical cancer is treated through surgery, radiation and chemotherapy. These therapies may be given alone or in combination with one another. Treatment depends on the stage of the cancer, the type of tumor cells and a woman's medical condition.

Colorectal Cancer

Colorectal cancer is cancer of the colon or rectum. It's the third most common type of cancer in the U.S. for both men and women.

An estimated 140,000 individuals are diagnosed with colorectal cancer and nearly 50,000 will die of the disease each year. With certain types of screening, this cancer can be prevented by removing polyps (grape-like growths on the wall of the intestine) before they become cancerous, or detected early when it can be more easily and successfully treated.

WHO IS AT RISK?

- People age 50 and older.
- People who smoke.
- People who are overweight or obese, especially those who carry fat around their waists.
- People who aren't physically active.
- People who drink alcohol in excess, especially men.
- People who eat a lot of red meat (such as beef, pork or lamb) or processed meat (such as bacon, sausage, hot dogs or cold cuts).
- People with personal or family histories of colorectal cancer or benign (not cancerous) colorectal polyps.
- People with personal histories of inflammatory bowel disease (such as ulcerative colitis or Crohn's disease).
- People with family histories of inherited colorectal cancer.

HOW CAN I REDUCE MY RISK OR DETECT COLORECTAL CANCER EARLY?

- Be physically active for at least 30 minutes, at least five days a week.
- Maintain a healthy weight and waist size.
- Don't smoke. If you do smoke, quit.
- If you drink alcohol, have no more than one drink a day if you're a woman or two drinks a day if you're a man.
- Eat more fruits, vegetables, beans and whole grains. These foods are good sources of fiber.
- Eat less red meat and cut out processed meat.
- Get screened.



Visitors learn about the different stages of colon cancer in the Prevent Cancer Super Colon,TM an inflatable 20 ft. long, 8 ft. high educational exhibit.

Start getting screened at age 50 if you're at average risk for colorectal cancer. If you're at higher risk you may need to start regular screening at an earlier age and be screened more often. If you're older than 75 ask your doctor if you should continue to be screened.

SCREENING INTERVALS

Use this information to help you talk with your health care professional about your screening options and their benefits and risks. Consider one of these tests:

TESTS THAT FIND PRE-CANCER AND CANCER

	<i>Screening Intervals</i>
Colonoscopy	Every 10 years
Virtual colonoscopy	Every 5 years
Flexible sigmoidoscopy	Every 5 years
Double-contrast barium enema	Every 5 years <i>(Only when other screening tests are not available)</i>

TESTS THAT MAINLY FIND CANCER (STOOL TESTS)

Fecal occult blood tests (FOBT) (Guaiac test)	Every year <i>(Only high sensitivity guaiac-based FOBTs should be used for colorectal cancer screening.)</i>
Fecal immunochemical test (FIT)	Every year
Stool DNA test (sDNA)	Ask your health care professional

WHAT ARE THE SYMPTOMS?

Early stages of colorectal cancer don't usually have symptoms. During later stages, people may have these symptoms:

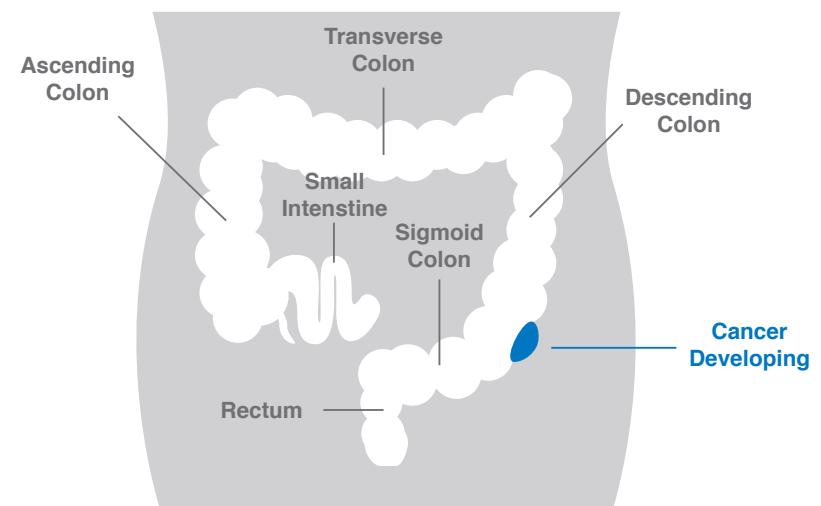
- Bleeding from the rectum or blood in or on the stool.
- Change in bowel habits.
- Stools that are more narrow than usual.
- General problems in the abdomen, such as bloating, fullness or cramps.
- Diarrhea, constipation or a feeling in the rectum that the bowel movement isn't quite complete.
- Weight loss for no apparent reason.
- Being tired all the time.
- Vomiting

If you have any of these symptoms, see your health care professional.

