Annual Report to the Nation: Rapid Decrease in Lung Cancer and Melanoma Deaths Lead Overall Continued Decline in Cancer Death Rate

Overall incidence rates continue to increase in women, children and adolescents and young adults

Overall cancer death rates continue to decline in men and women for all racial and ethnic groups in the United States, according to the latest Annual Report to the Nation on the Status of Cancer. During 2001 to 2018, declines in lung cancer death rates accelerated, and death rates for melanoma declined considerably in more recent years, reflecting a substantial increase in survival for metastatic melanoma. However, the report finds that for several other major cancers, including prostate, colorectal and female breast cancers, previous declining trends in death rates slowed or disappeared.

The report, appearing in *JNCI: The Journal of the National Cancer Institute*, also finds that overall cancer incidence rates continue to increase among females, children, and adolescents and young adults (AYA). All trends in this report cover the period before the COVID-19 pandemic.

The annual report is a collaborative effort among the American Cancer Society (ACS); the Centers for Disease Control and Prevention (CDC); the National Cancer Institute (NCI), part of the National Institutes of Health (NIH); and the North American Association of Central Cancer Registries (NAACCR).

The report shows a decrease in death rates for 11 of the 19 most common cancers among men, and for 14 of the 20 most common cancers among women, over the most recent period (2014-2018). Although declining trends in death rates accelerated for lung cancer and melanoma over this period, previous declining trends for colorectal and female breast cancer death rates slowed and those for prostate cancer leveled off. Death rates increased for a few cancers like brain and other nervous system and pancreas in both sexes, oral cavity and pharynx in males, and liver and uterus in females.

“The declines in lung cancer and melanoma death rates are the result of progress across the entire cancer continuum - from reduced smoking rates to prevent cancer to discoveries such as targeted drug therapies and immune checkpoint inhibitors,” said Karen E. Knudsen, MBA, PhD., Chief Executive Officer, American Cancer Society. “While we celebrate the progress, we must remain committed to research, patient support, and advocacy to make even greater progress to improve the lives of cancer patients and their families.”

An analysis of long-term trends in cancer death rates in this year’s report also shows that death rate declines accelerated in both males and females from 2001 to 2018. In males, a decline of 1.8% per year in 2001 to 2015 accelerated to a decline of 2.3% per year during 2015 to 2018. In females, a decline of 1.4% per year from 2001 to 2015 accelerated to a decline of 2.1% per year during 2015 to 2018. The report found that overall cancer death rates decreased in every racial and ethnic group during 2014 to 2018.

“It is encouraging to see a continued decline in death rates for many of the common cancers,” said
Karen Hacker, MD, MPH, Director of CDC’s National Center for Chronic Disease Prevention and Health Promotion. “To dismantle existing health disparities and give everyone the opportunity to be as healthy as possible, we must continue to find innovative ways to reach people across the cancer care continuum—from screening and early detection to treatment and support for survivors.”

However, increases in cancer incidence and death rates or deceleration of previous declining trends for some other cancers such as colorectal and female breast cancers are likely due to risk factors such as obesity.

“The continued decline in cancer death rates should be gratifying to the cancer research community, as evidence that scientific advances over several decades are making a real difference in outcomes at the population level,” said Norman E. “Ned” Sharpless, MD, Director of the National Cancer Institute, of the National Institutes of Health. “I believe we could achieve even further improvements if we address obesity, which has the potential to overtake tobacco use to become the leading modifiable factor associated with cancer.”

The authors report that cancer death rates continued to decrease among children (aged <15 years) and AYAs (aged 15-39 years) despite an increase in incidence rates from 2001 to 2017. Overall cancer incidence rates in children and AYA increased in all racial/ethnic groups except American Indian/Alaska Native (AI/AN) children where rates remained stable. The most common cancer among AYA was female breast cancer.

“When evaluating health disparities, it is critical to acknowledge the social factors that influence the health of the communities and access to health care,” said Betsy A. Kohler, MPH, NAACCR Executive Director. “Social and economic indicators, particularly based on small area assessments, are increasingly important to understanding the burden of cancer.”

Other key findings include:

- Overall cancer incidence rates were higher among men than women in every racial and ethnic group, except Asian/Pacific Islander population, where the rates were similar.
- Overall cancer incidence rates were slightly lower among Black people than White people.
- In contrast, overall cancer death rates were higher among Black people than White people.
- Incidence rates of liver cancer were previously increasing, but data show rates have stabilized among both men and women.
- Two-year relative survival for advanced-stage melanoma cases diagnosed during 2001-2009 was stable, but it increased 3.1% per year for those diagnosed during 2009-2014.
- Two-year relative survival only slightly increased for early- and intermediate-stage melanoma cases diagnosed during 2001-2014 (0.03% and 0.4% per year, respectively).

The authors indicate these findings can help inform healthcare providers about the need to increase efforts related to cancer prevention, early detection, and treatment, and for the need for equitable implementation of effective interventions, especially among under-resourced populations.


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**About the American Cancer Society:** The American Cancer Society is a global grassroots force of 1.5 million volunteers dedicated to saving lives, celebrating lives, and leading the fight for a world without cancer. For more than 100 years, the American Cancer Society has been the preeminent cancer-fighting organization in the United States through research, education, advocacy, and patient services. We have helped lead the evolution in the way the world prevents, detects, treats, and thinks about cancer. For more information go to [www.cancer.org](http://www.cancer.org).
About the Centers of Disease Control and Prevention (CDC): CDC works 24/7 protecting America’s health, safety, and security. Whether diseases start at home or abroad, are curable or preventable, chronic or acute, or from human activity or deliberate attack, CDC responds to America’s most pressing health threats. CDC is headquartered in Atlanta and has experts located throughout the United States and the world.

About the National Cancer Institute (NCI): NCI leads the National Cancer Program and NIH’s efforts to dramatically reduce the prevalence of cancer and improve the lives of cancer patients and their families, through research into prevention and cancer biology, the development of new interventions, and the training and mentoring of new researchers. For more information about cancer, please visit the NCI website at cancer.gov or call NCI’s contact center, the Cancer Information Service, at 1-800-4-CANCER (1-800-422-6237).

About the National Institutes of Health (NIH): NIH, the nation's medical research agency, includes 27 Institutes and Centers and is a component of the U.S. Department of Health and Human Services. NIH is the primary federal agency conducting and supporting basic, clinical, and translational medical research, and is investigating the causes, treatments, and cures for both common and rare diseases. For more information about NIH and its programs, visit nih.gov.

About the North American Association of Central Cancer Registries (NAACCR): The North American Association of Central Cancer Registries, Inc., is a professional organization that develops and promotes uniform data standards for cancer registration; provides education and training; certifies population-based registries; aggregates and publishes data from central cancer registries; and promotes the use of cancer surveillance data and systems for cancer control and epidemiologic research, public health programs, and patient care to reduce the burden of cancer in North America. For more, see naaccr.org.