

REGIONAL DIVERSITY

Cancer in Northern America

Not all segments of the Northern American population have benefited equally from scientific advances in cancer prevention and control.

About 1.79 million new cancer cases and 692,000 cancer deaths were estimated to have occurred in 2012 in Northern America.

① Prostate cancer in males and breast cancer in females are the most commonly diagnosed cancers, followed by lung and colorectal cancers in both males and females.

Rates and trends in incidence, mortality, and survival for all cancers combined and for most cancers are generally similar between the USA and Canada.

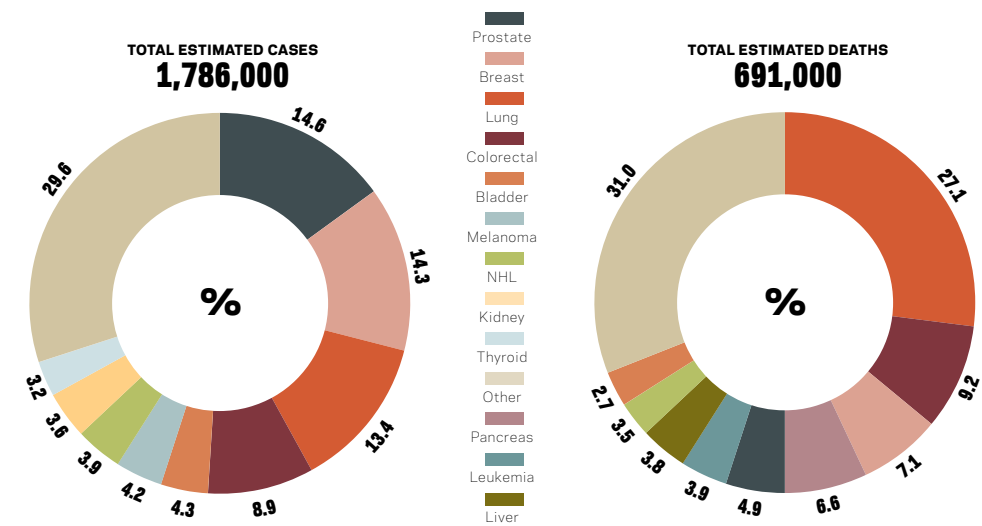
② For example, incidence rates have continued to increase for kidney and thyroid cancer, in part because of wide application of imaging techniques, and for liver cancer because of the high prevalence of hepatitis C virus infections during the 1970s and 1980s due to intravenous drug use. In contrast, rates have continued to decrease for lung and cervical cancer because of reduced cigarette smoking and increased use of Pap testing, respectively.

However, national cancer rates and trends mask marked differences between subpopulations, especially in the USA. For example, lung cancer rates are highest in Southern and Midwestern states, which have been historically dependent on tobacco farming and production.

③④ Progress in reducing colorectal and breast cancer mortality rates lags in blacks compared to whites, and survival after a diagnosis of cancer is lower in uninsured than in insured patients due to unequal access to medical care.

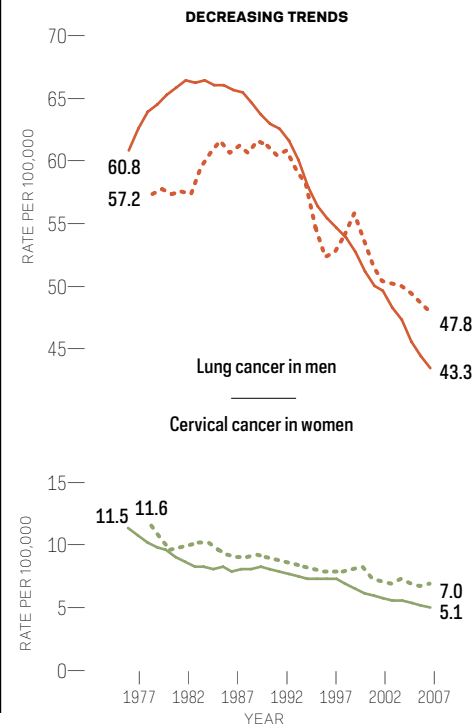
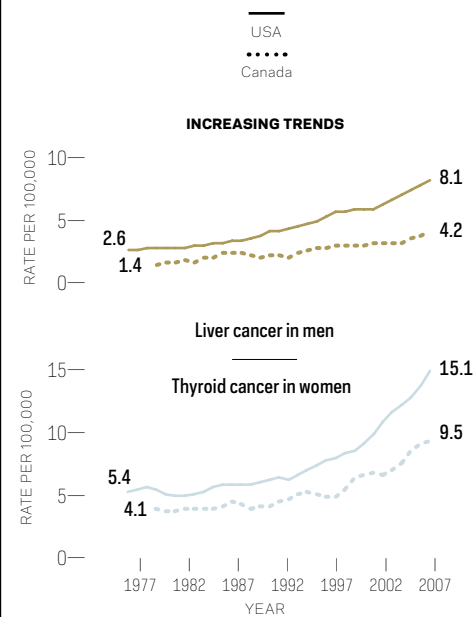
① Prostate cancer in males and breast cancer in females are the most commonly diagnosed cancers, followed by lung and colorectal cancers in both sexes combined. Lung cancer is the leading cause of cancer death.