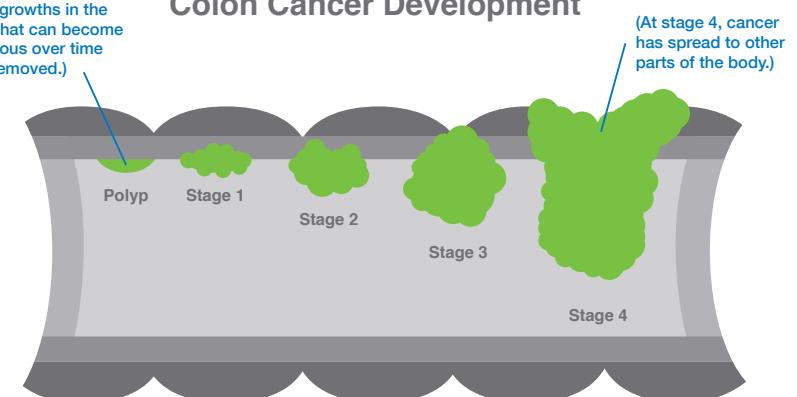
WHAT ARE THE TREATMENT OPTIONS?

Surgery is the most common treatment. When the cancer has spread, chemotherapy or radiation may be given before or after surgery.

Colon and Rectum (Large Bowel)



Colon Cancer Development



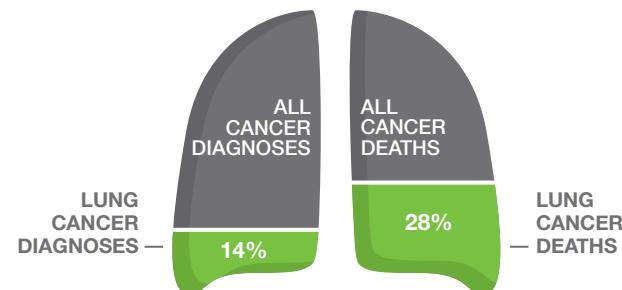
During a colonoscopy doctors remove polyps if found.

Lung Cancer

Lung Cancer is the leading cause of cancer death for both men and women. Annually, over 226,000 people will be diagnosed with lung cancer and nearly 160,000 will die of the disease. Smoking is the most important cause of lung cancer.

WHO IS AT RISK?

- People who smoke now or have a history of heavy smoking—even if they quit years ago.
- People exposed to second-hand smoke.
- People exposed to indoor and outdoor air pollution.
- People whose jobs expose them to radiation.
- People exposed to certain toxic substances, such as arsenic, radon or asbestos.
- People with personal or family histories of lung cancer.



WHAT ARE THE SYMPTOMS?

In the early stages, there may be no symptoms. As lung cancer progresses these symptoms may occur:

- A cough that doesn't go away
- Coughing up blood
- Constant chest pain
- Repeated pneumonia or bronchitis
- Weight loss and loss of appetite
- Hoarseness
- Wheezing or shortness of breath
- Feeling very tired all the time

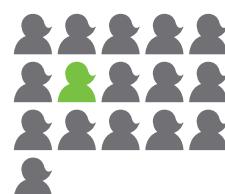
Talk with your health care professional if you have any of these symptoms.

1 IN 13 MEN



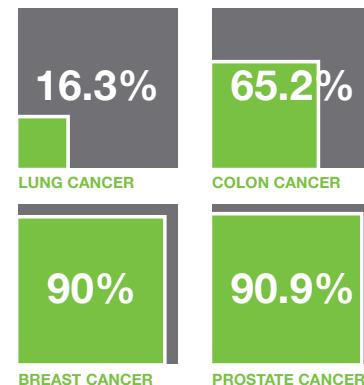
WILL DEVELOP LUNG CANCER

1 IN 16 WOMEN



WILL DEVELOP LUNG CANCER

THE 5 YEAR SURVIVAL RATE



HOW CAN I REDUCE MY RISK OR DETECT LUNG CANCER EARLY?

