Cancer

About

Cancer is a general term for disease in which abnormal cells in the body divide uncontrollably and invade other tissues. Cancer can occur in any organ and in any cell type within the body. Cancer cells spread throughout the body through the blood and lymph systems. There are over 100 different kinds of cancer, many of which form solid tumors, or masses of tissue. Cancers of the blood, such as leukemias, generally do not form solid tumors.

Although scientists are studying and learning about cancer at a rapid pace, the cause of many cancers is still poorly understood. More science is needed to understand and prevent cancer. About one in three people are diagnosed with cancer at some time in their life, and about one in five dies of cancer. Most cancers develop slowly and can appear any time spanning 5 to 40 years after exposure to a carcinogen. Although cancer can develop in people of all ages, it is most common among middle-aged and elderly persons. The number of cancer cases has risen dramatically over the past 40 years, but much of this increase is a reflection of the increase in population, especially in the older age groups. According to the American Cancer Society, cancer mortality rates from all causes have been declining since 1992, understood to be in large part due to reductions in tobacco use and advances in early detection and treatment.

Some causes of cancer have been identified. Sometimes there is a family history of cancer. Scientists agree that people can get cancer through repeated long-term contact with carcinogens in the environment. These include tobacco, sunlight, x-rays and certain chemicals that may be found in the air, water, food, drugs and workplace. Our personal habits and lifestyle may also contribute to cancer. It is believed that about 30% of cancer deaths are due to tobacco. Another 30% of cancer deaths are thought to be somehow associated with inadequate physical activity, unhealthy diet or obesity, but the relationship is not clear.

About the Measures

The LDH Tracking Program tracks the average annual incidence rates and the annual counts of new cases for the following types of cancer for all age groups and, if noted, childhood groups:

- Acute Lymphocytic Leukemia (includes childhood)
- Acute Myeloid Leukemia (includes childhood)
- Bladder
- Brain and Central Nervous System (includes childhood)
- Breast (Female and Male)
- Chronic Lymphocytic Leukemia
- Colorectal
- Esophageal
- Kidney
- Laryngeal
- Leukemia (includes childhood)
- Liver and Hepatic Bile Duct

- Lung
- Melanoma of the Skin
- Mesothelioma
- Non-Hodgkin Lymphoma
- Oral Cavity and Pharyngeal
- Pancreatic
- Thyroid

About the Data

- Confidentiality of cancer cases is protected through employment of a numerator suppression
 rule based on Louisiana Tumor Registry (LTR) guidelines. Cancer rates based on 16 or fewer
 cases may not be reliable. Rates based on counts of 1-16 cases are suppressed. Counts of under
 6 cases are suppressed.
- Cancer case definitions are based on Surveillance Epidemiology and End Results (SEER) Site Recode classifications.
- Parish of residence is based on the address at the time of diagnosis. No information is available on the location of prior residences or personal exposure history.
- Average Annual Incidence Rates are age-adjusted to the 2000 U.S. standard population. Rates
 for Louisiana are based on the entire state population combined, rather than an average of all
 the parish rates.
- Data are reported by tumor type or cancer site. Information is collected for each separate cancer when a person is diagnosed with more than one type of cancer.
- Records with unknown age, gender or parish of residence are not included in these data.
- The data describe invasive cases only with exception of in situ and invasive cases for bladder cancer.
- Incidence rates are related to periods of time. It is necessary to define the exact date of onset of a new case of disease; the Louisiana Tumor Registry uses the date of diagnosis.
- In 2005, Hurricanes Katrina and Rita impacted populations and record keeping within the Gulf Coast. Thus, the average annual incidence rates were calculated using the number of cases diagnosed in the first half of 2005 from January June. Assumptions were made that there was an equal number of cancers during July December 2005.
- Rates normally vary from one parish to another, and the differences may sometimes be significantly higher or lower than the statewide average. It's important to remember, however, that a parish border is just a line that usually has no meaning in a biological sense. When one crosses that line, the environmental conditions don't change. Nor do residents' family histories or genes. Those differences by parish rates are probably just a chance occurrence. On the other hand, differences by race or by sex are often important, as they reflect biological and genetic differences as well as possible differences in exposures to carcinogens or in access to healthcare. Public health professionals study those variations to target places where screening programs are needed—or where screening programs have led to a decline in incidence.

Disclaimer

Data are intended to spur further research and should be used only as a starting point to understanding how the environment and other contributing factors may be connected to disease. Datasets presented

on this site are intended to answer some basic questions, but should ultimately lead to further inquiry and more detailed study.

Data limitations should be noted if conducting exploratory ecological studies with these data. Limitations may include data gaps, reporting discrepancies (for example, a disruption of reporting or instrument recording following hurricanes) and insufficient data on all potentially confounding factors. There are numerous additional factors which may contribute to disease onset. These include genetics, access to health care, existing health conditions, medicines, other chemical substances we come into contact with or ingest, nutrition, route and duration of exposure, level of activity, level of stress, and many others.

Responsible use of this data therefore requires exercising caution when drawing conclusions based solely on views of the limited available data. Any perceived relationship, trend, or pattern apparent in the data should not be interpreted to imply causation; may in fact be unrelated; and should be regarded as preliminary, and potentially erroneous, until more in-depth study and if applicable, statistical evaluation, can be applied. The LDH Bureau of Health Informatics and Environmental Public Health Tracking Program cannot guarantee the completeness of the information contained in these datasets and expressly disclaim liability for errors and omissions in their content.

Data Sources

Louisiana Tumor Registry

Additional Information

- Louisiana Tumor Registry
- Louisiana Cancer Prevention & Control Programs
- CDC Cancer Prevention and Control
- National Cancer Institute What is Cancer?
- Agency for Toxic Substances and Disease Registry Health Effects of Exposure to Substances and Carcinogens
- Agency for Toxic Substances and Disease Registry Chemicals, Cancer, and You Fact Sheet
- National Institute of Environmental Health Sciences Cancer
- American Cancer Society

Questions

• Email: <u>healthdata@la.gov</u>