

About Breast Cancer

Estimated new cases and deaths from breast cancer in the United States in 2009

New Cases:

192,370 Females 1,910 Males

Deaths:

40,170 Females 440 Males

What you should do

*** Screening mammogram**

Women in their 40s and older should have mammograms every 1 to 2 years.

*** Clinical Breast Exams**

During a clinical breast exam, your health care provider checks your breasts.

*** Breast Self Exams**

Perform monthly breast self-exams to check for any changes in your breasts. Breast self-exams cannot replace regular screening mammograms and clinical breast exams.

To prevent new cancers from starting, scientists look at risk factors and protective factors. Anything that increases your chance of developing cancer is called a cancer risk factor; anything that decreases your chance of developing cancer is called a cancer protective factor.

Some risk factors for cancer can be avoided, but many cannot. Avoiding risk factors and increasing protective factors may lower your risk but it does not mean that you will not get cancer

Risk Factor that may increase the risk of Breast Cancer

- * Estrogen
- * Hormone replacement
- * Radiation therapy to the chest
- * Being overweight or obese after menopause
- * Lack of physical activity
- * Drinking alcohol
- * Inherited Risk

Protective Factors that may decrease the risk of Breast Cancer

*** Exercise**

Exercising four or more hours a week may decrease hormone levels.

*** Estrogen (decreased exposure)**

Decreasing the length of time a woman's breast tissue is exposed to estrogen may help prevent breast cancer.

Exposure to estrogen is reduced in the following ways

Pregnancy: Estrogen levels are lower during pregnancy.

Breast Feeding: Estrogen levels remain low while a woman is breast feeding.

Ovarian ablation: Removal of one or more of the ovaries which make estrogen.

Late menstruation; menstrual periods at age 14 or older.

Early menopause: Estrogen levels decrease with menopause.

*** Selective estrogen receptor modulators**

Are drugs that act like estrogen on some tissues in the body, but block the effect of estrogen on other tissues

*** Prophylactic mastectomy**

The removal of both breasts when there are no signs of cancer.

*** Prophylactic oophorectomy**

The removal of both ovaries when there are no signs of cancer

*** Fenretinide:**

Is a type of vitamin A called a retinoid. When given to premenopausal women who have a history of breast cancer, fenretinide may lower the risk of forming a new breast cancer

About Skin Cancer

Skin cancer forms in tissues of the skin. There are several types of skin cancer. Skin cancer that forms in melanocytes (skin cells that make pigment) is called melanoma. Skin cancer that forms in basal cells (small, round cells in the base of the outer layer of skin) is called basal cell carcinoma. Skin cancer that forms in squamous cells (flat cells that form the surface of the skin) is called squamous cell carcinoma. Skin cancer that forms in neuroendocrine cells (cells that release hormones in response to signals from the nervous system) is called neuroendocrine carcinoma of the skin.

Skin cancer is the most commonly occurring cancer in the United States. Basal cell carcinoma and squamous cell carcinoma (nonmelanoma skin cancer) are the most common forms of skin cancer, but are easier to cure than melanoma.

More than 1,000,000 new cases of skin cancer are anticipated in the United States in 2009.

However less than 1,000 deaths are anticipated.

Prevention

The best way to prevent skin cancer is to protect yourself from the sun. Also, protect children from an early age. Doctors suggest that people of all ages limit their time in the sun and avoid other sources of UV radiation:

- It is best to stay out of the midday sun (from mid-morning to late afternoon) whenever you can. You also should protect yourself from UV radiation reflected by sand, water, snow, and ice. UV radiation can go through light clothing, windshields, windows, and clouds.
- Wear long sleeves and long pants of tightly woven fabrics, a hat with a wide brim, and sunglasses that absorb UV.
- Use sunscreen lotions. Sunscreen may help prevent skin cancer, especially broad-spectrum sunscreen (to filter UVB and UVA rays) with a sun protection factor (SPF) of at least 15. But you still need to avoid the sun and wear clothing to protect your skin.
- Stay away from sunlamps and tanning booths.

Early detection of melanoma can save your life.

Carefully examine all of your skin once a month.

A new or changing skin lesion in an adult should be evaluated.

About Colon Cancer

Estimated new cases and deaths from colon and rectal cancer in the United States in 2009:

New cases: 106,100 (colon); 40,870 (rectal)

Deaths: 49,920 (colon and rectal combined)

Colon cancer is cancer of the large intestine (colon), the lower part of your digestive system. Rectal cancer is cancer of the last 6 inches of the colon. Together, they're often referred to as colorectal cancers.

In the United States, colorectal cancer is the fourth most common cancer in men, after skin, prostate, and lung cancer. It is also the fourth most common cancer in women, after skin, breast, and lung cancer.

