

## General Cancer Facts

- Cancer is the second leading cause of death in the United States. Half of all men and one third of all women in this country will develop cancer during their lifetimes.
- Cancer is a series of diseases in which abnormal cells divide without control forming a mass of tissue or tumor. These cells can originate almost anywhere in the body and can invade nearby tissues and spread through the bloodstream and lymphatic system to other parts of the body. Most cancers are named for the organ in which they originate.
- According to the American Cancer Society, cancer is the second leading cause of death in the United States. Almost 1.4 million new cancer cases were expected to be diagnosed in the United States in 2008. This estimate does not include carcinoma in situ (non-invasive cancer) of any site except urinary bladder, and does not include basal and squamous cell skin cancers.
- Breast cancer is the most frequently diagnosed cancer in women. It is estimated that more than 182,460 new cases were to be diagnosed in 2008.
- Lung cancer is the leading cause of cancer-related death among men and women. An estimated 161,840 deaths are expected in 2008, accounting for 29 percent of all cancer-related deaths.
- Prostate cancer is the second leading cause of cancer related death in men in the United States. In 2008, an estimated 186,320 new cases were expected to be diagnosed, and an estimated 28,660\* deaths were expected to occur.
- While anyone can get cancer at any age, about 77 percent of all cancers are diagnosed in people age of 55 and older. The rate of cancer occurrence varies by racial and ethnic groups.
- There are five main types of cancer — carcinomas, sarcomas, lymphomas, leukemia and myeloma.
  - Carcinomas are the most common types of cancer and arise from the cells that cover external and internal body surfaces such as the skin, lung, breast, and colon.
  - Sarcomas are cancers arising from cells found in the supporting tissues of the body such as bone, cartilage, fat, connective tissue and muscle.
  - Lymphomas are cancers that arise in the lymph nodes and tissues of the body's immune system.
  - Leukemia is cancer that starts in immature blood cells that grow in the bone marrow and causes abnormal blood cells to accumulate in large numbers in the bloodstream.
  - Myeloma is a cancer that develops in the plasma cells of bone marrow.
- Tumors can be benign (non-cancerous) or malignant (cancerous). Benign tumors do not spread to other parts of the body, can often be removed, and do not come back. Malignant tumors have cells that are abnormal, can divide without control, and can break away, enter the blood stream and spread to other parts of the body.

- Cancer cells develop because of damage to DNA, a substance in every cell that directs all activity of the cell. Usually when DNA becomes damaged, the body is able to repair it; however, sometimes it is not repaired and the cell becomes abnormal. Scientists are working to better understand what causes DNA to become damaged. Some people inherit damaged DNA, which accounts for inherited cancers. More often, though, a person's DNA becomes damaged by exposure to something in the environment or things people do, like smoking.
- Nearly half of all men and a little over one third of all women in the United States will develop cancer during their lifetimes.
- Standard types of treatment for cancer are surgery, radiation therapy, chemotherapy, hormone and biological therapy. These treatments may be used alone or combined for the best treatment option. Surgery and radiation therapy are considered local treatments, meaning they affect cancer cells in the tumor and near it. Chemotherapy, hormone therapy and biological therapy are systemic treatments, meaning they travel through the bloodstream reaching cancer cells all over the body. The National Cancer Institute estimates that 10.8 million Americans with a history of cancer were alive in January 2004. Some of these individuals were cancer free, while others still had evidence of cancer and may have been undergoing treatment.
- In 2007, the overall costs for cancer as estimated by the National Institutes of Health were \$219.2 billion. This estimate includes costs of direct medical costs, lost productivity due to illness and lost productivity due to premature death.
- Early detection examinations for some types of cancer including breast, colon, rectum, cervical, prostate, testicular, oral and skin cancer can help save lives. Self-examination (breast self-examination), physical examinations by a healthcare provider (breast, thyroid, gland, skin, colon and rectum, testicles and prostate examinations), and x-ray or laboratory tests (such as mammography and the Pap test) can lead to early detection and improved outlook for survival.
- US oncology-affiliated practices have enrolled more than 32,000 patients in clinical trials involving chemotherapy, immunotherapy, stem cell transplantation and gene therapy.
- Currently, more than 85 percent of all cancer care is delivered in the community setting.

\*Sources: American Cancer Society, *Cancer Facts & Figures 2008* and the National Cancer Institute, 08/08