- Don't smoke; seek support from family, friends and your physician to help you quit.
- Stay away from second-hand smoke.
- Make your home and community smoke-free.
- Some research has found that eating lots of fruits, vegetables and getting more exercise may be two ways to reduce your risk.
- There is definitive evidence of a reduced death rate from lung cancer with screening long-time smokers with low-dose spiral CT scans.
- If you're a heavy smoker or former smoker, talk with your health care professional about the pros and cons of screening.

WHAT ARE THE TREATMENT OPTIONS?

Lung cancer treatment depends on the type of cancer (small cell or non-small cell), the size of the tumor and whether or not it has spread.

- In early stages of lung cancer, when the disease has not spread outside the lungs, surgery is the usual treatment. Sometimes chemotherapy is used in combination with surgery.
- For later stages of the disease, radiation and chemotherapy are sometimes used in combination with surgery.
- New, less invasive surgery may help patients recover more quickly with the same results as older, more invasive surgery.

Oral Cancer

Oral cancer is cancer of the mouth or throat. Every year, over 40,000 people will be diagnosed with oral cancer and over 7,000 will die of the disease. Oral cancer is twice as common in men as in women. Tobacco and alcohol use are among the strongest risk factors for oral cancer. Because some oral pre-cancers and cancers can be found early, it is important to visit your dentist regularly for screenings.

WHO IS AT RISK?

- People who chew or smoke tobacco.
- People who drink alcohol in excess.
- People who are exposed to sunlight for long periods of time.
- People with a certain type of human papillomavirus (HPV).
- People whose immune systems are weakened by certain medications.

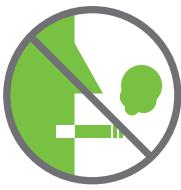
HOW CAN I REDUCE MY RISK OR DETECT ORAL CANCER EARLY?

- Choose not to smoke or chew tobacco. Seek help from your medical professional for quitting.
- Limit alcohol to no more than one drink a day.
- Stay out of the sun, especially between 10 am and 4 pm when sunlight is strongest.
- Always use lip balm with SPF 30 or higher.
- Eat lots of fruits and vegetables.
- Have an oral cancer screening by your dentist at your regular check-up.
- Talk with your dentist about an oral self-exam.

RISK FACTORS



CHEWING
TOBACCO



SMOKING
TOBACCO



EXCESSIVE
ALCOHOL



SUN
EXPOSURE



WHAT ARE THE SYMPTOMS?

- White or red patches on lips, gum, tongue or mouth lining.
- A lump which can be felt inside the mouth or on the neck.
- Pain or difficulty chewing, swallowing or speaking.
- Hoarseness lasting a long time.
- Numbness or pain in any area of the mouth that doesn't go away.
- Swelling of the jaw.
- Loosening of teeth.
- Difficulty wearing dentures.
- Bleeding in the mouth.
- A sore that doesn't go away on the lips or in the mouth.
- An ear ache that doesn't go away.

If you have any of these symptoms, see your dentist right away.

WHAT ARE THE TREATMENT OPTIONS?

Surgery, radiation, chemotherapy and newer targeted therapies may be used alone or in combination.

Prostate Cancer

Each year, nearly 240,000 men will be diagnosed with prostate cancer and over 28,000 will die from the disease. Most prostate cancer is diagnosed in men older than 65.

WHO IS AT RISK?

- All men over age 50.
- Men who are African American.
- Men with a family history of prostate cancer.

HOW CAN I REDUCE MY RISK OR DETECT PROSTATE CANCER EARLY?

You might lower your risk of prostate cancer by maintaining a healthy weight, exercising and never smoking or quitting if you do smoke.

- At 50, start talking with your health care professional about the pros and cons of getting tested—or not getting tested.
- There is no question that in some cases early detection of prostate cancer followed by prompt treatment saves lives.
- It is also clear that some men are treated for cancers that will never cause them harm and they must live with the side effects and complications of this treatment.
- Currently available tests are useful but are not 100 percent accurate. Sometimes a test indicates cancer where none exists and sometimes it does not indicate cancer where it does exist.
- If you are an African American man, or if you have a close relative (father, son or brother) who had prostate cancer before age 65, start talking to your doctor about prostate cancer when you are 45. If more than one close male relative had prostate cancer before 65, start that talk when you turn 40.



The total number of men in the U.S. diagnosed with prostate cancer each year is equal to the population of Orlando, Florida.

WHAT ARE THE SYMPTOMS?

In the early stages, there are usually no symptoms. Some men experience symptoms that include:

- Urinary problems (not being able to urinate, having trouble starting or stopping urine flow, having a weak or interrupted urine flow, feeling pain or a burning sensation while urinating)
- Blood in the urine
- Painful or difficult erection
- Pain in lower back, pelvis or upper thighs



WHAT ARE THE TREATMENT OPTIONS?

