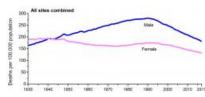
Cancer Mortality Continues Steady Decline, Driven by Progress against Lung Cancer

Drop of 2.2% from 2016 to 2017 is largest ever reported



The cancer death rate declined by 29% from 1991 to 2017, including a 2.2% drop from 2016 to 2017, the largest single-year drop in cancer mortality ever reported. The news comes from Cancer Statistics, 2020, the latest

edition of the American Cancer Society's annual report on cancer rates and trends.

The steady 26-year decline in overall cancer mortality is driven by long-term drops in death rates for the four major cancers – lung, colorectal, breast, and prostate, although recent trends are mixed. The pace of mortality reductions for lung cancer – the leading cause of cancer death – accelerated in recent years (from 2% per year to 4% overall) spurring the record one-year drop in overall cancer mortality. In contrast, progress slowed for colorectal, breast, and prostate cancers. The article appears early online in CA: A Cancer Journal for Clinicians, and is accompanied by a consumer version, Cancer Facts & Figures 2020.

The accelerated drops in lung cancer mortality as well as in melanoma that we're seeing ... are a profound reminder of how rapidly this area of research is expanding, and now leading to real hope for cancer patients.

Overall cancer death rates dropped by an average of 1.5% per year during the most recent decade of data (2008-2017), continuing a trend that began in the early 1990s and resulting in the 29% drop in cancer mortality in that time. The drop translates to approximately 2.9 million fewer cancer deaths than would have occurred had mortality rates remained at their peak. Continuing declines in cancer mortality contrast with a stable trend for all other causes of death combined, reflecting a slowing decline for heart disease, stabilizing rates for cerebrovascular disease, and an increasing trend for accidents and Alzheimer disease.

Lung cancer death rates have dropped by 51% (since 1990) in men and by 26% (since 2002) in women, with the most rapid progress in recent years. For example, reductions in mortality accelerated from 3% per year during 2008-2013 to 5% per year during 2013-2017 in men and from 2% to almost 4% in women. However, lung cancer still accounts for almost one-quarter of all cancer deaths, more than breast, prostate, and colorectal cancers combined.

The most rapid declines in mortality occurred for melanoma of the skin, on the heels of breakthrough treatments approved in 2011 that pushed one-year survival for patients diagnosed with metastatic disease from 42% during 2008-2010 to 55% during 2013-2015. This progress is likewise reflected in the overall melanoma death rate, which dropped by 7% per year during 2013-2017 in people ages 20 to 64, compared to declines during 2006-2010 (prior to FDA approval of ipilimumab and vemurafenib) of 2%-3% per year in those ages 20 to 49 and 1% per year in those ages 50 to 64. Even more striking are the mortality declines of 5% to 6% in individuals 65 and older, among whom rates were previously increasing.

"The news this year is mixed," said Rebecca Siegel, MPH, lead author of the report. "The exciting gains in reducing mortality for melanoma and lung cancer are tempered by slowing progress for colorectal, breast, and prostate cancers, which are amenable to early detection. It's a reminder that increasing our investment in the equitable application of existing cancer control interventions, as well as basic and clinical research to further advance treatment, would undoubtedly accelerate progress against cancer."

Highlights from the report:

• The death rate for breast cancer dropped by 40% from 1989 to 2017.

- The death rate for prostate cancer dropped by 52% from 1993 to 2017.
- The death rate for colorectal cancer dropped by 53% from 1980 to 2017 among males and by 57% from 1969 to 2017 among females.
- Decades-long rapid increases in liver cancer mortality appear to be abating in both men and women.
- Cervical cancer, which is almost completely preventable, caused ten premature deaths per week in women ages 20-39 in 2017.

Other highlights:

- In 2020, 1,806,590 new cancer cases and 606,520 cancer deaths are projected to occur in the United States.*
- Progress for hematopoietic and lymphoid malignancies (leukemias and lymphomas) has been especially rapid due to improvements in treatment protocols, including the development of targeted therapies. The 5-year relative survival rate for chronic myeloid leukemia increased from 22% in the mid-1970s to 70% for those diagnosed during 2009 through 2015, and most patients treated with tyrosine kinase inhibitors now experience nearly normal life expectancy.
- The overall cancer incidence rate in men declined rapidly from 2007 to 2014, but stabilized through 2016, reflecting slowing declines for colorectal cancer and stabilizing rates for prostate cancer.
- The overall cancer incidence rate in women has remained generally stable over the past few decades because lung cancer declines have been offset by a tapering decline for colorectal cancer and increasing or stable rates for other common cancers in women.
- The slight rise in breast cancer incidence rates (by approximately 0.3% per year) since 2004 has been attributed at least in part to continued declines in the fertility rate and increased obesity, factors that may also contribute to increasing incidence for uterine cancer (1.3% per year from 2007-2016).
- Lung cancer incidence continues to decline twice as fast in men as in women, reflecting historical differences in tobacco uptake and cessation.
- In contrast, colorectal cancer incidence patterns are generally similar in men and women, with the rapid declines noted during the 2000s in the wake of widespread colonoscopy uptake appearing to taper in more recent years.
- Incidence continues to increase for cancers of the kidney, pancreas, liver, and oral cavity and pharynx (among non-Hispanic whites) and melanoma of the skin. Liver cancer is increasing most rapidly, by 2% to 3% annually during 2007 through 2016, although the pace has slowed from previous years.
- The 5-year relative survival rate for all cancers combined diagnosed during 2009 through 2015 was 67% overall, 68% in whites, and 62% in blacks.
- Cancer survival has improved since the mid-1970s for all of the most common cancers except cervical and uterine cancers. Stagnant survival rates for these cancers largely reflect a lack of major treatment advances for patients with recurrent and metastatic disease.

"The accelerated drops in lung cancer mortality as well as in melanoma that we're seeing are likely due at least in part to advances in cancer treatment over the past decade, such as immunotherapy," said William G. Cance, M.D., chief medical and scientific officer for the American Cancer Society. "They are a profound reminder of how rapidly this area of research is expanding, and now leading to real hope for cancer patients."

Article: Cancer Statistics, 2020; CA Cancer J Clin 2020; doi 10.3322/caac.21590

Additional assets available online: Photos (1)