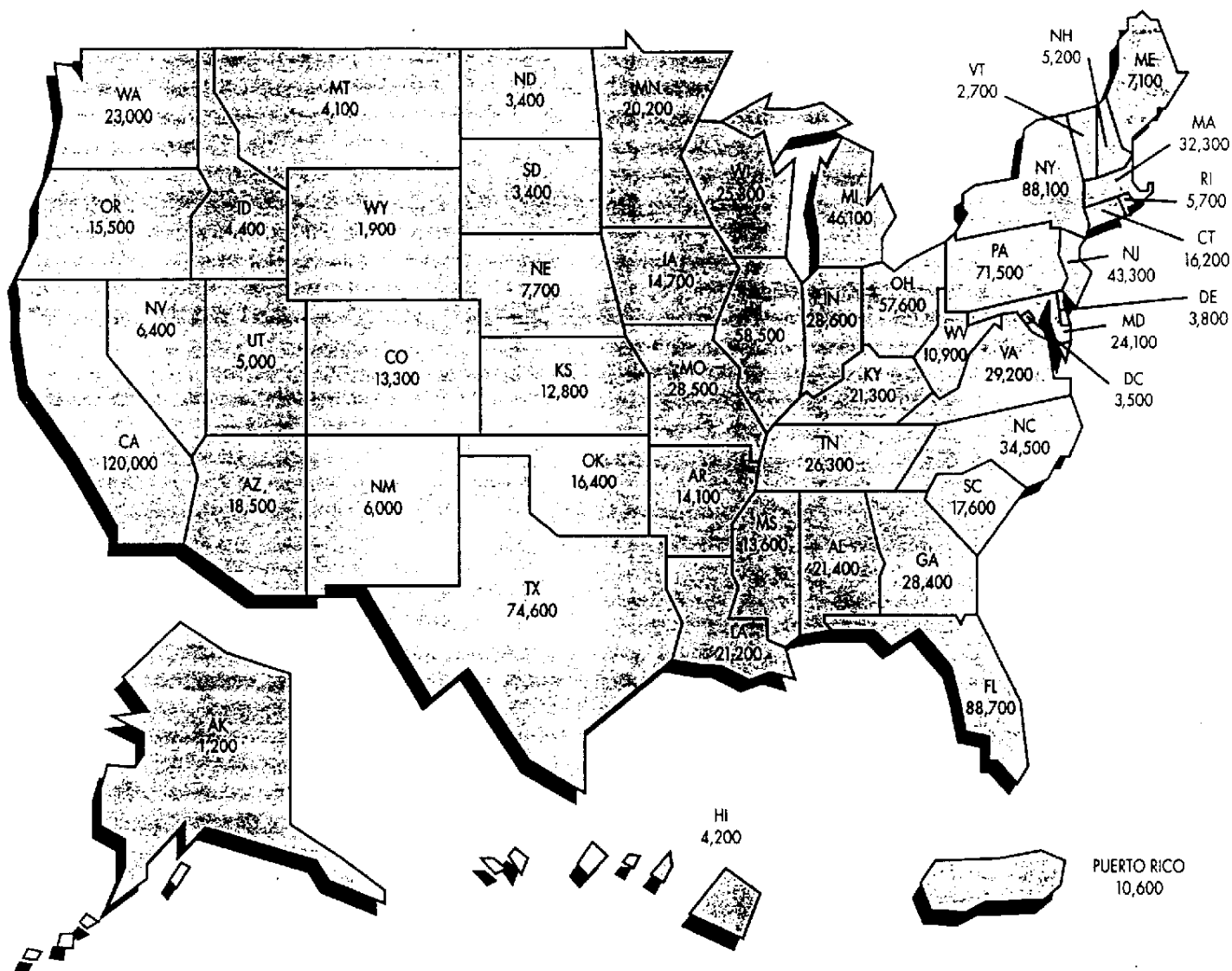


CANCER FACTS & FIGURES-1995



Estimated number of new cancer cases in 1995 by state, total: 1,252,000 (excluding Puerto Rico).*

*Excluding basal and squamous cell skin cancer and carcinoma in situ.

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mately 7,000 cases) and chronic lymphocytic (approximately 7,800 cases).

Mortality: An estimated 20,400 deaths in 1995.