ESTIMATED NUMBERS OF NEW CANCER CASES AND DEATHS, BOTH SEXES, 2012



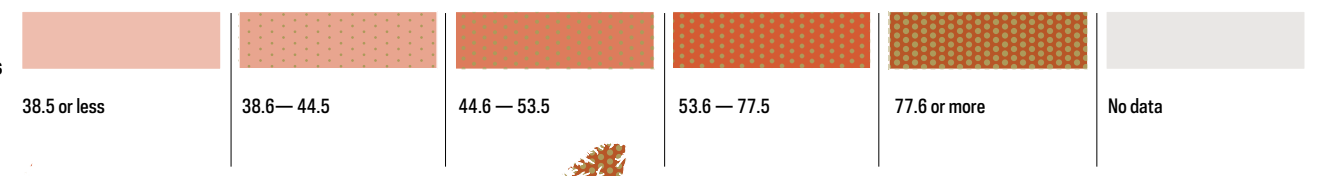
② High prevalence of hepatitis C virus in the 1970s and 1980s in part accounts for the increase in liver cancer incidence, while reduced smoking and more Pap testing for the decrease in lung and cervical cancer rates, respectively.

TRENDS IN AGE-STANDARDIZED INCIDENCE RATES (WORLD) PER 100,000 POPULATION FOR SELECT CANCERS, 1975-2007



Lung cancer incidence in males

AVERAGE ANNUAL AGE-STANDARDIZED RATE (WORLD) PER 100,000 POPULATION, 2007-2011



Lung cancer disproportionately strikes poorer populations across North America.

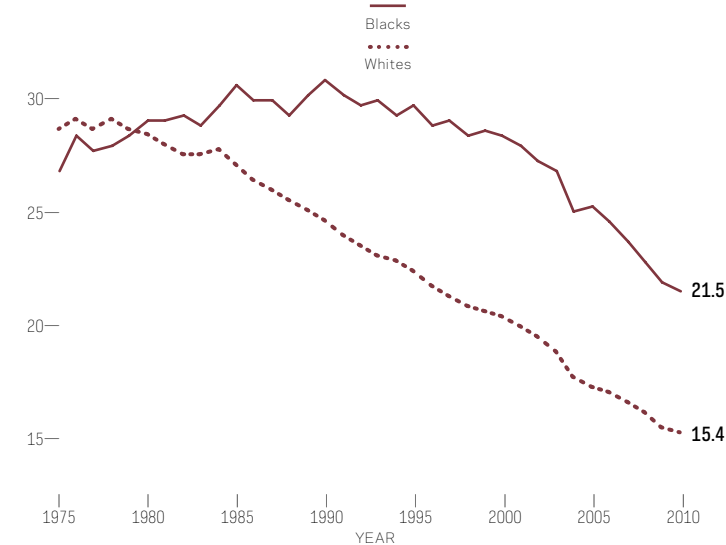
Lung cancer rates in Kentucky men and women are four times as high as in their counterparts in Utah.



“Poverty is a carcinogen.”
— Dr. Samuel A. Broder, former Director, National Cancer Institute (USA)

③ Reductions in colorectal cancer mortality rates in the USA began later and were slower in US blacks compared to whites.

US COLORECTAL CANCER MORTALITY RATES BY RACE, BOTH SEXES



④ In the USA, the uninsured with cancer have poorer survival compared to the insured.

COVARIATE-ADJUSTED CANCER SURVIVAL (%) BY INSURANCE STATUS