Current treatment options vary, depending on the stage of the cancer and other medical conditions of the individual.

- Treatments include surgery, radiation or hormone therapy. Sometimes treatments are combined.
- Some prostate cancers grow very slowly and do not require immediate treatment. In these cases, men and their doctors may decide on “active surveillance” with regular follow-ups, usually every three to six months. This option should be open to reassessment, as a man’s condition or concerns may change.

Skin Cancer

Skin cancer is the most common cancer diagnosis and it's the most preventable cancer. Most skin cancer is caused by damage from the sun's UV rays (ultraviolet radiation). Annually, over 76,000 people will be diagnosed with melanoma—the most dangerous type of skin cancer—and over 9,000 will die of the disease. Every year, as many as two million people are diagnosed with non-melanoma skin cancer—either basal cell or squamous cell carcinoma.

Research on the benefits of vitamin D (made by the skin from sunlight) indicates that just a brief exposure of your face, arms and hands to the sun is sufficient—about 15 minutes a day, three days per week. Talk to your health care professional about Vitamin D and your health.

WHO IS AT RISK?

- People who spend time in the sun or use sun lamps or tanning booths.
- People who smoke.
- People who have blond, red or light brown hair and blue, gray or green eyes.
- People with fair skin or freckles, or skin that burns easily.
- People with personal or family histories of skin cancer.
- People with certain types of genetic problems that affect the skin.
- People who have been treated with radiation.
- People with weakened immune systems.
- People who have several moles on their bodies, especially if they have had some moles since they were born.
- People who have odd moles or one or more large colored spots on their skin.
- People who have had contact with certain chemicals, such as arsenic in drinking water.
- People whose skin is damaged from injury or from long-term inflammation.
- People with HPV (human papillomavirus).
- Children who sustain sunburns may have an increased risk of skin cancer later in life.

Men are more likely than women to get non-melanoma skin cancer.



People who have paler skin tones are more likely to develop melanoma than those with darker complexions. However, anyone with any skin color may develop skin cancer. The risk for skin cancer increases as people get older.

HOW CAN I REDUCE MY RISK OR DETECT SKIN CANCER EARLY?

- Avoid sun exposure when it's brightest and don't ever use sun lamps or tanning beds.
- Always use sunscreen and lip balm with UVB and UVA protection with SPF 30 or more, even on cloudy days.
- Apply an ounce of sunscreen—a palm full—20 minutes before going outside and reapply every two hours if in continuous sun.
- Wear sunglasses that have been treated to absorb UV radiation, a wide brim hat and clothing made of tightly woven material with long sleeves.
- Protect children from the sun. Childhood sunburns may increase the risk of skin cancer later in life.
- Examine your skin once a month. Tell your health care professional about any changes.
- Have your health care professional examine your skin annually.

WHAT ARE THE SYMPTOMS?

- A sore that doesn't heal.
- A mole or other growth you haven't noticed before.
- Change in the border of a spot, spread of color, redness or swelling around the area.
- A small, smooth, shiny, pale or waxy lump that may bleed.
- Large areas with oozing or crust.
- A flat red spot or a lump that is scaly or crusty.
- Itchiness, tenderness or pain from a mole or elsewhere on your skin.
- A brown or black colored spot with uneven edges.

ABCDE RULE

When looking at moles, remember the **ABCDE** rule:

Asymmetry (one half of the mole doesn't match the other)



Border irregularity



Color that is not uniform



Diameter greater than 6 mm (about the size of a pencil eraser)



Evolving size, shape or color

WHAT ARE THE TREATMENT OPTIONS?

Most skin cancers found early can be treated successfully. Treatment depends on the type of skin cancer and the stage of the disease.

COMMON TREATMENT FOR SKIN CANCER:

- Surgery
- Biological drug treatments
- Various chemotherapies
- Radiation
- Immunotherapy



Testicular Cancer

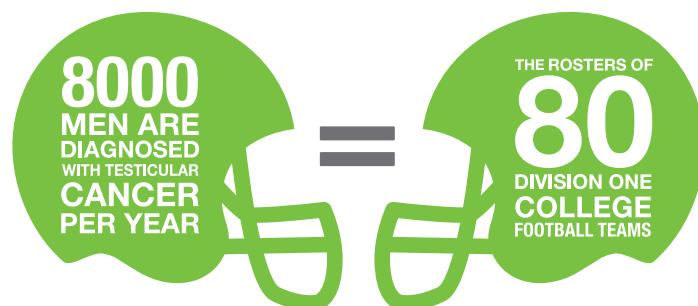
Annually, nearly 8,000 men will be diagnosed with testicular cancer, and over 350 will die of the disease. It is the most common cancer in men ages 15 to 34. When found early and treated appropriately, testicular cancer is usually curable.