Signs and Symptoms: Fatigue, paleness, weight loss, repeated infections, bruising easily, and nosebleeds or other hemorrhages. In children, these signs can appear suddenly. Chronic leukemia can progress slowly and with few symptoms.

Risk Factors: Leukemia strikes both sexes and all ages. Causes of most cases are unknown. Persons with Down syndrome and certain other genetic abnormalities have higher than normal incidence of leukemia. It has also been linked to excessive exposure to ionizing radiation and to certain chemicals such as benzene, a commercially used toxic liquid that is also present in lead-free gasoline. Certain forms of leukemia and lymphoma are caused by a retrovirus, HTLV-I (human T-cell leukemia/lymphoma virus-I).

Early Detection: Because symptoms often resemble those of other, less serious conditions, leukemia can be difficult to diagnose early. When a physician does suspect leukemia, diagnosis can be made using blood tests and biopsy of the bone marrow.

Treatment: Chemotherapy is the most effective method of treating leukemia. Various anticancer drugs are used, either in combinations or as single agents. Transfusions of blood components and antibiotics are used as supportive treatments. To illuminate hidden cells, therapy of the central nervous system has become standard treatment, especially in acute lymphocytic leukemia. Under appropriate conditions, bone marrow transplantation may be useful in the treatment of certain leukemias.

Survival: The 5-year survival rate for patients with leukemia is 38%, due partly to very poor survival of patients with some types of leukemia such as acute granulocytic. Over the last 30 years, however, there has been a dramatic improvement in survival of patients with acute lymphocytic leukemia; from a 5-year survival rate of 4% for people diagnosed in the early 1960s to 28% in the early 1970s to 52% in the mid-1980s. In children, the improvement has been from 4% to 73%.

Lymphoma

New Cancer Cases: An estimated 58,700 new cases in 1995, including 7,800 cases of Hodgkin's disease and 50,900 non-Hodgkin's lymphoma. Since the early 1970s, incidence rates for non-Hodgkin's lymphoma have increased over 65%. Incidence of Hodgkin's disease has declined over the same time period, especially among the elderly.

Mortality: An estimated 24,150 deaths in 1995 (non-Hodgkin's lymphoma, 22,700; Hodgkin's disease, 1,450).

Signs and Symptoms: Hodgkin's disease: enlarged lymph nodes, itching, fever, night sweats, and weight loss. Fever

can come and go in periods of several days or weeks. Non-Hodgkin's lymphoma: enlarged lymph nodes, anemia, weight loss, and fever.

Risk Factors: Risk factors are largely unknown but part involve reduced immune function and exposure to certain infectious agents. Persons with organ transplants are at higher risk due to altered immune function. Human immunodeficiency virus (HIV) and human T-cell leukemia/lymphoma virus-I (HTLV-I) are associated with increased risk of non-Hodgkin's lymphoma. Burkitt's lymphoma in Africa is partly caused by the Epstein-Barr herpes virus. Other possible risk factors include occupational exposure to herbicides and perhaps other chemicals.

Treatment: Hodgkin's disease: chemotherapy and radiation therapy are useful for most patients. Non-Hodgkin's lymphoma: early stage, localized lymph node disease can be treated with radiotherapy. Patients with later stage disease often benefit from the addition of chemotherapy. New programs using highly specific monoclonal antibodies directed at lymphoma cells, and improved techniques of bone marrow preservation, are under investigation for selected patients who relapse after standard treatment.

Survival: Survival rates vary widely by cell type and stage of disease. The overall 5-year survival rate for Hodgkin's disease is 79%. The overall 5-year survival for non-Hodgkin's lymphoma has steadily improved, and in the past 30 years has increased from 31% to 52%.

Skin Cancer

New Cancer Cases: Over 800,000 cases a year of highly curable basal cell or squamous cell cancers. They are most common among individuals with lightly pigmented skin. The most serious skin cancer is melanoma, which can be diagnosed in about 34,100 persons in 1995. Since 1970, the incidence rate of melanoma has increased about 10% per year. Incidence rates are over 10 times higher among whites than blacks. An additional 16,000 invasive nonmelanoma skin cancer cases will occur in 1995, mostly sarcomas, including Kaposi's sarcoma.

Mortality: An estimated 9,300 deaths this year, 7,100 from malignant melanoma and 2,100 due to other skin cancers.