Most cases of colon cancer begin as small, noncancerous (benign) clumps of cells called adenomatous polyps. Over time some of these polyps become colon cancers. Polyps may be small and produce few, if any, symptoms.

Regular screening tests can help prevent colon cancer by identifying polyps before they become cancerous.

If signs and symptoms of colon cancer do appear, they may include changes in bowel habits, blood in your stool, persistent cramping, gas or abdominal pain.

The following risk factors may increase the risk of colorectal cancer:

- Age (especially 50 and over)
- Colorectal polyps
- Family History of colorectal cancer
- Genetic alterations
- Personal history of cancer
- Ulcerative colitis or Crohn's disease
- Diet
- Cigarette Smoking

Not all polyps become cancerous, but nearly every colon cancer starts out as a polyp. Finding and removing polyps may prevent colorectal cancer. Also, treatment for colorectal cancer is more likely to be effective when the disease is found early

About Prostate Cancer

- A total of 186,320 new cases of prostate cancer and 28,660 deaths from the disease are anticipated in the United States in 2008. Prostate Cancer is the second most common type of cancer among men in this country.
- A man's lifetime risk of prostate cancer is 1 in 6.

Prostate cancer prevention

Prostate cancer can sometimes be associated with known risk factors for the disease. Many risk factors are modifiable though not all can be avoided.

- Age: The risk of developing prostate cancer increases as a man gets older.
- Chemoprevention: Chemoprevention is the use of specific natural or man-made drugs, vitamins, or other agents to reverse, suppress, or prevent cancer growth. Several agents, including difluoromethylornithine (DFMO), isoflavonoids, selenium, vitamins D and E, and lycopene have shown potential benefit in studies. Further studies are needed to confirm this.
- Diet and Lifestyle: The effect of diet on prostate cancer risk is under study. A diet high in fat, especially animal fat, may be associated with an increased risk of prostate cancer. More studies are needed to determine if a low-fat diet with more fruits and vegetables helps prevent prostate cancer. Studies show that a diet high in dairy products and calcium may be linked to an increased risk of prostate cancer, although the increase may be small.
- Hormonal Prevention: Studies are underway to discover the role of certain drugs, such as finasteride, that reduce the amount of male hormone as preventive agents for prostate cancer.
- Race: The risk of prostate cancer is dramatically higher among blacks, intermediate among whites, and lowest among native Japanese. However, this increase in risk may be due to other factors associated with race. Studies have shown a link between levels of testosterone and prostate cancer risk, with black men having the highest levels.



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Many people have included Ohio Cancer Research Associates in their will... a gift to continue after their lifetime. For planned giving information, Contact Tom Lamb at (800) 232-6272

Ohio Cancer Research Associates is an independent statewide, nonprofit organization dedicated to the cure and prevention of the many forms of cancer and the reduction of its debilitating effects through aggressive basic seed money research, public information and awareness. Ohio Cancer Research Associates is not affiliated with any other organization.

Over \$16 million has been spent on cancer awareness and seed money research projects. Of that amount, over **\$5.9 million in seed money** provided to researchers by Ohio Cancer Research Associates **has generated more than \$99 million in new money** from other sources to continue basic cancer research on projects initially funded.

Researchers have been funded at these Ohio institutions:

- The Ohio State University
- Nationwide Children's Hospital in Columbus
- The Cleveland Clinic
- Case Western Reserve University
- MetroHealth Medical Center in Cleveland
- University of Cincinnati
- Cincinnati Children's Hospital Medical Center
- University of Dayton
- Wright State University
- The former Hipple Cancer Research, Dayton
- Ohio University
- University of Toledo
- Bowling Green State University

"Without vigorous, farsighted and continuing encouragement of fundamental scientific research, we are in the position of eating our seed corn. We may fend off starvation for one more winter, but we have removed the last hope of surviving the following winter."

—Carl Sagan



Cancer Awareness and Prevention

What is prevention?

Cancer prevention is action taken to lower the chance of getting cancer. By preventing cancer, the number of new cases of cancer in a group or population is lowered. Hopefully, this will lower the number of deaths caused by cancer.

To prevent new cancers from starting, scientists look at risk factors and protective factors. Anything that increases your chance of developing cancer is called a cancer risk factor; anything that decreases your chance of developing cancer is called a cancer protective factor.

Some risk factors for cancer can be avoided, but many cannot. For example, both smoking and inheriting certain genes are risk factors for some types of cancer, but only smoking can be avoided. Regular exercise and a healthy diet may be protective factors for some types of cancer. Avoiding risk factors and increasing protective factors may lower your risk but it does not mean that you will not get cancer.

Different ways to prevent cancer are being studied, including:

- * Changing lifestyle or eating habits.
- * Avoiding things known to cause cancer.
- * Taking medicines to treat a precancerous condition or to keep cancer from starting.