Invasive Cancer Incidence and Survival — United States, 2011

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Background

- Cancer is the leading cause of illness and death in United States.
- This report summarizes the most recent cancer incidence rates by sex, age, race, and ethnicity for 2011 and data on state of residence using cancer incidence data from the United States Cancer Statistics: 2011 Incidence and Mortality report (USCS). 
- USCS is the official federal statistics on cancer incidence and mortality.
- For the first time, cancer incidence rates in Puerto Rico are included with the state-specific cancer incidence rates.
- Also for the first time a subset of the USCS dataset includes the 5-year relative survival rate.

Methods

- USCS includes incidence from CDC’s National Program of Cancer Registries (NPCR) and the National Cancer Institute’s Surveillance, Epidemiology, and End Results (SEER) program and mortality data from the National Vital Statistics System.

Incidence

- Data on new cases of invasive cancer diagnosed during 2011 submitted to CDC or NCI by November 2013.
- Data from DC, and all states except Nevada met USCS publication criteria for 2011; consequently, data in this report cover 99% of the U.S. population.
- Cases were first classified by anatomic site using the International Classification of Diseases for Oncology, Third Edition. Cases with hematopoietic histologies were further classified using the World Health Organization Classification of Tumours of Haematopoietic and Lymphoid Tissues, Fourth Edition.

Survival

- Defined as the proportion of persons surviving ≥5 years after cancer diagnosis compared with the proportion of survivors expected in a set of age- and sex-specific county population estimates from the 2000 U.S. standard population. The age-adjusted incidence rate was 451 cases per 100,000 persons.

Results

- In 2011, in the United States (excluding Nevada), 1,532,066 invasive cancer cases were diagnosed — 781,611 among males and 750,455 among females.
- The age-adjusted incidence rate was 451 cases per 100,000 population, representing 12,109 reported cancers.

Major Findings of 2011 Report

In 2011, in the United States (excluding Nevada)

- 1,532,066 invasive cancer cases were diagnosed — 781,611 among males and 750,455 among females.
- The age-adjusted incidence rate was 451 cases per 100,000 persons, representing 12,109 reported cancers.

- Rates were highest for cancers of prostate, female breast, lung and bronchus, and colon and rectum cancer.
- Cervical cancer incidence rate was 7.5 per 100,000 women, representing 12,109 reported cancers.
- 5-year relative survival rate was highest for prostate cancer (97%) and breast cancer (88%), intermediate for colorectal cancer (65%), and lowest for lung cancer (19%).
- 5-year relative survival was lower for black persons (68%) than for white persons (85%).

Limitations

- Potential race and ethnicity misclassification.
- Underestimation of certain cancer sites due to reporting delays.
- Relative survival rates could be calculated only for white and black racial groups because accurate life tables were not available for other racial/ethnic groups.

Conclusions

- National cancer surveillance data are essential for public health officials to monitor cancer incidence, mortality, and survival in the United States; identify populations that might benefit most from targeted cancer prevention and control efforts; help guide the planning of health care allocation and support services; and track progress toward the national cancer objectives set forth in Healthy People 2020.

- Using cancer incidence and survival data to effectively develop comprehensive cancer control programs, including supporting the needs of cancer survivors, can help reduce cancer incidence and improve survival.

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Additional cancer data are available at our website: www.cdc.gov/uscs

Note: The views expressed in this report are those of the authors and do not necessarily represent the official positions of the Centers for Disease Control and Prevention.

References