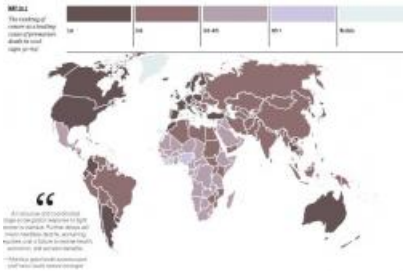
Report: Progress in Global Cancer Fight is not only Possible, but Achievable

Third Edition of Cancer Atlas highlights patterns and inequities in cancer burden around the world



The Cancer Atlas, 3rd edition, a comprehensive global overview of cancer around the globe, concludes that progress in the fight against cancer is not only possible, but achievable. The report was produced by the American Cancer Society (ACS), the Union for International Cancer Control (UICC), and International Agency for Research on Cancer (IARC). It was released at the World Cancer Leaders' Summit in Nur-Sultan, Kazakhstan.

> *"We simply must do better to ensure everyone can benefit from advances in the fight against cancer."*

The all-new 3rd edition highlights distinct patterns and inequities in the present cancer burden around the world; outlines the risk factors that are driving cancer patterns; and details the prospects for cancer prevention and control. This theme of the current edition is "Access Creates Progress," drawing attention not only to the problem at hand, but also the means of tackling the cancer burden through access to information and services.

The Cancer Atlas provides information on the global burden of cancer in a user-friendly and accessible form for cancer control advocates, government and public health agencies, and policy makers around the world as well as patients, survivors, and the general public. In addition to the printed report, the information is included on a comprehensive, interactive website (http://canceratlas.cancer.org/).

Cancer is the leading or second-leading cause of premature death (under age 70) in 91 countries worldwide. Based on expected population growth and aging alone, the number of global cancer cases is expected to increase by 60% in 2040. More widespread distribution of lifestyle factors such as smoking, unhealthy diet, and physical inactivity are likely to make that number considerably larger.

Other highlights of the 3rd Edition:

- Tobacco causes more preventable cancer deaths than any other risk factor. In 2017 alone, smoking was responsible for an estimated 2.3 million cancer deaths globally, accounting for 24% of all cancer deaths. There are still 1.1 billion smokers worldwide. Progress in tobacco control legislation over the last decade means 1.5 billion people in 55 countries are now protected by smoke-free legislation.
- While infectious agents are responsible for an estimated 15% of all new cancer cases worldwide, the proportion ranges from around 4% in many very high-income countries to more than 50% in several sub-Saharan African countries. The four major infectious agents (which together account for more than 90% of all infection-related cancers) are Helicobacter pylori , human papillomavirus (HPV), hepatitis B virus (HBV) , and hepatitis C virus (HCV) .
- Excess body weight increases risk of 13 types of cancer and in 2012 accounted for 3.6% of all new cancer cases among adults worldwide. The prevalence of excess body weight is rising worldwide: in 2016, an estimated 39% of men and 40% of women aged 18 years and older, and 27% of boys and 24% of girls aged 5–18 years, were obese. High amounts of sugar-sweetened beverages and sedentary behaviors, including screen-time, increase risk of excess body weight.
- The cancer burden associated with unhealthy diet, excess body weight, and physical inactivity is expected to grow in most parts of the world, particularly in parts of the Middle East and several other low- and middle-income countries in parts of Asia and Oceania because of the obesity epidemic.
- Alcohol is responsible for 4.2% of all cancer deaths globally, with marked variation across countries.
- Breast cancer is the most common cancer in women in almost all countries worldwide, and accounts for almost one in four new cancer cases among women. Lifetime risk of breast cancer among females in high-income countries can be up to three times that in low-income countries.
- Each year, about 270,000 cancer cases are diagnosed in children. Today, five-year survival from childhood

cancer in high-income countries is greater than 80%, but it can be as low as 20% in low-income countries. With interventions to improve early diagnosis and adherence to appropriate treatment, childhood cancer survival can be increased to 60% in low-income countries, saving almost 1 million children's lives over a decade.

- Over the next half century, an estimated 44 million cervical cancer cases will occur worldwide if current trends continue. Effective delivery of combined high coverage screening and vaccination could avert over 13 million cervical cancer cases by 2069, and eventually lead to cervical cancer eliminated as a major public health problem.
- Approximately 3 to 6% of all cancers worldwide are caused by exposures to carcinogens in the workplace.
- Outdoor air pollution causes over half a million lung cancer deaths and millions of deaths from other diseases each year. Outdoor air pollution levels are particularly high in rapidly-growing cities in low- and middle-income countries. Diesel exhaust, classified as a lung carcinogen by IARC, contributes to outdoor air pollution and is also an occupational lung carcinogen.
- Radiotherapy is indicated for about 60% of cancer patients to relieve symptoms, shrink tumors before surgery, or kill remaining cancer cells after surgery to avoid recurrence. Radiotherapy coverage is less than optimal in many low- and middle-income countries. In Ethiopia, for example, a population of approximately 100 million is served by a single radiotherapy center.

"This much is clear," writes Gary Reedy, ACS chief executive officer in report's foreword. "We simply must do better to ensure everyone can benefit from advances in the fight against cancer. As you will see in the pages of this Cancer Atlas, Third Edition, progress is not only possible, but also achievable."

"The Cancer Atlas has proved to be an outstanding publication in the past, helping the cancer community communicate the progress we have or have not made, the challenges we face and the areas of focus for future years," writes Cary Adams, chief executive officer of UICC. "Its beautifully crafted presentations of facts and evidence help us construct compelling messages to better articulate the problem and present solutions. This new edition will once again be circulated widely and inspire those of us who want to see change happen."

"Cancer is an issue of sustainable development," writes Elisabete Weiderpass, director of IARC. "Facing the cancer problem is a prerequisite for addressing social and economic inequities, stimulating economic growth, and accelerating sustainable development. I hope that this book will find widespread use, because prevention is, and should continue to be, the first line of attack in tackling the challenges posed by the global cancer epidemic."

Article: Jemal A, Torre L, Soerjomataram I, Bray F (Eds). The Cancer Atlas. Third Ed. Atlanta, GA: American Cancer Society, 2019. Also available at: http://canceratlas.cancer.org/

Report: http://canceratlas.cancer.org/download