Signs and Symptoms: Any unusual skin condition, especially a change in the size or color of a mole or of a darkly pigmented growth or spot. Scaliness, oozing, bleeding, or change in the appearance of a bump or nodule; the spread of pigmentation beyond its border, a change in sensation, itchiness, tenderness, or pain.

Risk Factors: Excessive exposure to ultraviolet radiation; fair complexion; occupational exposure to coal tar, pitch, creosote, arsenic compounds, or radium.

Prevention: The sun's ultraviolet rays are strong

Prevention

Researchers estimate that if everything known about the prevention of cancer was applied, up to two-thirds of cancers would not occur. The following are areas in which certain health choices might reduce an individual's risk of cancer.

Smoking

Cigarette smoking is responsible for 90% of lung cancers among men and 79% among women—about 87% overall. Smoking accounts for about 30% of all cancer deaths. Those who smoke two or more packs of cigarettes a day have lung cancer mortality rates 12 to 25 times greater than nonsmokers. (See Tobacco Use, p. 22.)

Nutrition and Diet

Research is showing the important role nutrition plays in preventing cancer. Evidence indicates that people may reduce their cancer risk by observing these nutrition guidelines:

1. **Maintain a desirable weight.** Individuals 40% or more overweight have an increased risk of colon, breast, prostate, gallbladder, ovary, and uterus cancers. Physicians can recommend a suitable diet and exercise regimen to help maintain appropriate weight and body fitness.

2. **Eat a varied diet.** A varied diet eaten in moderation offers the best hope for lowering the risk of cancer.

3. **Include a variety of vegetables and fruits in the daily diet.** Studies have shown that daily consumption of vegetables and fresh fruits is associated with a decreased risk of lung, prostate, bladder, esophagus, colorectal, and stomach cancers.

4. **Eat more high-fiber foods such as whole grain cereals, breads, and pasta; and vegetables and fruits.** High-fiber diets are a healthy substitute for fatty foods and may reduce the risk of colon cancer.

5. **Cut down on total fat intake.** A diet high in fat may be a factor in the development of certain cancers, particularly breast, colon, and prostate.

6. **Limit consumption of alcohol, if you drink at all.** Heavy drinking, especially when accompanied by cigarette smoking or smokeless tobacco use, increases risk of cancers of the mouth, larynx, throat, esophagus, and liver.

7. **Limit consumption of salt-cured, smoked, and nitrite-cured foods.** In areas of the world where salt-cured and smoked foods are eaten frequently, there is higher incidence of cancer of the esophagus and stomach. Modern methods of food processing and preserving appear to avoid the cancer-causing byproducts associated with older methods of food treatment.

Sunlight

Almost all of the more than 800,000 cases of basal and squamous cell skin cancer diagnosed each year in the US are sun-related (ultraviolet radiation). Epidemiologic evidence shows that sun exposure is a major factor in the development of melanoma and that incidence increases for those living near the equator. (See Selected Cancers: Skin Cancer, p. 15.)

Alcohol

Oral cancer and cancers of the larynx, throat, esophagus, and liver occur more frequently among heavy drinkers of alcohol especially when accompanied by smoking cigarettes or chewing tobacco. (See Selected Cancers: Oral Cancer, p. 17.)

Smokeless Tobacco

Use of chewing tobacco or snuff increases risk of cancer of the mouth, larynx, throat, and esophagus and is a highly addictive habit. (See Selected Cancers: Oral Cancer, p. 17.)

Estrogen

Estrogen treatment to control menopausal symptoms can increase risk of endometrial cancer. However, including progesterone in estrogen replacement therapy helps to minimize this risk. Consultation with a physician will help each woman to assess personal risks and benefits. Continued research is needed in the area of estrogen use and breast cancer. (See Selected Cancers: Uterus [Cervix] Cancer, p. 12.)

Occupational Hazards

Exposure to several different industrial agents (nickel, chromate, asbestos, vinyl chloride, etc.) increases risk of various cancers. Risk of lung cancer from asbestos is greatly increased when combined with cigarette smoking. (See Environmental Cancer Risks, p. 20.)

Ionizing Radiation

Excessive exposure to ionizing radiation can increase cancer risk. Most medical and dental x-rays are adjusted to deliver the lowest dose possible without sacrificing image quality. Excessive radon exposure in homes may increase risk of lung cancer, especially in cigarette smokers. If levels are found to be too high, remedial actions should be taken.