WHO IS AT RISK?

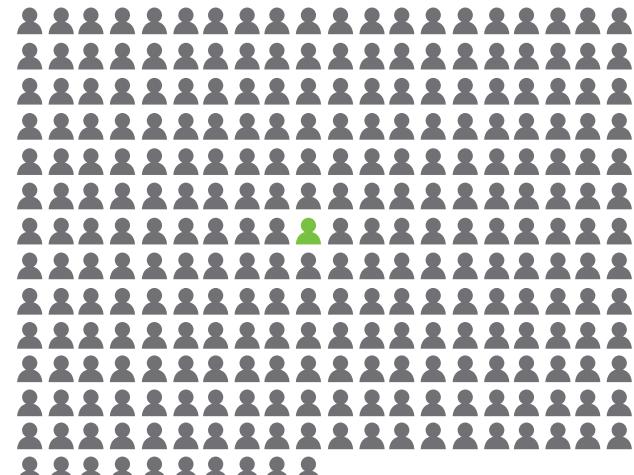
- Men with a personal history of undescended testicle at birth or other abnormal development of the testes.
- Men who are infected with HIV (human immunodeficiency virus).
- Men with a genetic problem caused by having an extra X chromosome.
- Men with personal or family histories of testicular cancer.
- White males are the most likely to develop testicular cancer.

HOW CAN I REDUCE MY RISK OR DETECT TESTICULAR CANCER EARLY?

- Ask your health care professional to examine your testicles as part of a routine physical exam.
- Talk with your health care professional about the testicular self-exam. It is one way to get to know what is normal for you. If you notice a change, talk with your health care professional right away.
- If you have a son who was born with an undescended testicle, talk with his health care professional about correcting it before he reaches puberty.



A man's lifetime risk of developing Testicular Cancer is **1 in 270**.



WHAT ARE THE SYMPTOMS?

Talk with your health care professional right away if you have any of these symptoms:

- A painless lump, enlargement or swelling in either testicle
- A change in how the testicle feels
- Dull aching in the lower abdomen, back or groin
- Pain or discomfort in a testicle or in the scrotum
- Sudden collection of fluid in the scrotum
- Feeling of heaviness in the scrotum

WHAT ARE THE TREATMENT OPTIONS?

Treatment depends on the stage and type of the cancer, and the size of the tumor. It also depends on whether the cancer has spread beyond the testicle. Treatment can include surgery, radiation and chemotherapy, alone or in combination.

Viruses and Cancer

Certain viruses have been linked to different types of cancer, but are preventable through vaccination.

HPV

Human papillomavirus, also known as HPV, consists of over 150 related viral strains. Many of the HPV strains are spread through skin-to-skin contact during vaginal, anal and oral sex. High-risk strains of HPV have increasingly been found to cause many types of cancer.

Several types of cancer associated with HPV include:

- Cervical cancer
- Vulvar cancer
- Vaginal cancer
- Penile cancer
- Anal cancer
- Oropharyngeal cancers (cancers of the back of the throat, including the base of the tongue and tonsils)

Annually, over 21,000 women and over 12,000 men are affected by HPV-associated cancers. Vaccination is available: talk to your health care professional about the age recommendations for HPV vaccines for girls. Boys may also get the vaccine.



HBV

The hepatitis B virus (HBV) can cause long term liver infections that can increase a person's chance of developing liver cancer. In the U.S., approximately one-third of liver cancers are linked to HBV or HCV (hepatitis C virus) infections.

HBV is spread from person to person through sharing needles, unprotected sex or childbirth. An HBV vaccination is available and is recommended for babies and older children who were not vaccinated earlier, and adults who are at risk for HBV infection.

THIS GUIDE USES INFORMATION FROM THE FOLLOWING SOURCES:

- American Cancer Society
- American College of Gastroenterology
- American Institute for Cancer Research (AICR) and World Cancer Research Fund (WCRF)
- Archives of Dermatology
- Centers for Disease Control and Prevention
- Institute of Medicine
- National Cancer Institute
- National Institutes of Health
- The New England Journal of Medicine
- Susan G. Komen for the Cure